THE
MACROLEPIDOPTERA
OF THE WORLD

A SYSTEMATIC DESCRIPTION OF THE HITHERTO KNOWN MACROLEPIDOPTERA

IN COLLABORATION WITH WELL-KNOWN SPECIALISTS
EDITED BY

DR. ADALBERT SEITZ, PROFESSOR

DIVISION I: FAUNA PALAEARCTICA VOL. 1—4
DIVISION II: FAUNA EXOTICA VOL. 5—16

VOL. 5

ALFRED KERNEN VERLAG STUTTGART
1924
THE AMERICAN RHOPALOCERA

WITH 203 PLATES

TEXT

ALFRED KERNEN VERLAG STUTTGART 1924
Preface.

The first era of the "Macrolepidoptera of the World; comprising the paleartic fauna, could yet be completed in the year 1914. It is only to-day that the second large division containing the exotic day-butterflies is coming to a close. On 458 plates the whole day-butterflies of the Indo-Australian, American, and Ethiopian ranges were figured, unless they were dispensable or unavailable.

The present fifth volume which I herewith place before the public, comprehends the Rhopaloecera and Grypocera of the whole of America with a delimitation as has been tried to substantiate on p. 3 (of the Introduction). To those who do not consider this delimitation to be sufficient for faunistic reasons — which doubts are not unjustified — it may be pointed out that, in order to finance such expensive enterprises as was the production of the Macrolepidoptera, practical theoretical considerations have sometimes to yield to practical ones. The restriction of the interest or at least of the collections of many intending purchasers upon especially American forms appeared to the editor to be so far-spread that he thought to owe particular consideration to the nations of that part of the globe promising the greatest number of subscribers for the relative volumes.

This consideration appeared to the author to be the more necessary since just of late the work had been considerably subsidized by America. Beside many letters from Brazil, Argentina, Colombia, and Paraguay to the editor and the authors of the corresponding groups of lepidoptera, that were often mentioned in the text, we are particularly indebted to the United States and Mexico for their active support. Especially Mr. Roberto Mueller and Prof. Carlos Hoffmann in Mexico (City), Mr. W. Schaus and H. G. Dyar in Washington, by their unselfish collaboration enabled us to fill up a great number of hitherto prevailing gaps and to eliminate former errors. By the kindness of some more eminent specialists of the American fauna, such as Barnes, Benjamin, Boll, Snyder etc. — whose names had been gratefully noted already in the first part of the work — we were able to supply figures of specimens which would have never been possible but for the kind control of the owners of such rarities or even unique specimens.

The mentioning of the names of all who assisted the editor in his gigantic work both by word and deed is probably neither intended by them nor is it to the interest of the work; but we consider it to be our duty to express at this place our sincere thanks for their endeavours.

The immense material to which we had to seek access for the sake of elaborating most satisfactorily the American lepidoptera was only partly available on the European Continent. The faunae of Canada and of the United States were the most represented in European, particularly German, Museums. This is especially the place where the above-mentioned assistance of the entomologists of the United States set in; and besides the literature on the North American fauna is already so copious that by its aid an approximate survey particularly of the American day-butterflies could be obtained. By means of an abundant use of the works of Abbot and Smith, Scudder, the two Edwards, Holland, Wright and others with partly excellent figures, and by the aforesaid kind assistance of North American collectors, we believe to have supplied a compilation sufficient for the short draft to which such an extensive work has to be confined.

As to Mexico, the above-mentioned help of Mr. R. Mueller and Mr. C. Hoffmann enabled us to study novelties and rarities about which others would scarcely have informed us. Prof. Dr. M. Draudt at Darmstadt, whose collection of Mexican lepidoptera is probably unexcelled in Europe, has on the base of this material personally elaborated the Lycenidae and Grypocera and thereby rendered a particularly great service to the exploration of this rather defective field, and he was able to supply nearly all the figures of more than a hundred newly described American day-butterflies.

Central America which, by the renowned "Biologia" of Salvin and Godman and later on by W. Schaus' publications, is better known than most of the South American tropical countries, could frequently
be elaborated according to the material of A. H. Fassl and the abundant collection yielded by Ribbe from the Chiriqui having been most kindly made accessible to us by the firm of Dr. Staudinger and Bang-Haas. But with respect to this faunistic region — apart from Costa Rica perhaps — we can state that numerous districts have been insufficiently explored, and already the near future may supply us with a more compendious enlargement of our knowledge.

About Colombia and the districts of the Amazon and its tributaries the collections of A. H. Fassl give us ample information. Some places, such as the Agrias on pl. 113 B, have almost entirely been made according to novelties from Fassl’s Collection, which he collected in the unhealthy forests of Tropical South America and which cost him his life, for he recently succumbed to the pernicious climate. We feel particularly pleased that he left a permanent memorial in the Additions just to this fifth volume.

From Brazil and the western part of South America there existed likewise rich collections. Carlepp’s plentiful returns from Peru supplied particularly abundant material. In Bolivia it was likewise Fassl who collected very thoroughly though not very long and who put his rich material at our disposal. For the adjacent parts of Argentina, the returns by José Steinbach yielded many good objects, whilst to the south of that country and in Uruguay the editor himself was able to make many observations. The same is the case with Brazil, where the editor collected considerable material especially in Bahia and from where the greatest part of the biological notes originate which were interspersed in the text. Of great value were the consignments from these South American districts by Mr. Zikan and Mr. Arp in Brazil.

Moreover, both the compilers and the editor, for the sake of their studies, endeavoured to make use of the special collections as well as of the large Museums. We here once more beg to express our gratitude also to their directors or owners, as far as this has not already been done in the preface to the volumes of the first part. By their kindness Courvoisier’s Collection of the Lycænids could be viewed, and Mr. Abel in Leipzig had the kindness to send us some of his Hesperids for comparison. If I mention here that for instance Lord Rothschild allowed me to study 2500 Hesperids of the Tring Museum, it is easily understood of what great importance such aid was in composing the different chapters.

If the conclusion of this volume has been delayed for an entire decade, nobody will wonder at it who remembers that just the native land of the work was the centre of those terrible convulsions to which the world was exposed during that period. It is, on the contrary, astonishing and above all due to the subscribers’ forbearance that a scientific work such as the present one was able to outlast all these heavy blows without being harmed otherwise.

I cannot edit this volume without emphatically thanking the compilers of the different Lepidopteral families as well as the publisher for the immense sacrifice which the continuation of this work required just in such hard times. It was the latter’s ardent desire to reward, in close collaboration with the editor, the subscribers’ great patience to which they had been exposed by the disastrous events of the last ten years, and to reach such a juncture, when the volume of the American day-butterflies could be put before the public and those of the Indian and African faunae are on the point of being concluded.

As to the way the work was compiled, we may refer to the prefaces of the volumes of the palaeartic part. Nothing has changed in the editor’s position towards the so-called international nomenclatural rules. They must be rejected in the zoological world as a universally decisive code of laws, and entomology is not entitled to have an exclusive position therein. This, however, does not preclude that the greatest part of these rules, particularly those representing merely a precise wording of customs used long ago and having nowhere been refused, are useful and have therefore also been applied throughout the „Macrolepidoptera“. They have probably only been rejected as a decisive code in as much as they did not only accomplish their main object of creating a nomenclatural stability, but even often upset it, since constant unearthings and fresh interpretations of old names produced new conflicts with the whole literature on this subject. As our work is intended to be only a manual, we have tried to guard it against this defect which is mostly due to the principle of priority having been too rigidly interpreted, but otherwise we in no way restrained the author in applying the customary nomenclatural laws.

It seems that many entomologists thought the „Macrolepidoptera“ to offer the chance of putting the treatment of Lepidopteroptery on a scientific basis. The editor, however, could not chime in with this view for ideal and practical reasons. Every specialist usually considers those methods and maxims by means of which he gained his most important results to be the most valuable to science. It appears, however, to be impossible to attain in this way the uniformity of the total work aspired at by the editor. Nearly every chapter
would then have been subject to another principle of the mode of compilation. And besides every revolution must be substantiated, and thereby the extensive program of the work would have been rendered disharmonious, unhandy, and its contents would not have been enduring, but at any rate rather antipathetic to most of those using it, 95 percent of whom are no learned specialists. The editor therefore tried to prevent the authors from specialistic digressions however valuable they might be in monographies.

In the 5th volume, like in the volumes of the preceding part, a cursory inspection already shows that the text is chiefly thought to be a complement to the plates. Beside biological remarks it mostly contains hints to more subtle marks of distinction from closely allied species. Wherever the species were easily recognizable from the figures without any danger of errors, as in especially variegated and conspicuously marked genera (Perisama, Catagrammus, Annea, etc.), the text could be confined to but few words on synonymy and patria; on the contrary, certain complicatedly marked Lycaenids or Hesperids often necessitated a somewhat minute description. At any rate the latter has been presented without exceeding very much the number of 1000 pages and 200 plates being the maximum number for the handiness of a volume.

In the text on the whole 15000 names were explained and illustrated by about 9000 figures on the plates. No sensible man will demand or only expect all the figures to be faultless or even works of art. If, however, the later plates of this volume should exhibit more defects than the first, this is due to the immense difficulties due to the war and revolution.

But we beg the readers to make allowance also for that part of the volume that appeared before the war, just as the reviewers had done for the first part. First and foremost the work is to serve as an orientation, for the quick recognition and estimation of materials, returns from explorations, collections, centuria, single specimens captured etc. For this purpose the figures must be well recognizable and like-like, but they need not be highly artistic. In those cases where copies were only to be obtained from old, technically incomplete works, we have therefore not expressly refused the responsibility for the correctness of our figure. Those who know the old works — and for monographies on single groups only such works will be taken into account — will at first sight find out which figures were made according to Hewitson, Cramer, or Hübner, so that it appeared to be superfluous to supply long lists about the origin of each original or copy.

We only remark in general that nearly all the figures of the Papilio and Erycinidae were made according to specimens of the Tring Museum, the Pieridae and many Nymphalidae according to those from J. Röber’s collection at Dresden, the Morphidae, Brussolidae, Prepona, Agemonia all from the Coll. Frustorfer, the Lycaenids according to those of the collections of Fassl, Staudinger-Bang-Haas, and of the editor. The Mexican forms are mostly copies by Dr. Deaut, whilst many Satyrids originate from the collections of Staudinger and Weymer, now in Berlin.

Of particular importance I consider to be the statement that a great many Hesperid figures were taken from the work by Carl Plötz. Though this work, a great part of which is at present in the editor’s possession (until its sale), has never been published in the volumes containing the plates (of which there exist about 20), yet, without the inspection of these plates, the numerous publications edited by Plötz cannot possibly be correctly determined. We therefore had some hundreds of the species — mostly Hesperids — appearing to us to be doubtful copied from the 5th, 9th, and 13th volumes, and by the comparison of these original figures it has been possible to remove many an error and doubt from science. Although Plötz’ work was never for sale in the book-trade, yet at least part of it has been available to nearly all the active lepidopterologists; Hewitson, Godman, Mabille etc. have frequently referred to this work. Many figures, particularly those of the Hesperids on more than 1500 pages (the 6 volumes of part XX), have been copied and published by Swinhoe, Mabille etc. Thus we have also cited Plötz’ work as an indispensable text-book and not newly denominated those species that are at once recognizable from the unique figures, but taken them over as sufficiently marked and distributed by copies.

As to the text-volume we must remark that the editor is only responsible for the German edition. He had no influence upon the two other editions. The French edition, as far as it has been published after 1914, is at any rate entirely unknown to me; I have never seen a single copy. A real completeness could of course only be aspired until the time when the destructive effect of the World’s War had not yet interrupted the scientific connexion amongst the nations. The further completion must be reserved to the supplementary numbers and to the time when the torn threads of scientific intercourse amongst the nations will be reknitted.

Unfortunately we could neither in this volume avoid annoying differences between the denominations in the text and on the plates. Technical reasons prevent us from starting simultaneously the description and illustration often based on the same specimen, and thus it was sometimes only after the accomplishment of
the plates that the figured specimens proved to deserve better another, mostly new name which could yet be done in the text, whilst the plates had already been published. We therefore beg to accept this drawback as the consequence of the continuous progress of our knowledge.

Thus the fifth volume, like its predecessors, is sent forth with the sole task of serving as a text-book to all the representatives and friends of lepidopterology. Just as little as the author intended with the volumes of the first part, he strived to create a sumptuous work with as many surprises as possible, with improved systems and unexpected novelties. A systematically and uniformly arranged elaboration of the American day-butterflies, organized into a complete set, with a short description of the habits and stages of development, but with as much consideration of the variations, faunae and synonymy as possible, that is the main task of the work, and if it should be recognized from its contents with how great a devotedness the authors as well as the editor and publisher have bestowed their fullest attention to this design, this acknowledgment will be their best reward.

Darmstadt, May 1924.

Dr. Adalbert Seitz.
B. Grypocera, broad-headed day-butterflies.

As has already been stated in Vol. I, p. 329, this second Division (Haase denominates it Netrocera) is not equivalent to the first to which all the families of day-butterflies belong except the Hesperidae (*), inasmuch as it comprises only a single group of relatively homogeneous butterflies, whereas the Rhopalocera comprehend very heterogeneous formations, such as Morpho, Chrysophanus, Lecidina, Leptocrurus etc. The differences of the two divisions have already been briefly stated at some other places **) and are here once more classified in the following characterization of the Hesperidae, to which we may, therefore, refer.

1. Family: Hesperidae, Skippers.

The Hesperidae are mainly distinguished from the other day-butterflies by the forehead being very broad, for which reason the eyes are farther remote from each other than in any Rhopaloceron. This conspicuous mark, together with the robust structure of the body and a great uniformity in the shape and venation of the wings served Latreille as the foundation for his thoroughgoing separation of this family from the stock of the other day-butterflies. Latreille's grouping is also aided by special morphological examinations; as for instance Reté's palpal spot exhibits great conformity with all the Hesperidae, but differs entirely from that of all the other day-butterflies **). Moreover, the venation strikingly deviates from that of the Rhopalocera, so that all the systematizing authors, although they did not give expression to it in the scheme of their systems, still laid great stress upon the caesura between the Hesperidae and the other day-butterflies, e. g. Herrich-Schäffer, Scudder, Thienemann a. o.

The number of Hesperid forms enumerated by Mabille (*), about 2150, has since that time increased by several hundreds, although numerous species having often expressly been quoted as doubtful by the said excellent expert of this family turned out to be synonymous or not maintainable for some other reason. The general geographical range has been dealt with already in Vol. I, p. 329; we may once more state here that America is extraordinarily favoured in the distribution of the Hesperidae. In spite of the great flying power of the butterflies, they are still absent in a comparatively great number of islands, and consequently seem to be entirely unfit for flying across the ocean. But where compact tracts of land allowed them to rest temporarily from their flight, which seems to be a necessity to them, they were able to spread across enormous districts. Thus Calpodes ethlius is distributed over more than 70 degrees of latitude, some Hesperia (e. g. alceus) over 150 degrees of longitude. As the Hesperids are besides very fond of flying much and far and to a certain degree even of wandering, it is natural that they vary little in the countries connected by strips of land even at great distances; but as they never fly very unintermittingly, there had to be formed particular local forms in all the places separated by the sea. In the far remote New Zealand the Hesperidae, being yet well represented in Australia, are entirely absent, and even in the Canary Islands, which are not difficult to reach for palearetics, there is but 1 species, Adopaea actaeon, however in the form christi regarded by many as a separate species.

We have already pointed out (Vol. I, p. 329) that the Hesperidae are extremely heliophilous. This explains their immense preponderance in the Tropics, which decreases rapidly as soon as we come to the temperate zones, while on proceeding farther towards the polar regions the state of things is reversed. Only one single Hesperid can be regarded as an arctic butterfly, Hesperia centaurea, and since in the north there is a less interrupted connection of countries between the New and Old World, this species is also the only one which America has in common with any of the other faunas of the world, i. e. with the palearctic fauna. All the other, almost 2000 Americans are separate species, although some North Americans can yet be recognized to be representatives of certain palearetics.

The eggs of the Hesperidae vary greatly in their size, but in their exterior shape they are rather exactly conformable. They are hemispherical, above more or less flattened, ribbed radiately, and often distinctly reticulated. The ♀♀ deposit them always singly and, as far as is known to me, also always in moderate numbers on the food-plant or its surroundings. The food-plant itself may belong to nearly all the families of plants; very many species live on the most highly developed plants, such as Papilionaceae, Caesalpinaceae and Mimosae, whilst on

---

*) Some writers spell the name „Hesperidae“ so as to distinguish it from the mythological name of the daughters of Atlas. But since both words are equally derived from the name „Hesperia“, they may as well be homonymous.


***) Certain resemblances in the exterior of the palpi between the Hesperidae and some genera of other groups of day-butterflies (Papilio, Allotinus etc.) prove to be merely externally morphological.

*) Wyttsman. Genera Insectorum, Fasc. 17 (1904).
The larvae are mostly almost bare, i.e. very sparsely covered with downy hairs standing singly, or with very short plush-like hair; their colour is frequently green, but often also snow-white or bone-coloured, in the larger species frequently speckled or striped like a zebra. The head usually sits on a very much strangled neck; it is mostly downwards-broader, tapering off towards the vertex, where it is, however, also sometimes notched and thereby of a cordiform shape. Very peculiar is a bristly hairing of the face as it often occurs in the Pyrrhopyginae; in other species the frontal vesicles show dark, eye-shaped dots which, together with a nose-like middle-streak and transverse mouth-marking are apt to recall a human face or that of a monkey. The larvae rarely live in the open, but in feeding they sometimes creep out from the leaf in which they are encased; some also only put out their head in feeding. The case itself consists of a leaf being rolled up at the margins but it may also represent a more or less highly artistic funnel which very often discloses the larva’s abode to the collector. The larva, in the tropical forms, grows up rather quickly, but it usually feeds only at night even in the most day-loving species. For the pupation most of them do not construct a real cocoon, but the transformation takes place rather incompletely protected in a carelessly guarded niche of a leaf, out of which one sees the pupa looking out being often very brightly coloured, frequently snow-white or hoary bluish.

The pupae entirely have the shape of the body of the imago, so that the broad head and the far separated eyes can already be recognized. The head frequently exhibits a cone directed forward sometimes prolonged in the shape of a thorn; between the costal margins of the wing-cases, the case for the siphon runs along, which is often so long that it projects beyond the anal end of the pupa like a spike. The pupa likewise sometimes has a marking like a face, i.e. blackish dots on the eyes, sometimes with a dark middle streak. The pupal stage usually lasts for a short time in the tropics, often only a week or little more. The wings very quickly grow stiff after creeping out, so that the imago is able to fly already a few minutes after leaving the pupa.

As we have already mentioned in Vol. I, p. 329, the main flying time is concentrated upon the hottest months of the year in the temperate districts; only few fly in spring, and these often appear yet in a second generation in midsummer. In the Northern States most of the Hesperids fly only in one generation from June to August. In the Southern States they are often followed by another generation in autumn, and in Tropical America very many Hesperids in almost the same frequency fly all the year round without any pause; thus, during a longer spell of dry weather in which the other day-butterflies sometimes disappear nearly altogether, they form the only remaining moment culminating nature. Almost without exception they eagerly visit flowers some of which have such a great attractive power upon the Hesperids, that they are continually surrounded by whole swarms of them. They very rarely come to the bait; I never met with them on the sap dripping from trees, but they often drink water from pools and banks of rivers. They eat dry materials serving them as food by pouring out drops of liquid from the anus on to the base from which they suck them, as KüHN proved for Indian and K. Dietze for European Hesperidae. Dietze observed that an Aquiades syræus dropped more than 200 of such clear small drops on the base to be sucked up (at intervals of about 5 seconds), which it then wholly absorbed again by means of the siphon being bent below the body. Their flight is somewhat skipping, in floating darts, for which reason they are called „skippers“ in English. It is a bussing and mostly impetuously Swift flight, so that most of the species are thus scarcely recognizable, let alone to be overtaken. Nevertheless it is easy to capture them, since they are not timid, and not only allow themselves to be approached when drinking from the flowers, but also mostly remain sitting without the least fear when they are on the look-out on the top of a bush or on a twig projecting into the open space.

The Hesperids have two modes of keeping their wings. One part of the species keeps the wings always spread out flatly, often in such a way that the apical part of the forewing appears as if bent down over the horizontal line; in these species the distal margin is frequently angular, lobate, gnawed out, dentate or laciniform. The genera, taking up this position, mostly consist of velvety black or deep dark brown species (Eantis, Ancyloides, Antigonus, Sebahia etc.); they are nearly all confined to the tropics, where they represent the more northern Thanass and Thorybes. The second group, containing more species, folds the wings together while being at rest, like the day-butterflies do, whereas in the swarming time, while it settles down only temporarily, it keeps the wings in such a way that the forewings are turned upward parallel to each other, though not
folded together, whilst the hindwings are being kept somewhat more flatly, sometimes even almost appressed to the base; hereto belong the greater part of the Pamphilini. In drinking from the blossoms, these species frequently keep their wings quite closed (Caryxus) or also, like the Lycaena, half-opened (Hesperiid).

The position of the wings often influences the colouring, which may be very variable in the Hesperiid. If, as for instance in Caryxus, always only the under surface of the wings is exhibited, it is variegated, on a yellow or azure ground there run stripes or bands of intense colours; if the under surface is kept concealed, as for instance in Pythonides, Miletus, Syntypus etc., the under surface is generally pale with a blurred marking. Very common are small or large vitreous spots and dots like the pricks of a needle, often arranged in chains, and very characteristic for the different species by their arrangement. Metallic colours, particularly golden green or a brilliant blue, are exhibited by whole genera and comprise both wings and body; there may even occur the strange picture that quite unicolorously black butterflies have metallic green or golden heads.

Among the colours deep red is represented the least (Haenactis sanguinalis), whilst an ochreous golden yellow occurs most frequently. Still oftener, however, the upper surface of the wings is of a deep black-brown, only interrupted by small vitreous spots and sometimes with a very bright colour in the anal area. There are no leaf-green Hesperiid known, nor any with a colour like the bark of trees as is exhibited on the under surface of the wings by so many species of day-butterflies, such as Caligo, Vanessa, Polygonia etc.

Nor do the Hesperiids imitate leaves, as it occurs so often in America (Anrea, Catopsis, Histor). There are certainly sleeping specimens sometimes found dreaming on a blossom, but the variegated species still seem mostly to creep into their hiding-place for their repose. The robust body, the narrow wings, of which the hindwings are very closely folded together, facilitate their creeping under the cover of the vegetation, so that a protective colouring has not been developed. The great resemblance of the members of one genus among each other (compare e. g. t. 162) makes us presume that exterior influences have been of very little formative value and that the different species have only differentiated themselves from one another to such an extent as was necessary for the distinction. The number of enemies seems to be very small for the imagines; I saw birds from the family of the Ixus snatching at them and chasing the numerous swarming Hesperiids away from the bushes, but these birds did not chase them systematically, as for instance a flycatcher or fire-tail chase the flies, but the noisy and furious pursuit of the Ixus seemed to be more of an amusement and to arise more from the playful bent characteristic in the Ixus jocosus. On the whole, the Hesperiidae remained entirely unmolested by the birds; I even was able to observe humming-birds shunning in their visit to flowers those blossoms that were occupied by larger Hesperiids such as Eudamia, Thymele, Gonaiurus.

The Hesperiid seem neither to be particularly attacked by parasites. I once had more than 50 bags filled with pupae of Calpodes ethlius, which I had gathered in the agricultural park of Palermo near Buenos Ayres; not one specimen supplied a parasite. Also the numerous pupae of Pythonides cerealis which I discovered in the course of a year in Brazil, all yielded sound imagines. If the latter species were very much pursued, it would be incomprehensible that their pupae exhibit a bright, snow-white colour and hides so incompletely in the green leaf being scarcely drawn together, that it can immediately be noticed even at greater distances.

The Hesperiidae have neither developed any colours and markings which would have to be regarded as the effects of mimicry. Except some very rare resemblances occurring now and again in otherwise non-mimetic genera, all the Hesperiids exhibit an exterior found in no other group of butterflies remarkably repeated; and the sporadic cases of (mostly also only very slight) resemblance are so rare that they may very well be explained as casual, particularly since such casual resemblances exist also in such cases where mimicry is out of the question owing to the incongruence of the patriae, as for instance between Rhopalocampta acanthius * from West Africa and American Pyrrhopyge! **). In a somewhat greater number of cases we find resemblances of Hesperidae with members of the family belonging, however, to another genus. Thus certain Anthilla and Pyrrhopygops resemble the Pyrrhopyge to such an extent that one of these genera was denominated after it. In a similar way we find in some Phocides the otherwise very sporadic scheme of colouring of certain Jemudia. But although it is a nonsense to explain a resemblance, as for instance of Limenitis archippus to Danaida archippus, by the „homogeneous effect of homogeneous exterior influences“, we still can easily imagine a certain equally working effect of the same exterior forces in the close affinity of similar species. However, the biological conditons of the Hesperidae, particularly of the neotropical species concerned here are still too little known to give a definite answer to the question whether there occurs any mimicry in the Hesperidae.

As the most destructive enemies to the Hesperid imagines, beside amphibia and reptiles, the Arthropoda are to be looked upon. Above all the spiders. Although the Hesperids, owing to their powerful wings, often free themselves from the nets of weak spiders, I often found in Brazil whole galleries of horizontal, somewhat purse-

*) Comp. Vol. XIII. t. 72.
**) Comp. Vol. V. t. 182.
shaped cobwebs with tough, almost sticky threads in which there hung not only large *Hesperidae*, but also large and powerful *Papilio* (*polydactylus*) and even beetles of the size and strength of large Scarabaeids. I furthermore observed Mantids that had picked out their post at the ends of twigs in so insidious a way that the Hesperids flew directly into their arms.

The division of the Hesperids causes rather great difficulties by reason of the great conformity of the species and genera among each other. For a long time nobody wanted to try a scientifically well-founded classification, until Watson, in 1893, solved this task in a very satisfactory way by the abundant material of the British Museum. He based his task upon the preliminary studies by Scudder and created a system of the *Hesperidae*, which was later on yet improved by P. Mabille by furnishing a catalogue of the whole family which, though it seems to be not quite complete and somewhat superficial in the citations, can still scarcely be excelled in its zoogeographical argumentation, and which is therefore retained here without any essential alteration.

The *Hesperidae*, in their total appearance, are mostly small butterflies, not exceeding an expanse of few centimeters.

The head being conspicuously broad, as we have already mentioned, is not vertically, as in the *Rhopalocera*, but more horizontally placed, as in the *Sphingidae*, so that the frons shows upwards instead of forewards. The palpi have a stout basal and middle joint; they are mostly also very much inflated, the terminal joint being small, styloid. Also the antennae distinguish the *Hesperidae* from all the other day-butterflies by the club being not only bent round like a hook, but also comprising far more antennal joints than in any other family of day-butterflies. Particularly the apex of the spindle often bends off in a sharp flaw rectangularly from the shaft.

The thorax is uncommonly robust and its chitinous cuirass offers great resistance to the pressure of the fingers; it is, however, not elastic and tenacious, as for instance in a Danaid or Zygaenid, but delicate, and the animals having once been pressed are no more able to recover their flying power; legs and antennae are easily broken, but particularly only a rude touch at the head suffices to make the palpi drop.

The abdomen, though it sits broadly on the thorax, is nevertheless slender, pointed, not heavy nor strongly inflated. It is usually just as stout in the ♀ as in the ♂, so that it is often not easy at first sight to distinguish the two sexes. It is never seen conspicuously lengthened.

All the 6 legs are adapted for resting. They also exhibit a peculiarity by the hindlegs, mostly having 2 pair of well-developed spines, as we find them also in *Heterocera*.

The venation likewise greatly deviates from that of the other day-butterflies. The cell of the forewing is usually very long and narrow, sometimes open like that of the hindwing. The subcostal veins branch off at almost the same distances, so do the radial veins from the discocellular, wherever it is present. Thereby the phase is shown that all the subcostal veins of the forewing touch the costal margin, which imparts to the scheme of venation a peculiar primitive appearance.

Subfamily: *Pyrrhopyginae* Wts.

By the peculiar shape of the antennae, this well-characterized subfamily, which is confined to the New World in its distribution, is always distinctly to be separated from all the other *Hesperidae*. They are almost without exception large, strong species, on the bodies and wings of which dark colours, often with a deep blue or green lustre, are predominant, sometimes with hyaline spots. Most peculiarly almost all the forms find imitators among the other subordinate groups.

The club of the antenna is strong, quite cylindrical or also slightly conic, rarely very little pointed, but never with the long, turned down point which we find otherwise. The club is usually more or less strongly bent at the beginning of the thickening. The cell of the forewing is long, at least ⅔ of the length of the costal margin, mostly longer. Vein 5 of the hindwing is often absent. The 3 has never an overturned costal fold. While being at rest, the wings are usually spread out horizontally.


This genus comprises very numerous, partly extremely similar species which are difficult to separate and perhaps neither are separable as distinct species. Nearly all are large, strong animals with black body and wings, often with a bronze-green or deep blue lustre, often spotted red on the head and abdomen. On the broad, mostly pointed forewings the discoidal runs very obliquely, the upper median vein rising somewhat behind the middle of the cell. On the hindwing the lower radial and upper median vein rise unpetioled, the middle radial being absent. The hind tibiae are strongly haired outside.

The *Pyrrhopyge*, according to statements by Dr. Seitz, are conspicuous animals owing to their almost invariably one-coloured black colouring and the mostly glaring-red ends of their bodies. When they fly past swiftly, these red places are difficult to notice for the human eye, but the resting insect makes the impression
as if its body were bleeding in front and behind. As the flight is impetuously swift, the animal escaping its enemies scarcely needs any protection, whereas on the topmost branches of bushes of 1 or 2 m height, which are chosen by the $\beta_{\alpha}^{\gamma}$ as their point of observation, one of the most dangerous enemies of the tropical butterflies is lying in ambush, the praying-cricket which even catches butterflies of the size of strong Papilio with a sure dart and is able to devour several large specimens a day. In the waiting attitude taken up by the Pyrrhopyge on the tip of the twig, the forewings are half erected, the hindwings somewhat more lowered; a position sometimes met with in European Adopaea or Pamphila, whereas other Pyrrhopyginae, such as the blue-striped Jemadia, the Mimoniades, Mycetis etc. keep their wings spread out when at rest, about like Thanaos tages. The larvae of Pyrrhopyge, as far as we know, are thinly haired on the body, shaggily on the head, brown or reddish with yellow, zebra-like stripes. They live on different trees, so on Gujava pear-trees (Psidium pyriferum and pomiferum), in leaf-cases. The pupae are haired, too. The imagines fly along the roads and skirts of woods in a raving, somewhat skipping flight and are fond of drinking from wet places on the roads. The Jemadia and Mimoniades love the umbels of blossoming bushes, where they are met with in the company of similarly coloured Hesperids from other groups, such as Phocides and Pyrrhopygopsis.

P. hyperici Hbn. (162 a) is easily recognized by the rounded white spot on the upper surface of the hyperici hindwing and the oval white spot on the hindwing beneath at the base. Brazil.

P. sergius Hppfr. (= leucoloma Ersch.) (162 a) is above quite black with white fringes, red head, sergius collar and anus; beneath the hindwing exhibits a blue-white, broad marginal band extending from near the proximal angle almost to the costal angle and being somewhat traversed by the dark veins. From Colombia, Peru and Brazil.

P. aeraethyrea Hew. (= aeraethyrea Mab.) (162 a) is somewhat larger, otherwise the same, but the aeraethyrea blue-white marginal band of the hindwing is present also on the upper surface and is traversed above by 6, below by 7 black veins. Ecuador.

P. aziza Hew. differs from aeraethyrea by the marginal band being narrower above and crossed only aziza by the rays of five black veins. New Granada.

P. garata Hew. (162 a). Here the blue-white marginal spot only extends to the upper median vein, garata, but instead it extends proximally to the discocellular and is traversed only by 3 black rays. The red head is posteriorly bordered with black. Surinam.

P. scylla Min. (162 a) has above and below black wings with white fringes which are smoky on scylla, the forewing from the middle radial vein towards the apex. Head and palpi are black, shoulders, shoulder-covers and anus red, and the anterior femora are spotted red, too. Peru and Bolivia.

P. decipiens Mab. is the same, only of a deeper black, and on the costal margin of the hindwing decipiens, beneath it exhibits a red spot between the costal and subcostal. Ecuador.

P. melanomerus Mab. & Boul. differs from scylla (162 c) by the anterior femora being quite black melanomerus and by the fringes of the forewing being smoky only at the extreme apex. Described from Bolivia.

P. papius Hppfr. is recognizable by the red palpi being bordered with black. The fringes of the forewings papius are brownish from the lower radial vein to the apex. South America.

P. creona Drc. (= aurora Mab.) (162 a). Like scylla, but of a browner ground-colour, beneath creona dusted red, the shoulder-covers prolonged to long hair-pencils. Bolivia.

P. charybdis Dbl. (162 b) is bluish-black with carcine head and anus, on the vertex there is a thick charybdis black dot, behind it a black transverse streak. The fringes are of a pure white as far as the apex. South America.

P. zeledonius G. & S. (= thanus Blr.) is alike, but the head and anus of a lighter red, without zeledonius the black dot on the vertex, the fringes of the forewing are smoky from the upper radial vein to the apex. Mexico.

P. polemon Hppfr. (162 b) has, like in zeledonius, towards the apex brownish fringes of the forewings, polemon, and the dot on the vertex is absent, but it has the deep carmine of charybdis. Brazil.

P. menecrates Mab. (162 b) differs from the preceding immediately by the red base of the shoulder-meneocrates covers. Distributed from Brazil to Bolivia.

P. zeleucus F. (162 b) is much larger than charybdis and has red-spotted anterior femora. Brazil. zeleucus.

P. lampros Hppfr. (162 b) is separated from zeleucus by black anterior femora and the fringes being lampros somewhat brownish at the ends of the veins, particularly at the apex of the forewing and proximal angle of the hindwing, so that the latter look somewhat undulate. Brazil.
P. rhacia Hew. (162 b) is at once discernible from all the species by the white palpi and the white-striped anterior femora, as well as the red thorax. A.ina Gerana.

P. proculus Hfpr. (= zeleucus Erichs., nec F.) (162 b) differs from the preceding by only the anterior head being red, the posterior head being black as far as the eyes. Guiana.

P. rosicus Hfpr. exhibits a red belt across the middle abdominal rings, but the head is quite black, only the shoulders being spotted red and the anus red. From Brazil.

P. dulcinea Plötz (162 c) has 3 white transverse lines on the head: on the forehead, between the antennae and on the hindhead; palpi, base of shoulder-covers and apex of abdomen are red, the shoulder-covers finely bordered with red or orange-yellow. Mexico to South America.

P. semidentata Mab. This species has, like the 6 following ones, a white base of the hindwing beneath, also the base of the forewing is white; the fringes of the hindwing are speckled black on the ends of the veins, on the forewing white as far as the middle of the upper vein, from there to the apex black. Colombia.

P. intersecta H.-Schäff. (162 c) differs by the fringes of the hindwing being only speckled in the proximal half, those of the forewing being almost entirely white. The red head is spotted black, the thorax quite black. South America.

P. denticulata H.-Schäff. deviates from the preceding by the fringes being yellowish at the base. Head, prothorax and apex of abdomen are red. South America.

P. fluminis Btlr. (162 c) has unspeckled fringes like the 4 following species. On the brownish under surface of the forewing only the costal-marginal base is white, the fringes blackened only at the extreme apex. Amazon.

P. bixae Cr. (= maenas F., tiribazus Plötz) has the whole base of the forewing beneath blue-white, the fringes of the forewing are smoky from the upper median vein. Guiana.

P. latifasciata Btlr. (162 d) is recognizable by the extraordinarily broad white basal spot of the hindwing, whereas the base of the forewing remains quite black; fringes like in bixae. Colombia and Peru.

P. phidias L. (162 c, d) differs from latifasciata by its smaller white basal spot, the fringes being only brownish from the lower radial vein towards the apex. From Guiana and South America.

P. infantilis Drc. (162 c) is smaller than the preceding, the white spot on the hindwing beneath is placed somewhat more into the middle of the wing, indistinct and strewn with a dark tinge. Peru.

P. agenoria Hew. (162 d) has, like the 6 following species, a red-spotted proximal angle of the hindwing, and is recognizable by its black head and abdomen (only the collar being red) and by the under surface of the hindwing being all black. Known from Pará.

P. cruror Drc. (166 a) entirely resembles agenoria, but in the middle of the forewing it shows a broad transverse band of modified, differently placed scales, which stands out against the ground of the forewing indistinctly darker. Described from Pozuzo (Peru).

P. sanies Drc. (164 d) entirely resembles cruror, but the band of the forewing is here white, semi-diaphanous and somewhat opalescent, it also runs more obliquely. From La Paz (Bolivia).

P. styx Mesblr. (= anina Plötz) (166 a) has beneath a white-spotted base of the hindwing; head and prothorax are red, the red spot of the hindwing is very large and occasionally extends beyond the lower median vein. Colombia.

P. passova Hew. (162 d) differs by an entirely black prothorax and the spot of the hindwing being bordered with black; the basal spot of the hindwing beneath is decidedly bluish. Amazon, Bolivia.

P. gortyna Hew. (166 a) is at once recognizable by the hindwing being spotted green-white above in the middle. From Ega.

P. galgala Hew. (= strigifera Fldbr.) (162 d) cannot be confounded with any other species for the yellow oblique line exhibited by the forewing above, by the hindwing also beneath. The body is black except the red hindhead and apex of the abdomen. Colombia, Brazil.

P. gellias G. & S. (162 d) exhibits along the distal margin of the hindwing high, triangular, silvery blue spots. Costa Rica.

P. gazera Hew. (162 d) differs from gellias by the broader and rounder shape of its wings, the distal-marginal spots are less high and extend only to the upper radial vein. South America.
P. jonas Fldr. (= cydonia Drc.) (162 e) is a large, beautiful species with undulate white fringes; jonas. palpi and abdominal apex are yellow. From Mexico.

P. josepha Plätz is very similar, but it has yellow fringes and pale red palpi. Brazil.

P. josephina spec. nov. (162 g) has the same shape as the two preceding ones, the fringes are white, with a yellowish tint, with a fine antemarginal orange-yellow line being on the forewing only as fine as a hair. Head, palpi and apex of abdomen are red, the femora black. Described according to § from the Songo, Bolivia (Fassli).

P. araxes Hew. (= cyrillus Plätz) (162 e) is above brown with several small hyaline spots, beneath araxes. The hindwings are deep ochreous-yellow with two dark brown macular bands, between at the costal margin another small spot and a broad brown margin which is proximally sharply defined by black lunae. Mexico to Colombia.

P. arizonae G. & S. (= araxes Holl.) is very much alike and may be the northern representative of the preceding species, exhibiting on the hindwings beneath less distinct, more blurred transverse bands, and the marginal area being here blackish is not sharply defined. Arizona.

P. maculosa Hew. (= agathon Fldr.) (162 e) resembles the preceding, the ground-colour is blacker and the small spots are smaller and whiter. The larger basal half of the hindwing beneath forms a broad, orange-ochreous area. Brazil.

P. erythrostricta G. & S. (162 e) differs from maculosa by a red spot below the base of the cell of the forewing. Distributed from Central America to Colombia.

P. cossea Drc. exhibits above on the forewing the same spotting as maculosa, the hindwing shows cossea, an orange-red band extending from the distal margin to the proximal margin. Beneath the base of the forewing is more extensively spotted orange, and at the costal margin there is a red dot. South America.

P. thericles Mab. is above quite black, also the fringes of all 4 wings black, only the head and apex thericles. of abdomen red; on the hindwing beneath a moderately large, white, oval spot. Bolivia.

P. cardus Mab. differs from thericles by a much larger white spot on the hindwing beneath, to which cardus. a minute blue spot corresponds above. Bolivia.

P. hylaeus Mab. is larger than cardus, the spot of the hindwing beneath decidedly blue-white, divided hylaeus. into 8 rays by the veins with a rounded end. Bolivia.

P. creon Drc. (= cyclops Stgr.) (162 e) is a large species of a metallic blue lustre, with a round red creon. spot near the proximal angle of the forewing. Distributed from Honduras to Colombia.

P. aerata G. & S. (166 a) is bronze-green and exhibits at the cell-end of the darker hindwing 3 minute aerata. red spots. On the abdomen there are 6 yellow lateral spots. Bolivia.

P. hygieia Fldr. (= bogotana Reak.) (162 f) is likewise of a bright metallic blue lustre and has, like the following species orange-red fringes of the hindwing, whereas the fringes of the foregoing remain black as well as the head and apex of abdomen. The anterior femora are spotted red; the species is particularly charac- terized by the broad orange-red marginal band being situate before the fringes of the hindwing. Ecuador.

P. rufinucha G. & S. (162 f) differs from hygieia by the orange-red marginal band of the hindwing rufinucha. being much narrower, and by its red neck and palpal base. Bolivia.

P. aesculapius Stgr. (= variegaticeps G. & S.) (162 f), has black anterior femora and no orange aesculapius. marginal band in front of the red fringes of the hindwing. Central America.

P. insana Stgr. differs from the preceding by a narrow red marginal band before the fringes of the hindwing, extending as far as the subcostal vein, and by its red neck. Described from the Chiriqui.

P. fassli Boull. approaches hygieia (162 f), but it deviates above by the brilliant blue lustre of fassli. the wings exhibiting a slight greenish reflection. Forewing with a moderate black marginal band; the hindwing shows a rather broad, red band extending beyond vein 6 almost to vein 7. Fringes of the forewing intermixed with red-orange. From insana Stgr. it deviates by the collar being black, not red, from aesculapius Stgr. by the red band not extending to the costal angle. Colombia, Peru, Bolivia.

P. kelita Hew. (162 h) is very easily recognizable by the 3 or 4 orange-red, in the ♀ more yellow kelita. longitudinal rays of the hindwing; of the same colour are the fringes, somewhat smoky at the extreme apex of the forewing. Head, palpi, borders of the shoulder-covers and apex of abdomen are red, the anterior femora spotted red. — The form tristis Mab. & Boull. has the fringes of the forewings smoky already from the upper tristis. median vein. The species is found in Bolivia, Peru and Ecuador.
**PYRRHOPYGE. By Dr. M. Draudt.**

P. phaeax *Hypfr.* (162 g) is above black, sometimes with a slight brown tint, both wings with red fringes. Head and palpi are black, the collar laterally, as well as the borders of the shoulder-covers and apex of abdomen red; the anterior femora spotted red. On the base of the hindwing beneath, like in the 5 following species, a red spot. Peru.

**crocemargo.**

P. *crocemargo* *Mab. & Boull.* (162 f) looks very much like *phaeas*, but it has quite black anterior femora and conspicuously histrionically blast-striped veins on a more olive-brownish ground. Besides, the fringes are more yellow, not so red. Bolivia. —

**martena.**

P. *martena* *Hew.* (166 b) is distinguished by the very broad, orange-red marginal band of the hindwing, which is about 3 times as broad as the fringes. The base of the hindwing beneath exhibits a red spot which is radiately prolonged to the border below the costal vein. Ecuador.

**telassina.**

P. *telassina* *Hew.* (162 g) is like the preceding, but the marginal band of the hindwing is less broad, and on the under surface the red basal spot of the hindwing is not prolonged to the border. Ecuador. —

**cleopas.**

P. *cleopas* *Mab. & Boull.* has no marginal band before the broadly orange fringes of the hindwing; the veins are prominently histrionically black as in *crocemargo*. The apex of the abdomen and the interior margin of the shoulder-covers are red. Bolivia, Peru.

**mendax.**

P. *mendax* *Mab. & Boull.* has much narrower fringes which are smoky towards the apex on the hindwing; the wings are of a purer black, the black shoulder-covers only at the end with some red hairs. Peru.

**pelota.**

P. *pelota* *Plotz* (166 a). In the following species the red spot of the base of the hindwing beneath is absent. *pelota* is a species with a metallic green lustre and light yellow fringes, in front of which there is on the hindwing a light yellow narrow marginal line. Head, shoulders, and apex of abdomen are red, the anterior femora spotted red. — Larva of a bright red-brown, with yellow transverse belts; on *Psidium*. Brazil and Paraguay as far as Argentina.

**finbriata.**

P. *finbriata* *Plotz* differs by deeper orange fringes, absent marginal line of the hindwing and black abdominal apex. Described from Mexico.

**rubricor.**

P. *rubricor* *Mab. & Boull.* from Ecuador has deeper orange-red fringes which are blackened on the forewing from the middle radial vein to the apex, as well as by more extensively red shoulders and interior margins of the shoulder-covers.

**zereda.**

P. *zereda* *Hew.* (= *rufipeactus* G. & S.) (162 f) is a large, green and blue species, with a broad, proximally dentate, orange marginal band of the hindwing, the femora and legs spotted and striped orange. Head, palpi and abdominal apex quite black. Ecuador.

**chalybea.**

P. *chalybea* *Scudder.* (= *zereda* *Hew* part.) (126 g) differs from *zereda* by its black femora. From Mexico and Central America as far as Venezuela.

**angelas.**

P. *angelas* *Cr.* (= *amiatus* F., *laonome* *Sennis.*) (162 f) has on the hindwing and on the forewing an orange-yellow marginal band before the fringes. Head, shoulders and apex of abdomen are red, the shoulder-covers black. Guiana.

**hadassa.**

P. *hadassa* *Hew.* (162 f) has orange-red fringes and on the hindwing a dentate marginal band before them, which is broader than the fringes. The fringes of the forewing are mostly blackened towards the apex; the proximal half of the shoulder-covers is red. Ecuador and Bolivia.

**pseudo-hadassa.**

P. *pseudo-hadassa* *Mab. & Boull.* has the marginal band of the hindwing not broader than the fringes which are on the forewings blackened to a small extent. The proximal border of the shoulder-covers is more narrowly red. From Peru.

**tennis.**

P. *tennis* *Mab. & Boull.* Here the marginal band of the hindwing is still narrower than the fringes, more orange-yellow. Head and palpi are black, the proximal margin of the shoulder-covers narrowly red like in the preceding. Peru.

**hades.**

P. *hades* *Mab.* (162 g) has quite black shoulder-covers, only laterally on the shoulders somewhat red; the head is likewise red with a large black dot on the frons and a black streak between the eyes; otherwise like the preceding. Bolivia.

**phyleia.**

P. *phyleia* *Hew.* (162 g) differs from *hades* by deeper red fringes, the black frontal dot is much smaller, the streak between the eyes is absent. From Bolivia.

**haemon.**

P. *haemon* G. & S. is like *phyleia* (162 g), but the narrow orange-red margin of the hindwing is here broad; from *hadassa* (162 f) it differs by the red head. Forehips black. Costa Rica, described according to a ♀ in the Coll. Staudinger.
J. fleximargo $Mab. & Boull.$ is distinguished by its entirely black hindhead; the marginal band $fleximargo.$ of the hindwing is broader between the median and radial veins than the fringes are, on both sides of them, however, narrower; the fringes of the forewing are blackened towards the apex. Bolivia.


The genus contains animals greatly resembling the preceding in their exterior, chiefly distinguished by the bare posterior tibiae, the wings being generally narrower and the apex of the forewing somewhat prolonged.

A. pionia $Hec.$ (162 h) is black with a deep blue metallic reflection, at the anal angle of the hindwing $pionia.$ silvery blue, prominent spots; in the middle of the forewing there are two red spots below each other. On the under surface particularly the hindwings are blue-white towards the base, the fringes of all the 4 wings are of a pure white; the distal margin of the hindwing is concave in the $\gamma$, the anal angle extended in the shape of a lobe. Colombia.

A. ponina $H.-Schdff.$ is extremely similar, but it has dirty yellow, instead of white fringes, and those $ponina.$ of the hindwings are much longer. Panama.

A. affinis $H.-Schdff.$ (162 h). Above deep bluish black with white fringes, a carmine ring at the neck, $affinis.$ palpal base and abdominal end; the sides of the abdomen are striped yellow, the costal margin of the hindwing beneath is narrowly orange-yellow, which colour extends as a fine marginal line before the fringes as far as near the anal angle. Colombia, Brazil, also in numbers from West Mexico (Guerrero).

A. amra $Hec. (= brasiliensis $Mab.$) (160 c) differs from the preceding by red-striped abdominal sides $amra.$ and by the yellow marginal band of the hindwing beneath being broader than the fringes. Brazil.

A. proxima $Mab. & Boull.$ has red-spotted abdominal sides and a red costal margin of the hindwing $proxima.$ beneath; the marginal band before the fringes on the hindwing is of the double width of the fringes. The species is besides by one third larger than $amra.$ Distributed from Mexico through Colombia as far as Paraguay.

A. ambigua $Mab. & Boull.$ exactly resembles $Mysoria venezuelae$ (162 h) and is only discernible $ambigua.$ by the veins. It has the broadest marginal band of the hindwing, which is more than twice as broad as the fringes. Brazil.


Entirely like the preceding genus in the structure except the petiolation of the upper median and lower radial vein of the hindwing, rising from above the lower cell-angle; the posterior tibiae are likewise bare.

M. sejanus $Hpfjr.$ (162 g) is above dull bluish-black with a red abdominal end; hindhead, collar $sejanus.$ and first joint of the palpus are black. Beneath the costal margin of the hindwing is not differently coloured. Bolivia.

M. thasus $Cr.$ (162 h) is just the same but it has a red spot on the hindhead and on the middle of $thasus.$ the collar, and a red first palpal joint. Colombia and Peru.

M. pallens $Mab.$ is similar, but it has beneath in front of the white fringes of the hindwing a yellow $pallens.$ marginal band. From Brazil.

M. decolor $Mab. & Boull.$ differs from the preceding by the white marginal band of the hindwing $decolor.$ being struen black, instead of the yellow one, exhibiting traces of a red costal margin of the hindwing. Costa Rica and Panama.

M. venezuelae $Scudd. (= acastus $anat. $rec $Cr.$) (162 h) has on the under surface a red costal margin $venezuelae.$ of the hindwing, which grows a little broader towards the base, and a yellow marginal band before the white fringes, which gradually grows narrower towards the anal angle. The fringes of the forewing are of a pure white as far as the apex. Distributed from Mexico to Colombia.

M. cayennae $Mab. & Boull.$ differs from the preceding species by the fringes of the forewing being $cayennae.$ blackened from the upper median vein to the apex, and besides the red costal margin of the hindwing beneath is equally broad as far as the base. — In the form $verbena$ $Bltr.$ ($= phidias$ $F$. barcastus $Sepp$) the otherwise $verbena.$ yellow marginal band of the hindwing is red, like in: $acastus$ $Cr.$ in which form the red at the costal margin $acastus.$ of the hindwing is extinct. Guiana.


This genus contains large, very strong animals. On the forewing the upper median vein rises far behind the middle of the cell, both the lower subcostal veins rising separately; on the hindwing the cell is longer than
half the costal margin, the middle radial is absent; the distal margin is feebly undulate or somewhat concave. The posterior tibiae show 2 pair of spurs.

**spatiosa.**

*Y. spatiosa* Hew. (164 b) is a large beautiful species, black with a deep hemochrome base of the forewing and a larger discal spot of the hindwing, also the thorax and base of abdomen are intermixed with red hair. The forewing exhibits a broad tripartite band of vitreous spots in the middle and 2 shorter and narrower ones behind it, often between the second and third besides 2 minute vitreous spots; the under surface is dull lustrous indigo-blue with a red diffuse spot at the base of the hindwing. Ecuador, Colombia.

**cosyra.**

*Y. cosyra* Decr. (164 b) differs from the preceding by yellow-red and less extensive basal spots; the 2 hyaline dots between the apical and postdiscal bands are always absent; the abdomen is more conspicuously curled whitish. Bolivia and Peru.

**staudingeri.**

*Y. staudingeri* Plötz (164 b) is likewise very similar, but it has only 2 small hyaline spots, the discal one of which is shorter and broader; the basal spots are of a purer red, the under surface of a brighter metallic blue. In the form: — **cometides** Stgr. (164 b) the apical hyaline spots are also absent, so that there only remains the large discal hyaline spot, and besides the red colour is mostly more or less confined and may be entirely absent on the wings. From Peru and Bolivia.

**aspilos.**

*Y. aspilos* Mab. & Boull. (164 b) is without any hyaline spots, it is entirely bluish-black with yellow-red basal spots. Peru, Bolivia.

**cometes.**

*Y. cometes* Cr. (= thekera Hew.) resembles *staudingeri* (164 b) above and has also only 2 rows of hyaline spots, the insignificant basal spots are rusty-red. Beneath distinguishable by its reddish ground-colour with black marginal spots on the hindwings, 2 or 3 of which at the proximal angle are pupilled white. Surinam.

**aspitha.**

*Y. aspitha* Hew. (164 c) is very much like *cometes*, but it has only one small apical hyaline spot and yellow-red basal spots; the abdomen is curled white like in *cosyra*. Pará.

**rubricollis.**

*Y. rubricollis* Sepp (164 c) has on the black wings only one tripartite hyaline discal spot, a black head and abdomen and red-spotted shoulders. Surinam.

**pedaia.**

*Y. pedaia* Hew. (164 c) differs from *rubricollis* by its red head and apex of abdomen, whereas the shoulders remain black. Amazon.

**hadora.**

*Y. hadora* Hew. (164 c) is the same, but it has a black abdominal apex, a red prothorax, and on the red head a black transverse streak between the eyes. Ega.

**arinas.**

*Y. arinas* Cr. (= arinus F.) (164 c) has a more intense blue lustre on the wings, with a more rounded oval, hyaline discal spot; only the frons and apex of abdomen are black. Fringes of the hindwings white. Surinam.

**assaricus.**

*Y. assaricus* Cr. (= alsaricus F.) (164 c) is a smaller, somewhat more variegated species; beside the white discal band of the forewing it has 3 apical hyaline spots and 3 before them, with a red-spotted base; base and disc of the hindwing are red-brown with 2 black spots in it near the proximal margin; the fringes of the hindwing are speckled white. On the under surface the hindwings are spotted blue and white. The abdomen is red and black, whit whitish rings and a red end; the head is black. Guiana.

**parina.**

*Y. parina* Plötz (164 d) is likewise smaller and neater with a very concave excision of the distal margin of the hindwing. The black forewing exhibits beside the orange-red discal band two rows of hyaline spots, the hindwing a large red anal-angular spot. Thorax and head likewise red-yellow. Surinam to Bolivia.

5. Genus: **Mahotis** Wts.

Closely allied to the preceding genus, but it has only terminal spurs on the posterior tibiae, and the cell of the hindwing is shorter and does not reach the middle of the wing, the distal margin of the hindwing is entire and round; the upper median and lower radial vein rise together from the lower cell-angle or also short-petioled.

**crida.**

*M. crida* Dbl. (164 c) may not belong here at all. The wings are black with a discal spot; head and apex of abdomen red. Nicaragua.

**nurscia.**

*M. nurscia* Sems. (164 d) is above black with a large, brick-reddish, somewhat transparent discal spot, the hindwings have some blue macular markings particularly towards the distal margin. Beneath the hindwings are blue with a black marginal band and 2 black basal rays. Ecuador and Peru.

**malis.**

*M. malis* G. & S. (164 d) is above very similar, but beneath quite different, the hindwings being black with 3 blue transverse bands, the middle one of which consists of separate spots. Colombia.

Distinguished from the preceding genus by a well developed middle radial of the hindwing, rising from the middle of the transverse vein. The posterior tibiae likewise show only 1 pair of spurs. Only 1 species:

*A. eximia* Hev. (164 e) is a smaller, very easily recognizable species, above black with an oblique *eximia* band of 7 reddish-yellow spots and one behind the cell; the hindwings are diaphanous light yellow, in the disc with a slight red-brown tint and a black marginal and discal band. Venezuela.


Very much like *Ardaris* from which it differs by 2 pair of spurs of the posterior tibiae, and the middle radial of the hindwing rising nearer to the lower radial vein. Likewise only one, though variable species:

*M. cosinga* Hev. (164 e) has light-yellow, more or less grey-dusted forewings with thick black veins, a broad black distal margin and a dentate discal band interrupted between the median veins. The long-haired black thorax shows 2 light-yellow longitudinal stripes; head red, with black spots, anal tuft red. —  *f. obscura* Mab. has entirely black wings, the light yellow patches are visible only beneath. — *In f. sanguinea* Mab. the cell-spaces are of a deep red instead of light yellow. Bolivia. Peru.


Greatly approaches the following genus *Jemadia*, also exteriorly with respect to the colour and marking. The chief difference is the petioled rise of the upper median and lowest radial vein from above the lower cell-angle on the hindwing. Only one, sexually somewhat dimorphous species:

*G. pascas* Hev. (= *albimacula* Mab. & Boull.) (163 a). Above black with light-blue dusting *pascas* at the base, oblique subbasal band and antemarginal spots; the discal oblique band and 2 spots towards the apex are light yellow in the $\mathcal{S}$, white in the $\mathcal{Q}$, like an oblique band in the costal-marginal area of the hindwing. From Brazil.


A very comprehensive genus, in which it is rather difficult to define the species owing to the extraordinary resemblance among one another. Moreover, there are 2 series parallel to each other, one of which shows 4 white dots on the prothorax, the other exhibiting a white transverse streak instead. In order to facilitate the definition we keep to Marille’s division of the groups into “punctati” and „lineati“. The *Jemadia* are robust animals with white or blue marking and hyaline spots. The hindwings are often remarkably small, in the $\mathcal{S}$ often with tooth-like projections on the inner-marginal and lower median vein, above them mostly with a deeply concave excision, and between the upper radial and subcostal vein often with an obtuse projection; more rarely the hindwings are quite round. The middle radial vein is absent, the lower one comes from the lower cell-angle, the upper median vein below it separately.

I. Group: punctati. *Prothorax with 4 bluish-white dots beside each other.*

*J. hospita* Btr. (166 b) has, like the following species, a rather round, only feebly undulate distal margin of the hindwing. A characteristic mark of this species is the hindwing exhibiting on its black ground only one blue discal band and 3 fine, blue inner-marginal rays; the latter are all developed the same, diverging distally, the most proximal ray, extending to the proximal margin, is parted by a fine black longitudinal stripe. From Colombia and Brazil. — *f. pseudognetus* Mab. from Colombia is larger, the blue oblique stripes at the base of the forewing are extinct, the narrow marginal band coherent; on the hindwing the most proximal ray of the inner-marginal is shorter than the middle one. — *f. imitator* Mab. (163 c) (= *dorylas* Plötz, vulcanus Hev., paulensis Schls.) from Bolivia is above much blacker, the basal bands of the forewing quite extinct or absent, the marginal band broken up into spots; the postdiscal hyaline spot is absent altogether, or it is replaced by 2 minute hyaline dots. On the nearly quite black hindwing the middle inner-marginal ray touches the marginal band. — *f. ulyxes* Plötz (163 c) represents the species farther up to the north as far as Surinam; on the forewing the basal oblique band is extinct, the distal one quite narrow and slightly concave distally; the marginal band extends coherently to the postdiscal hyaline spot, then it makes a break and forms 2 small spots as far as the small apical spots; the inner-marginal rays of the hindwing are strong and broader than in the other forms. — Although these 4 forms are reported to exhibit slight differences of the sexual organs, yet I should take them to be a very variable species; the separation grows still more difficult, if there are very large
series spread before one, as for instance from Fassl's collection; then the differences become more and more obliterated.

**J. vulcanus** Cr. nec (*Hev. 163 c*) has a blue band more on the hindwing than the preceding species, the most proximal of the inner-marginal rays being removed more into the middle and forming a broad middle-band. On the forewing the basal bands are both well developed, the marginal band runs in a straight line to the apical hyaline spots and even beyond them. Colombia, Guiana.

**J. heuwitsoni** *Mab.* (166 b) looks like the preceding, but the middle band of the hindwing is only very short, triangular and almost white. Beneath on the hindwing the 2 black middle bands are united at the costal margin and proximal margin, the latter being all black. Colombia.

**J. fallax** *Mab.* (163 c) likewise resembles *vulcanus*, but it can easily be distinguished from all the species of the *punctati* group by the distal, basal band of the forewing forming with the lower blue inner-angular streak a single oblique band; the fine marginal band is somewhat more curved. On the hindwing the blue median band is removed more distally, the marginal band being narrow, broadly interrupted by the black veins. The under surface of the hindwings is almost entirely black, the broad black middle bands exhibiting only a fine metallic bluish-green thread between them. Brazil, Colombia.

**J. patroclus** *Plötz* (166 c), according to the excellent figure by *Plötz*, belongs to the *punctati*, not as *Marille* thought to the *lineati*, the species being allied to *fallax* from which it chiefly differs by the distal basal oblique band of the forewing not coalescing with the inner-marginal ray, but being separated afar. On the forewing there is only a small, square, postdiscal hyaline spot, above it there is a small blue oblique spot; the 5 apical hyaline spots are relatively large and well developed. The hindwings are marked the same, but the blue marginal band is considerably broader and coherent. On the under surface the 2 black middle bands are separated afar by the blue colour and neither coalescent at the costal margin; before the black border, in the blue colour, there is besides a fine, black, undulate line from the upper median vein to the costal-marginal vein. Described from Peru.

**J. lisetta** *Mab.* & *Boull.* In the following species of this group the distal margin of the hindwing, at least in the ♀, is deeply concave with 2 distinctly dentate anal lobes, in the ♂ mostly rather rounded. In *lisetta* the marginal band of the hindwing consists only of 4 or 5 separate, small spots and does not extend to the proximal angle; the blue middle band is entirely absent. Described from Peru.

**J. lecerfi** *Mab.* & *Boull.* (163 d) has a still shorter marginal band of the hindwing, extending only to the lower median vein, and a short, triangular, pale blue median band. On the forewing above the blue marginal band only extends to the postdiscal hyaline spot. Guiana.

**J. menechmus** *Mab.* (163 d) differs from the two preceding by a broader, coherent marginal band exhibiting a break only near the proximal angle. The blue marginal band of the forewing extends to the small apical hyaline spots. Brazil and Colombia.

**J. gnetus** *F.* (= *megalesius* *Hbn.*, *sosia* *Mab.*) (163 d) has been a somewhat doubtful species which I, however, unhesitatingly unite with *sosia*; it has the broadest marginal band of the hindwing, extending coherently to the proximal angle where it bends round and passes over into the inner-marginal ray; the two proximal inner-marginal rays are flown together to a broad, white-blue surface, the median band is absent. On the under surface the 2 black median bands are not directly united at the proximal margin, only coalescent at the costal margin. Widely distributed in Colombia, Guiana and Brazil.

**J. hephaestus** *Machl.* (= *zamora* *Mab.*) (163 e) is very similar, on an average somewhat smaller, above with a narrowed marginal band and middle inner-marginal rays, the median band being likewise absent. The under surface of the hindwing shows an entirely black proximal margin and the 2 black median bands are also united at the proximal margin. From Surinam as far as Colombia and Bolivia.

II. Group: *lineati*. Instead of the 4 dots at the prothorax a bluish-white transverse line.

**J. polyzona** *Latr.* (= *jamina* *Blt.*.) (163 a) is easily recognizable by the great extent of the blue colour, particularly the blue costal margin, the postdiscal hyaline spots being scalariformly arranged below each other, and 4 apical spots. On the hindwing beneath the middle black band is forked like a Y on the middle radial. Guiana and Brazil.

**J. zimra** *Hev.* (163 a) is similar, but much less blue, mostly with an intensely greenish tinge; particularly the marginal band of the hindwing is very narrow. Brazil to Paraguay.

**J. alburnia** *Mab.* (163 b) has above no blue rays or only traces of them below the median hyaline spot of the forewing, and beneath the black median band of the hindwing is not shaped like a Y, but broadly coalescent with the proximal one at the costal margin and proximal margin, like in the *hospita* group. Brazil.
J. zonara Hew. (163 b) has, like fallax (163 e) of the first group, the distal oblique band of the zonara. forewing connected with the lower blue inner-marginal spot and round the proximal angle mostly continued as far as the marginal band. The black median bands of the hindwings beneath are on both sides coalescent. The species is more common, flying from the Amazon through Colombia as far as Ecuador.

J. suzetta Mab. & Boull. is larger than zonara; the 2 blue stripe-like spots below the median hyaline suzetta. spot are broad, connected at the apex and separated from the broad, distal,basilar oblique band. Bolivia.

J. macleani G. & S. (166 b) differs from the preceding by the Y-shaped, black median band of the hindwing beneath, the absent or almost extinct postdiscal hyaline spot of the forewing and blue proximal margin, Panama.

J. umbra Mab. & Boull. Whilst the preceding 6 species show 4 small, apical hyaline spots, there umbra. are here and in the following species 5 of them. The median hyaline spot is broadly square, above it there is another 4-cornered blue spot; the blue marginal band extends to the postdiscal hyaline spot. Beneath the proximal margin is quite black, the black median band on the subcostal vein forked in the shape of a Y. Bolivia.

J. patrobas Hew. (= vulcanus Hew. [text]) (163 b) differs from umbra by more blue at the proximal patrobas. margin of the hindwing beneath, as well as by the bifurcation of the black median band taking place already below the upper radial vein. Brazil and Colombia.

J. azeta Hew. (163 b) has a still more extensively blue proximal margin of the hindwing beneath, azeta. and the Y-shaped bifurcation of the black median band takes place already at the upper median vein or even below it. — In f. melanina Mab. (163 c) the black of the under surface is very extensive. Bolivia to melanina. Paraguay.

J. brevipennis Schaus is unknown to me, it may belong near zimra; spots and bands decidedly brevipennis. green; instead of the 2 postmedian hyaline spots of zimra there is but one; the median band of the uncommonly being reduced to a green cell-end streak. Described from Sao Paulo.

J. ahira Hew. (163 a) is easily recognizable by the absence of all the hyaline spots and by the broad, ahira. Bluish-green inner-marginal band of the forewing. Pará.


By the habitus, colour and marking this genus entirely approximates Jemadia from which it chiefly differs by the posterior tibiae being without any spurs, but fringed above. Furthermore, as a unique mark of the whole family, the rise of the lower radial vein from the upper median vein on the hindwing is as equidistant as the upper median vein from the lower one. The distal margin of the hindwing is somewhat concave, the anal lobe well developed. Hitherto only one very imposing representative known:

N. perpixa Mab. (= scomber Drec.) (163 c) looks exactly like a gigantic Jemadia, also in the colouring perpixa. and marking. The distal blue basilar oblique band of the forewing passes over into the lower inner-angular spot, like in J. zonara or fallax, and from there it turns round without any interruption into the marginal band which reaches as far as the apical spots. On the hindwing the inner-marginal rays form a broad white patch, the median band is represented by a large blue spot. On the collar a white stripe, no dots. Brazil.


A very uniform group of black, imposing animals marked yellow and red, with entire-margined wings and a rather pointed apex of the forewing. On the forewing the lower median vein rises close at the base, the upper one behind the middle. The hindwing is very feebly undulate at the border; the discocellular is shorter than half the length of the wing; the upper median vein rises petioted with the lower radial. The posterior tibiae have two pair of spurs.

S. spizii Plötz (164 f). On the black forewing the spot below the cell of the broad yellow median spizii. band touches the lowest of the 6 yellow apical spots; at the base of the forewing there is above the proximal margin a minute yellow spot. The hindwing exhibits a broad yellow discal area which is divided on the transverse vein by a black transverse stripe cohering with the broad black proximal margin. Palpi, anus and venter are red, the latter with a black streak before the last ring; abdominal sides, shoulders, and a stripe on the shoulders are yellow. Patria doubtful.

S. xanthippe Latr. (164 f) was described according to but one ♀ and is above almost just like spizii, xanthippe. though the basal spot of the forewing is smaller, the yellow bands of the forewing do not touch each other, and the base of the hindwing is extensively black. Beneath on the hindwing the black stripe of the transverse vein is a broad band; the red venter exhibits a black streak in the middle, so does the red hindhead. Rio de Janeiro.
oneka. S. oneka Hew. has no basal spot of the forewing; the yellow bands of the forewing are very narrow and consist of separate spots; on the hindwing the 5th and 6th spots of the yellow band, counting from the proximal angle, are removed towards the base. The under surface of the hindwing is preponderantly black with 2 yellow spots at the base. The red head is posteriorly bordered with black; the black abdomen shows beneath a yellow stripe, the sides being red. Ecuador.

antias. S. antias Pldr. (164 f) has somewhat broader yellow bands than the preceding, red palpi and collar, the head being otherwise black. The venter is striped red. Brazil.

crythrosoma. S. crythrosoma Mob. (164 f) is immediately recognizable by the red 4 last abdominal rings being narrowly bordered with black; the short apical band runs straight. Amazon.

damingue. S. damippe Mob. & Boul. (164 f) is above similar, but it has a black abdomen, the venter being black, too, with double red macular bands; the sides exhibit small yellow-red spots. The hindwings are beneath black with a broad, regular median band and a four-cornered basal spot from the costal margin to the middle of the cell. Head red, between the eyes spotted black. Brazil.

catomeelaena. S. catomeelaena Mob. & Boul. is distinguished by an entirely black abdomen with a blue lustre, the venter being red only on the first rings; head and palpi are red, the hindhead striped black. Wings marked very much like in the two preceding. Minas Geraes.

hegesippe. S. hegesippe Mob. & Boul. has broader yellow bands on the wings, touching each other like in spiizii (164 f). The hindwing beneath exhibits a yellow subbasal band being broad at the costal margin and tapering downwards, and a broad, regular median band. Head, anterior femora, and anus are red; the venter is bluish-black, the shoulder-covers and the hair on the posterior tibiae are yellow. Guiana.

pertyi. S. pertyi Plütz (164 f) is very similar, but it has a red venter with a black median stripe and yellow lateral spots separated from the red by a black stripe. The red head shows a black transverse stripe between the eyes; the shoulder-overs are inside only narrowly margined with yellow. Brazil.

martii. S. martii Plütz (164 e). Here the distal band, running about parallel to the margin, extends down to the proximal angle; a large yellow basal spot is to be seen on the forewing; the hindwing shows a very broad median band projecting distally between the upper median and middle radial vein. The fringes of the hindwings are yellow, almost unspeckled. Brazil.

luteizona. S. luteizona Mob. (164 b) is very similar, but it has black-speckled fringes on the hindwings, the still broader median band of the hindwing is distally somewhat blurred. Described from Mexico.


Large strong animals, the marking of which, on a black ground, corresponds to that of Jemadia, but the colour of the bands is a lighter or darker yellowish red, often with a brownish tint. The distal margin of the hindwing is only feebly undulate, but near the anal angle somewhat more distinctly dentate. On the forewing the lowest subcostal vein and the uppermost radial vein rise from the same place; the cell is shorter than half the costal margin, the transverse vein runs rectilinearly, the upper median and lower radial rise from the lower cell-angle.

ocyalus. M. ocyalus Hbn. (iphinus Ky.) (166 e) recalls Mahotis narscia and malis (164 d). The black wings exhibit 3 brick-redish, semi-diaphanous spots, the hindwing shows bluish bands at the proximal margin and distal margin. Brazil.

euphene. M. euphene G. & S. (163 f) is very variegated like the following: next to the base of the forewing is a blue band, then a broad red one in the middle, 2 spots nearer to the apex are yellowish-red; the hindwing exhibits 2 irregular blue bands. Anal apex black-haired. Peru, Ecuador.

versicolor. M. versicolor Latr. (= mulcifer Hbn.) (163 e) is similar, but the blue basal band is broader, the red median band narrower; above all distinguished by the red-haired apex of the abdomen. Brazil.

sela. M. sela Hew. (= pityusa Hew. pro parte) (163 f). Here and in the next species the forewing exhibits 4 red-yellow bands; recognizable by the under surface of the forewing showing 3 blue-white bands near the base and a more purely blue band near the margin. New Granada.

periphema. M. periphema Hew. (163 f) is above similar, but on the hindwing it has besides a broad, red-yellow marginal band. The hindwings are red-yellow beneath, with two equally broad, black median bands and a blue band in the broad black margin. From Peru and Bolivia.

pityusa. M. pityusa Hew. (= porus Plütz) (164 a) is the same, but on the hindwing beneath the blue marginal band is absent, and the distal one of the black median bands is narrower than the proximal one. Colombia, Peru.
M. punctiger Mab. & Boull. (164 a as punctigera) is very much like pityusa; the median band of punctiger. the forewing is pointed towards the proximal margin; the hindwing exhibits a regular, curved median band; the shoulder-covers are distally broadly bordered with red-yellow. Colombia, Bolivia.

M. minthe G, & S. (164 a) differs by the absence of the apical spots, so that there are only three red-yellow macular bands. — In the form: egena Mab. & Boull. the two postmedian spots are likewise absent. egena. Bolivia.

M. minetes Mab. Somewhat smaller than ocyalus (166 a) which it superficially resembles entirely, minetes. though the position and shape of the spots are different. The orange spot which in ocyalus is between veins 3 and 4, is parted in two by vein 4. The apical band is curved, composed of 5 spots, whereas in ocyalus it consists of 4 spots. The blue and yellow stripes run likewise somewhat different in minetes. Guiana.

M. baroni Mab. & Boull. differs from all the others by the forewings being strewn with yellowish. baroni. green scales and exhibiting 3 rows of spots; fringes and palpi are yellow; the median band of the forewing is more red. The hindwings are black with two yellowish-green discal bands. Ecuador.


Differs from the preceding genus only by much longer hindwings with the anal angle extended like a tooth. Only three species are known:

C. machaon Dbl. & Hew. (164 b) shows 3 yellow-white bands on the black forewing, on the hindwing machaon. a broad, yellow median band and reddish-yellow fringes. Brazil, Rio Grande do Sul.

C. pieria Hew. (164 b) recalls again more Jenadia by the scheme of markings; the spots of the forewings pieria. are light lemon-coloured, partly diaphanous, the hindwings are red-yellow with two black median bands being united towards the proximal margin, and a black border. Amazon, Colombia.

C. auraria H. Dréc. is very closely allied to pieria, the yellow marginal band of the forewing is broader, auraria. the black postmedian band of the hindwing much narrower and towards the costal margin almost extinct; the hyaline band of the forewing has a somewhat different shape and position, and the hindwing is beneath in the proximal half of a much deeper orange than in the costal half. From La Paz (Bolivia).


The antennal club is decidedly more slender and more pointed than in the allied genera. The hindwings are not prolonged as they are in Croniades, but dentate at the border. On the forewings both the lowest subcostal veins are situated next to each other at their rise. Only 1 species:

M. varicolor Mén. (164 e) shows on the black ground towards the margin blue, deeply notched varicolor. lines, and discal and subapical yellowish macular bands. Anal apex, palpi, and stripes on the thorax are likewise ochreous yellowish. Minas Geraes.


The only species has a still longer antennal club being pointed almost like a thread, so that one might be inclined to doubt whether it is a Pyrrhopygina at all. The hindwings are somewhat longer than in the preceding and deeply notched. Both the lowest subcostal veins of the forewing are close next to each other, the two median veins rise close beside each other.

A. pardalina Fldr. (164 g) is black, on the forewing with large, discal and smaller subapical hyaline pardalina. spots. Thorax and bases of wings red-brown, on the hindwing very extensive and spotted black. The hindwing beneath exhibits instead of the red-brown a bluish-white colouring and in it, towards the base, two black transverse bands. Colombia.


Differs chiefly from the preceding genus by the shape of the hindwings: they are not so uniformly dentate, but more undulate, below the somewhat extended apex sinuous, between the anal angle and the next tooth likewise deeply concave; the antennal club is likewise slender and pointed.
M. illistris Mab. (164 g) has, like the following species, a round hyaline spot on the hindwing. The colour is a bright golden-yellow with thick black veins and on the hindwing with three spotted antemarginal bands interrupted by black. Peru and Bolivia.

M. nobilis Cr. (= salus F.) (165 a) extremely resembles the preceding, the black veins of the forewing somewhat less thick, the black border broader and the 3 black bands of the hindwing are more regularly coherent, and on the median veins, the uppermost radial and the subcostal vein more strongly dentate towards the margin. From Surinam.

M. hages G. & S. (165 a) has a much smaller hyaline spot of the hindwing, the 3 black bands of the hindwing being much less pronounced. Central America.

M. amystis Hew. (165 a) is not so bright yellow, with much finer black veins and a narrower black border, the 3 bands of the hindwing stunted, partly interrupted. On the much lighter yellow under surface the black lines are much finer and consist only of short, black streaks. From Peru, Colombia and Bolivia.

M. orbicus Mab. (165 a) has a more brown colour, a broader black border of the forewing, particularly broader at the proximal angle, with medium-fine black veins and somewhat nebulous, irregular bands of the hindwing, that are partly connected with each other. The hyaline cell-spot of the forewing touches the inner-marginal vein, in amystis it does not. The under surface is yellowish-brown, on the forewing the black markings are almost entirely absent, on the hindwing they are fine, prominently black. From Brazil to Paraguay.

M. epigona H.-Schäff. (164 g) is similar, above more yellowish-brown, the border not so black, the lines of the hindwing of a clearer, more prominent black. Beneath quite light-yellow, almost without any black marking, also on the hindwings only light brownish traces of it. Venezuela. Perhaps the northern representative of orbicus.

M. sothis Mab. (165 a) approximates particularly phoronis from which it chiefly differs by the under surface of the hindwing, in which the rusty brown ground-colour being broadly yellow at the base is traversed by 3 undulate brown macular bands, the two lower ones of which are nearer to each other, whereas phoronis has four black undulate lines at equal distances from each other. Brazil.

M. aethras Hew. i. i. is dark brown with a broad, black border of the forewing. The hindwing shows 3 stout, coherent, black transverse bands being broadly separated from each other. On the under surface the bases of the wings are whitish, the hindwings exhibit distinctly marked transverse bands. Brazil.

M. orthrus Hew. is more red-brown, the brown border of the forewing exhibits 9 white dots. The macular bands of the hindwing are not black, but more rusty brown. Brazil.

M. phoronis Hew. (165 a). This well-known species is of a bright rusty yellow, the forewings almost without the dark border. The hyaline spot of the hindwing is very large, round, sharply defined with black. On the under surface the proximal halves of the wings are sharply defined by a light yellow, with the three usual transverse bands being brown here. Widely distributed in Colombia, Bolivia and Peru.

M. belti G. & S. (166 c) differs by the darkened apical part of the red-brown forewing and a much smaller hyaline spot of the hindwing. Beneath the wings are lighter, the distal macular band of the hindwing touches the margin. Central America.

M. persela Mab. (166 c) is above of a purer brown, beneath in the proximal halves of the wings light greenish yellow, marked similarly as phoronis, but the distal transverse band is situate nearer to the border and is more angular. Brazil. — In the form: caucanus Stgr. the under surface of the hindwing is without the black transverse band before the hyaline spot, and without the basal stripe; the distal part is so very much darkened, that the black band bordering on it proximally and the one being situate in it are scarcely prominent. The upper surface is also a little darker, of a more monotonous brown colouring than in phoronis. Cauca Valley.

M. santhilarius Latr. (164 g) has, like the following species, no hyaline spot of the hindwing. Above rusty brown with a broadly darkened border; the small subapical hyaline spots touch the discal spot by being moved forward towards the margin between the median veins. On the under surface the hindwing is yellow with 3 black bands and a broad black border. Guiana to Brazil, Amazon.

M. epimachia H.-Schäff. (165 a) is above more purely rusty yellow without the darkened border of santhilarius. The discal spot is not so much pushed forward, the subapical dots do not touch it. The yellow of the hindwings beneath is purer, more extensive. The hindwings are more prolonged. Peru to Paraguay.

M. pegasus Mab. (165 b) is smaller, more dirty rusty brown. The hyaline spots of the forewings are similar to those in santhilarius. The under surface of the hindwings is of a purer yellow, without any brown transverse bands, only discally there are occasionally traces of one. Palpi and legs are yellow. Guiana.
17. Genus: *Azonax* G. & S.

Distinguished from the most closely allied genera by the entire-margined hindwings being only on the upper radial somewhat angular. The antennal club is obtuse than in the preceding, and in contrast with the allied genera the upper median and the lower radial of the hindwing are not potted. 1 species:

*A. typhon* Hew. (165 e) looks like a *Myseclus*: above rusty brown with one large, quinquedentate, *typhon*. discal vitreous spot and 4 small apical ones, between them at the costal margin 2 more of them. The hindwing exhibits one large, round, white antemedian spot and a row of black dots behind it, two of which are puffed white. Nicaragua.

18. Genus: *Oxynetra* Fldr.

Differs from all the other *Pyrrhoppyginae* by the straight transverse vein of the forewing. On the hindwing the middle radial vein is absent; the antennal club is rather pointed.

*O. felder* Hppf. (165 b) is like the other very similar species of a greenish black with very large *felderi*. vitreous spots. The present species has a red ring round the 2nd abdominal segment. On the forewing the very large discal hyaline area is separated from the subapical one only by a small, narrow black stripe. Brazil to Peru.

*O. semiyalina* Fldr. (165 b) has no red-brown abdominal ring and a very much larger subapical *semiyalina* vitreous spot separated from the discal one by a broad black band. Towards the margin on the veins pearl-coloured dust-stripe. Body and mesothorax are metallic green. Colombia.

*O. confusa* Mab. (= annulata Stgr.) (165 b) is similar, but the subapical vitreous spot is oval, not *confusa*. square as in the preceding, parallel with the margin there is behind it a band dusted with a pearl-colour, growing narrower towards the proximal angle. The *confusa* has quite black wings without any vitreous spots and a red-ringed abdomen. Described from Peru.

*O. hopferi* Stgr. (165 b) differs from the preceding by a much narrower vitreous band of the forewing, *hopferi*. being only traversed by the median and its branches, by the absence of a white spot below the large double vitreous spot of the hindwing, and particularly by 5 bright orange-red transverse band on the dorsum of the abdomen; venter in the middle curled white. Shoulder-covers spotted orange. From the Chiriqui.

Subfamily: *Hesperiinae* Wts.

A large subfamily with not always uniform marks, so that a separation into two groups was necessary, so as to arrange in some degree the great number of forms. There are very large animals with extreme resemblances to certain genera of the *Pyrrhoppyginae*, down to small species. All have either a very short or horizontally projecting 3rd palpal joint, which is never bent up vertically. On the forewing there is never a discal stigma.

**Group A.**

The species of this group mostly have the antennal club bent round like a hook, sometimes in the shape of a sickle always terminating into a fine point. The chief mark of distinction from the 2nd group is the length of the cell of the forewing, always amounting to more than 1/2 of the length of the costal margin. The transverse vein generally runs very obliquely; the middle radial vein never rises very near to one of the neighbouring branches. On the hindwing, often exhibiting a tail or a tooth on the submedian vein, the middle radial vein is always rudimentary. The *confusa* exhibits on the forewing an inverted costal-marginal fold which is inside covered with scent-scales, often a hair-tuft on one of the wings or on the tibiae mostly having two pair of spurs, and a spine on the anterior tibiae. This group is almost exclusively confined to the Nearctic region, only very few species being found in the old world.


Distinguished by a spindle-shaped antennal club on which only the fine tip is turned round like a hook. The thickly scaled 2nd palpal joint, being closely appressed to the forehead, is of a broad square shape, the very short 3rd joint being scarcely visible. The lower discocellular of the forewing is the longest and strongly curved. The lower median vein rises twice as far away from the upper one as from the base, the upper one close before the cell-end. The hindwing is much prolonged towards the anal angle, but it does not show a real tail. The tropical parts of South America homes about two dozen of species.

*Ph. oreades* Hew. (165 e) resembles about *Minomydes selia* (163 f), but in the basal area of the forewing oreades. there are, like in all the convergent *Hesperiinae*, longitudinal rays, in contrast with the basal transverse bands
of the corresponding *Pyrrhopyginae*. These rays are partly bluish-green like the marginal spots of the hindwings.

*oreas*. The under surface, however, almost entirely corresponds to that of *sola*. Peru. — *oreas* Stgr. from Bolivia has broader bands, which are yellowish-red also on the hindwing. — *debora* Stgr. has quite light yellow bands, *charonotis*. *Ph. charonotis* Hew. (165 e) differs from *oreades* by quite green basal rays of the forewings, without any yellowish-red, and much more extensive red-yellow bands of the hindwings, which are also beneath the same colour, not blue. Bolivia.

*phakara*. *Ph. yokhara* Btrr. (165 e) is similar, but it has quite red-yellow basal rays of the forewings, the yellowish-red of the hindwings is still more extensive, and the black ground-colour on the upper and lower surface of the hindwings is suffused with a coppery brown. Magdalena River, Peru.

*pilia*. *Ph. pilia Hew. (165 e)*, in contrast with the preceding, is banded almost quite greenish-blue, only the 3 large discal and apical macular rows remain red-yellow. Distributed from Mexico through Guatemala as far as Brazil.

*iliea*. *Ph. iliea Reak. (= albieilla H.-Schäff., crucetus Sodd., socius Btrr. & Dec., decolor Mab., denuba Plötz) (165 d)* is a dark species, above and beneath black with a red discal streak of the forewing, above in the basal half tinted greenish-blue. Palpi and neck orange-red, fringes white. Like *pilia* most widely distributed from Mexico to Brazil.

*palemon*. *Ph. palemon* Cr. (= polybius F., crucetus Hbn., spurius Mab., phanias Barm.) (165 d as *spurius*) is very similar, but in the anal part of the hindwing it has broad, orange-yellow fringes. Brazil to Argentina.

*palemon*. *Ph. unimaculata* — *unimaculata* Mab. & Bonll. has only one red cell-spot, the costal part being absent.

*imbres*. *Ph. imbreus Plötz (165 f)* resembles *iliea* (165 d), but instead of the red discal streak it has a metallic blue one, and the ring round the neck is not orange, only the palpi. Central America.

*charon*. *Ph. charon* Fbr. from Brazil approximates *palemon* (165 d as *spurius*) of a blackish-green lustre, costal margin and base of the forewing strewn with lighter atoms, the fringes posteriorly white; beneath the base is sooty brown with a blue proximal margin, 3 spots at the base of the costa and the dusting at the costal margin whitish-green. Hindwing on both sides bluish, the costal and proximal margins violetish-blue, fringes at the apex white, at the hinder angle yellow; beneath of a lighter lustre, with a dispersed basal and discal strewing.

*tophana*. *Ph. tophana Plötz (= scython G. & S.) (165 d)* likewise resembles *palemon* regarding the ochreous-yellow anal-angular fringes on the hindwing, but it has no discal streak at all on the black forewing, showing but very little green reflection at the base. Minas Geraes, Peru, Uruguay, Paraguay.

*distans*. *Ph. distans* H.-Schäff. (165 e) from Central America, Colombia and Cuba entirely resembles a *Jemadia*, but, like in *oreades*, instead of the *Pyrrhopyginae*-transverse bands it has basal longitudinal rays of the forewing. This species and the 4 following are very much alike and are often confounded. It is best distinguished on the hindwings beneath: *distans* shows here 3 blue bands, the middle one being short, extending only to the middle of the wing, equally distant from the other two, the most proximal one being at the same time the shortest. Plötz’ figure of the supposed *Jemadia dysoni* from the Chiriqui, in spite of the Pyrrhopyginal antennae, I can only take it to be a *Phocides* with a wrong head, on account of the basal longitudinal rays; it entirely resembles *tenuistriga*. *distans*, and is only of a somewhat purer blue. — *tenuistriga* Stgr. is larger, more extensively black, the discal band almost as narrow as a thread.

*pigmalion*. *Ph. pigmalion* Cr. (= nectus Latr.) (165 e) is a larger, robust species. On the hindwing beneath the blue median band is thin, almost like a thread, bending outward at the lower end and touching the broad, spotted distal band in its middle; the latter band is shorter than the proximal band. The blue basal rays above are short. Colombia.

*belus*. *Ph. belus* G. & S. (165 f) entirely resembles *valgus* (161 a), but the 3 hyaline bands of the forewing are more compact and are placed more steeply, the proximal one ending broader on both sides, whilst in *valgus* it is tapering towards the hinder angle. From Mexico.

*perillus*. *Ph. perillus* Mab. I only know from the insufficient description and uncoloured figure; it is above black with the usual 3 hyaline bands, the apical and postdiscal ones of which are situate close together and both very large; the text does not mention any blue colour on the forewing, according to the figure, however, it is extensively present in the basal area and in marginal spots. The hindwing exhibits, parallel with the distal margin, a broad band of 8 blue spots, a broad discal ray and a triangular patch of whitish-blue at the base. Beneath similar to *distans*. From Colombia.

*valgus*. *Ph. valgus* Mab. (161 a) differs above from *pigmalion* by much stronger and longer basal rays extending almost to the discal vitreous spot, the blue colour being at any rate much more extensive. On the hindwing beneath the blue middle band is almost purely white, longer and broader, only below the broad proximal band
somewhat curved, without touching the distal band which is parted into 4 spots and ends pointedly on the upper median vein. From Cayenne.

Ph. thermus Mob. is immediately discernible by only 2 hyaline bands on the forewing above: an apical one, and a discal one, extending as a band up to the costal margin; the only remainder at most of the postdiscal band may be a small vitreous dot above the lower radial vein. Beneath like *pyrgionia* (165 e), the basal band almost straight, the middle one narrow, longer, not touching the distal one, which is short and ending at the middle of the median. Bogotá.

Ph. hevitsonius Mob. (= *pyrgionia* Hew.) is a doubtful species showing above long, blue basal *hevitsonius*, rays like *valgus* (161 n); the hyaline spots are uncommonly large and a little differently placed; it presumably coincides with one of the preceding species. The under surface is unknown.

Ph. batabano Luc. (= *mammeus* H.-Schöff.) (165 d) is not to be confounded with any other species. *batabano*. Above the slate-brown, at the bases of the wings striped bluish-grey, and in front of the margin of the hindwing with undulate line of bluish-grey. Beneath the hindwing shows yet 2 or 3 narrow blue stripes in the middle and near the proximal margin. Cuba.

Ph. urania Dbl. & Hew. (165 f) is very well recognizable by the long, bluish-green intercinal stripes extending almost to the border. Common in Mexico.—*pyres* G. & S. is of a more brilliant green, the subterminal band, which in the form *tezana* Scudd. is yellowish-brown, being coherent.

Ph. vida Btlr. (165 f) is the same, but without any hyaline macular bands at all, so that there is a broad, black apical area. Panama and Costa Rica.

Ph. lineca H.-Schöff. (= *grandimacula* Mob.). Above slate-coloured with a slight olive tint, similar *lineca* to *Nacusus phoeus* (165 f) towards the base somewhat lighter, distally bordered darker with 3 hyaline bands placed like in *urania* (165 f), but much broader, the discal one extending to the costal margin and here with a yellow tint. The hindwing exhibits a dark median band forked towards the costal margin. Beneath the forewings are lighter, towards the base yellowish, the hindwings reddish-yellow with 3 dark bands. Described from Brazil.

Ph. iphineus Latr. is a species having for a long time been erroneously taken for another, resembling *iphineus*. *oreades* (165 e) on the forewings, but the basal rays are entirely absent, and the brick-reddish discal band is above and beneath of the same with, something like in *nurseia* (164 d). The hindwings are likewise quite black, with only one narrow blue subterminal band and a similar blurred spot at the proximal margin. Brazil.

Ph. thrasea Hew. (= *mazares* Mob. [Stgr. i. L]), a small doubtfull species, is above black with a *thrasea* steel-blue reflection, at the apex of the forewing brownish, in the apical part of the forewing, and at the anterior angle and border of the hindwing beneath light violet. Head and palpi, collar and shoulders, as well as the apex of the abdomen of a deep dark red. Epinuse of wings: 35 mm. South America.

Ph. maximus Mob. is only known to me from the description and figure. Above black, the spots *maximus* of the forewings diaphanous reddish-yellow, the discal ones below the cell much broader; hindwing with 3 blue rays and an antemarginal row of blue crescents. This species on the whole recalls *Minoniades versicolor* (163 e), but it is much larger. Brazil.

Ph. nakawara Weeks almost coincides with *distans* (165 e) in the description, but there is only one *nakawara* white apical spot mentioned on the hindwing, and on the hindwing the triangular blue median band is absent. 55 mm. From Venezuela.


Closely allied to *Phocides* from which the species differ by the 3rd palpal joint projecting a little more and being bare; besides the transverse vein of the forewing is not so oblique, and the middle discocellular is somewhat longer than the lower one; the hindwings are here also longer and extended into a round anal lobe. In the 2 one of the two spurs of the posterior tibiae is prolonged, and the proximal end of the tarsus shows on each side beneath a comb of yellowish bristles, covering this spur when the tarsus is stretched out. In *papias* this is not so much developed. Quite a number of species, copying the most diverse kinds of *Pyrrhopyginae*, are found in Tropical America.

T. plutia *Hew.* (165 g) is a variegated species: on the black ground with a red base of the wings *plutia*, and a red thorax, a large discal vitreous spot of the forewing, a bluish longitudinal stripe below it, and a light blue submarginal band of the hindwing. Amazon District.

T. herringi H.-Schöff. (165 f) is very similar, the red colour of a more yellowish tinge, besides there *herrichi* are near the apex of the forewing 4 small vitreous spots, the blue rays are almost dying away. Patria unknown.
HYPOCRYPTOTHRIX; POLYTHRIX; EUDAMUS. By Dr. M. Draudt.

erebus. T. erebus Plötz (165 g). Here the vitreous spots and blue colour are entirely absent, so that it becomes very similar to Mim. aspilos (164 b). Described from Bahia.

praecia. T. praecia Hew. (165 g) greatly resembles herrichi, but the red colour turns here ochreous-yellow and is more extensive, assuming on the hindwing more the shape of an antemedian band and of a proximal-marginal ray, the light blue colour is more extensive, particularly on the hindwing, and on the forewing we notice bluish marginal lunae towards the proximal angle; besides there is a small, oblong hyaline spot between apical and discal hyaline spots. Brazil.

corytas. T. corytas Cr. (= pyramus Cr.) (165 g) has on the forewing 3 oblique, narrow hyaline bands and a reddish-yellow basal area, whilst on the hindwing the whole disc is reddish-yellow. Found from Surinam to Colombia.

gaudialis. T. gaudialis Hew. (161 a, as dabius) differs little from corytas. The ground-colour is a beautiful pure bluish-black, the basal areas of the fore- and hindwings are more red than yellow, and there appear blue sub-marginal diffuse patches, being still more prominent on the jet-black under surface. This beautiful species originates from the Chiriqui.

bivittatus. T. bivittatus Mab. & Boull. has, like platia, a single tripartite hyaline band in the middle of the disc on the forewing; below it, between and the border, 2 blue spots. The hindwing shows a double blue-antemarginal band. Collar, thorax and abdominal base quite black, abdomen banded light blue; head black, palpi ash-grey. From the Amazon.

rufibasis. T. rufibasis Mab. & Boull. (172 a). Forewing quite black with an oval, twice crossed, vitreous spot in the middle of the disc, the base of the wing with brown hair; hindwing with a light blue, straight antemarginal band flowing together with a brown discal band mixed with light blue before the inner-marginal area. Beneath the vitreous spot of the forewing is extended to the costa by a bluish continuation. The hindwing has 2 rather parallel, antemedian and postmedian bands; the whole rest of both wings beneath is black. French Guiana.

perissographus. T. perissographus Mab. (165 g) is on the forewing marked exactly like corytas (165 g), but the reddish-yellow colour is here blue, and the hindwing exhibits blue bands at the proximal margin, in the middle and before the border, converging towards the anal angle. From Panama.

papio. T. papio Hew. (165 g) is smaller, otherwise very similar to the preceding vitreous spots of the forewings are much smaller, the blue colour somewhat more extensive, the blue basal area of the forewing parted by a black transverse band, and on the hindwing the black space between the median band and antemarginal band forks in the shape of a Y towards the costal margin, so that a blue, triangular costal-marginal spot is cut off. Brazil.


Allied to the preceding genus but in the habitus similar to certain Yangna-species. The cell of the forewing is a little shorter, the two lower discocellulars about of the same length. The ♀ shows on the forewing beneath a hair-tuft at the base of the submedian. Only 1 species:

teutas. H. teutas Hew. looks like Y. hadora (164 c); it has a black body with a scarlet neck. The black forewing is lustrous green with a large, triangular, discal vitreous spot, the hindwing with white fringes. Described from the Amazon.


The separation from Eudamus is probably scarcely justified, for the sole difference consists of a secondary sexual mark in the ♀ exhibiting, like in the preceding genus, at the base of the submedian on the forewing beneath, a hair-tuft being covered by the strongly convex costal-margin of the hindwing. Only 1 species:

metallescens. P. metallescens Mab. (166 c) somewhat resembles the Eudamus-species of the chola-group (161 c); above brown, tinted rusty-yellow, with 3 discal vitreous spots, placed almost like in metaphis (160 d), and 3 small apical spots; the bases of both wings strongly haired metallic green, also beneath with a green reflection, on the hindwing with a white antemarginal band. Brazil (Manaos) and Panama (?).

5. Genus: Eudamus Swv.

The species of this well-known genus, mostly having long tails, show in the male a costal fold, except eurycles and orion. The antennal club is bent round like a hook close behind the thickest part. The cell of the
forewing is very long, the transverse vein oblique, rectilinear; the middle radial rising nearer to the lower one, the lower median vein near the base, the upper one twice as far away from the latter as from the lower radial. On the hindwing the middle radial is absent, the submedian vein terminates into the more or less long tail. A great number of partly very similar species is distributed in Tropical America. About 80 forms are described; the animals are throughout dark brown, mostly with an oblique row of discal hyaline spots in the forewing. They very actively seek from flowers of all kinds and are, as a rule, not timid. Their flight, however, is very rapid. In sitting on a blossom, they always keep their wings half opened. Many are rather common.

**E. dorantes** Stoll (= amicus Hew., protillus H.-Schäff., rautenbergi Skinn., kefersteini Plötz) (160 a). *dorantes*. A rather variable species, above olive-grey with a more or less brown tinge, in the disk with 5 square, yellowish hyaline spots, the 4 proximal ones of which extend in a line from the middle of the costal margin to the proximal angle and occasionally form almost a band; near the apex there are besides 3 minute hyaline dots, mostly a fourth at some distance below them. The under surface is light greyish-brown, on the hindwing often with violet or bluish-grey tints, 2 dark costal-marginal spots, 2 broader, undulate, antemedian and postmedian transverse bands and one narrower, submarginal band. — In the form *velinus* Plötz (160 a) from Bahia, which *velinus* is not well reproduced by the figure, the hindwings beneath are of a darker violetish-grey with much narrower, distinct transverse lines, the distal spot of the costal margin being absent, the submarginal band terminating dark as far as into the border. Very widely distributed from Texas, Arizona, California, and Mexico to Venezuela; everywhere very common.

**E. galbula** Plötz (160 b) is a very similar species with narrower, more stretched wings; the middle *galbula*. discal macular band is placed more steeply, the 5th spot is more remote from it, the fringes are more profusely speckled light and dark. On the under surface the inner-marginal part of the forewing is almost white, the bands of the hindwings are less dentate, the whole surface not so indeterminate, the border darkened in uniform width. From Brazil.

**E. santiago** Luc. (= cariosa H.-Schäff.) (161 a). Above darker blackish-brown with much smaller, *santiago*. otherwise similar hyaline spots. The under surface is likewise much darker, particularly in the basal area almost purple-black, the transverse bands are more dentate and extend to the costal margin, the proximal one being united with the distal spot at the costal margin. — *retractus* Plötz from Venezuela, St. Vincent and Grenada, *retractus*. is presumably of the same species, of a more compact shape, with a shorter tail, and above the discal spots have almost disappeared. The typical form flies in Cuba. — *larius* Plötz (= corydon Bltr.) is said to differ from typical *santiago* by its broader wings, the row of vitreous spots being more complete.

**E. galapagensis** Williams is quite similar to *santiago* (161 a), but not quite so dark, and the spots are arranged the same, but mostly larger. Beneath the violet spot in *santiago* is here of a lilac tint; the tails of the hindwings are shorter (only 3 mm). Chatham Island, Galapagos; common, from January to April and again in August; fond of resting in the shade of craggy rocks.

**E. cenis** H.-Schäff. (160 a) is a species with shorter tails and a rounder costal angle of the hindwings; *cenis*. above similar to *galbula* (160 b), but the hyaline macular band is narrower, and on the hindwing there appears a darker median band. Beneath likewise similar, but the inner-marginal area of the forewing is not so light. Colombia. — *athesis* Hew. has grey fringes and a lighter under surface.

**E. procerus** Plötz (160 b). In this species the hyaline spots of the disc, which are here of a pure white, *procerus*. not yellowish, are placed together in a broad oblique band, also the apical spots rather large, the fringes of the hindwing yellowish, not speckled. Beneath similar as *galbula* (160 b), the proximal median band confined to a dark cell-spot, both the costal-marginal spots are entirely absent, the distal band is interrupted in the lower half. From Peru.

**E. athlete** Bltr. is allied to *proteus* (160 f), but the wings are broader, hindwings in the anal area *athlete*. less elongate, the tails more slender and of a smaller shape. Basal part of the wings above with olive hair, forewing with 4 discal spots arranged in one line, and with another distal one; 3 small ones near the apex. Hindwings beneath brown, denselyusted violetish-grey; double subcostal spots, 2 shortened bands blackish-brown, dusted brown with grey margins and an obsolete, undulate submarginal stripe. Colombia and Brazil.

**E. proteus** L. (= domingo Scudd.) (160 b) is a well-known, common species, easily recognized by the green hairing of the basal part above particularly in the hindwing. The forewing exhibits a yellowish discal oblique band which is almost extinct in the form *proteoides* Plötz from Florida and the Antilles. Beneath the hindwings exhibit, on the dark brown ground, 2 thick dark transverse bands and mostly an isolated costal-marginal spot between. — *esmeraldis* Bltr. is presumably only a large species with a brighter metallic green reflection on its body and base of the wings from more southern habitats, in which the distal band of the hindwing beneath is parted by white. — *proteus* is found in North America in the Atlantic States and from Mexico almost through the whole of South America. The larva is green, posteriorly reddish with a red-brown head and light lateral stripes. It lives between two leaves of Glycinine being joined together and on other Papilionaceae.
E. aelius Plötz (160 b, c) is above similarly marked, but without any green and with a white antemarginal line before the white fringes of the hindwing. Under surface of the hindwings almost like in caryotes (160 e). Described from Pará.

elevus

E. elevus Mab. greatly resembles aelius above, the hyaline spots of the discal band are not scalariformly arranged, but form a rectilinearly defined oblique band, of a white, not yellowish colour. A white antemarginal line in front of the fringes is noticed here only beneath; otherwise the hindwings are beneath very much like those of the preceding species. Brazil.

talithyius

E. talithyius Mab. likewise belongs here; 50 mm, thus very large. Base of wings like in proteus (160 b), of a metallic green like the body. The discal hyaline band of the forewing broad, coherent, tapering towards the proximal angle, slightly yellowish. Hindwing with a short, broad tail and dirty-white fringes, beneath rusty-brown with 2 not very distinct, black transverse bands like in the preceding. Described from Brazil.

concinus

E. concinns Mab. Above blackish-brown with speckled whitish fringes and yellowish hyaline discal spots. Beneath the apex of the forewing is of a light grey. Hindwing at the base blackish-grey with a darker transverse band, behind it a whitish band-like space, parted by a darker colour; in the lilac-grey distal area a curved, black spot. Expanse of wings: 47 mm. Brazil.

alaeus

E. alaeus Hew. (= montezuma Seckel.) (160 c) in the scheme of markings above resembles proteus (160 b), but it has no green, but ochreous-brown hairing on the body and bases of the wings. Beneath easily recognizable by the extensive white area in the discal and lower half of the hindwing, and by the torn black marking. Arizona, Mexico, Costa Rica, Ecuador.

aminias

E. aminias Hew. (= pithys Schk.) (160 c) is allied to alaeus. Above the discal macular band is of a yellower tone, the bases of the wings, however, of a darker ochreous-brown. Beneath the hindwing is reddish-grey with torn black spots without the white marginal area. Colombia, Brazil.

tarchon

E. tarchon Hbn. (= longicandus Segg) (172 a) is very closely allied to the following, but the spots of the forewings are whiter, and on the hindwing beneath the white band is more concave, its lower part split up in 2 parts either by a blackish ray or by 2 spots being above pointed. — Mabile considers it to be only a form of catillus. From Brazil.

catillus

E. catillus Cr. (= ixion Plötz) 160 a). Above little different from dorantes (160 a), but the forewings project somewhat angularly below the apex. Under surface of the hindwing very variegated; particularly prominent is an antemedian band bent almost rectangularly on the upper median vein, behind it a lighter, lilac-grey space into which a brown dentiform spot projects from the direction of the dark proximal margin. Widely distributed in South America.

zilpa

E. zilpa Blr. (160 d). Here the angle below the apex of the hindwing is still more pronounced, the hindwings beneath still more variegated; at the costal margin brightened up by lilac, a large inner-marginal spot almost white, the macular marking in contrast with it of a deep brownish-red; also behind the small spots in the apex of the forewing beneath there is a deep dark triangular spot. From Mexico through the whole of Central America, to the north as far as Arizona.

cinerus

E. cinereus Mab. is brown with an ashy-grey haired basal area. In the forewing the 3 subapical punctiform spots are arranged in an oblique row, 4 white hyaline spots form a discal band and a 5th is situate apart of apex. Forewing very much extended. Beneath the apex shows a lilac tinge. The hindwings are beneath brown with an ashy-grey margin and a large white ray from the costa, expanded to a triangle as far as the inner-marginal fold, where it is filled up by a diffuse ashy-grey spot. The hairing of the brown body is grey and shows a somewhat green reflection; palpi white. Brazil.

myrto

E. myrto Mab. is allied to catillus (160 a), but with much larger and yellower discal spots above, and the small apical spots are not arranged in a row, but the third is removed towards the margin. The hindwing is concavely indented below the costal angle, the undulate fringes are white. Forewings beneath of a light red-brown; hindwings very much like in catillus, at the margin blackish with a fine silvery line in front of the fringes, the macular markings violetish-black, the subbasal, angled band broken up into 4 spots: 2 round ones near the costal margin, encircled by whitish, then a large one in the middle, enclosing a small silvery spot and in the whitish anal area another tooth-like spot. Hayti.

stylites

E. stylites H.-Schaff. (160 c) is a smaller species, distinguished by an almost white inner-marginal area of the forewings beneath; the pale lilac-grey hindwings speckled with brown exhibit 2 brown transverse bands, the proximal one being broad, slightly curved, bordered dark, the distal one almost streak-shaped. Colombia, Brazil.

callias

E. callias Mab. somewhat resembles procerus (160 b), above marked just the same, towards the base with a green lustre, spots purely white diaphanous. Forewings beneath reddish-brown, the hyaline spots margined darker, hindwings light reddish-grey with 2 minute dark spots at the costal margin like in dorantes (160 a), but at a much greater distance from each other; in the cell a round black spot and a short black band behind

E. callicina Sch. is very closely allied to the preceding and is marked the same, above brown, towards callicina, the base and at the proximal margin of the hindwing haired olive-yellow; hindwings with traces of 2 darker transverse bands; fringes white. Beneath the forewings are brown with a lighter proximal margin, the hindwings brown, tinted violetish, a proximal, dark, narrow band broken up into spots, and a slightly curved, distal, short band. Expanse of wings: 46 mm. Honduras.

E. juanita Sch. seems to be closely allied to styliites (160 c), distinguished by lighter, dark speckled juanita, fringes; the vitreous spots are arranged like there, whitish. Hindwings haired olive. Under surface also like in styliites, but at the costal margin near the base of the hindwing there is yet a brown spot, and the distal band is more undulate. Expanse of wings: 38 mm. Rio de Janeiro.

E. platowi Plötz (160 c) is larger than styliites, above similarly marked, but with larger purely white platowi, hyaline spots, of a deeper black ground-colour and extensive olive-green hairing on the body and bases of the wings. Fringes of the hindwings whitish, speckled dark. Beneath easily discernible by the large, brownish-black discal area being distally irregularly defined, containing a whitish middle luna and being bordered towards the proximal angle by a whitish, short band. Patria unknown. Perhaps an aberration from proteus.

E. megaletes Mob. is very closely allied to platowi and exhibits the same hyaline spots. Druce takes megaletes to be it a form of esmeraldus with confluent spots on the hindwings beneath; forewings below the apex sharply angled, fringes of the hindwings uncicolously dirty grey, hindwings blackish as far as the costal margin with a light middle luna and the marginal area tinged light yellowish-green and iliac. Brazil.

E. metophis Latr. (160 d) is above not unlike proteus (160 b), but with a shorter, broad tail and mostly metophis, only 2 or 3 discal hyaline spots. Hindwings extensively haired olive-green. Beneath brown with a light proximal margin of the forewing; hindwings dark brown with white fringes and a yellowish-white, narrow band parallel to the border, touching neither the costal nor proximal margin. Distributed in South America.

E. jetryra Btr. (160 e) is not be mistaken for any other species owing to the extensive ochreous colon- jetryra, ring above and the large ochreous-yellow discal spots; also the fringes of the hindwings are yellow, speckled darker. On the under surface allied to zilpa. From Peru.

E. harpagus Plötz. (160 e) is probably the largest species, on the body and base of the hindwings harpagus, haired slate-blue. Under surface of hindwings of a deep blackish-brown with a violetish-grey distal area parted by a band of the groundcolour with 3 proximally projecting teeth. Colombia.

E. albofasciatus Hew. (160 d). Above like zilpa, but the angle below the apex of the forewing does not project so much; beneath unmistakable by the broad, silvery white transverse band. In Central America widespread and mostly common; to the north as far as Texas and Arizona.

E. simplicius Stoll (= pilatus Plötz, proce Plötz) (160 e) is the most common and most insignificant simplicius, species, above unicolorously blackish-brown, without any spots, beneath likewise brown, on the forewing with 2 light costal-marginal spots, and on the hindwing with 2 partly interrupted blackish diffuse bands and an isolated spot at the costal margin near the base. — eurycles Latr. (= zagorus Plötz, zalanthus Plötz, sunich- eurycles, rasti Sedd.) (160 e) is certainly only a subform differing by the presence of a narrow, yellowish-white oblique band and 3 or 4 small apical streak-spots. There are numerous transitions. From Texas through the whole of Central and South America. — ab. latipennis Mob. is larger, the wings broad and lustrous. The median latipennis, band composed of 5 spots, broader, before the apex 4 or 5 punctiform spots in one line; hindwing beneath at the base with 2 very small spots and the fringes almost white; the tail is broad and very long; the 3 without a costal fold. Colombia and Guiana.

E. gracilicanda Plötz (161 e, f) is like simplicius above and beneath brownish-grey, without any hyaline gracilicanda, spots, with a finer, longer tail. Beneath the proximal margin of the forewing is lighter, on the hindwing the costal-marginal spots are absent, the 2 transverse bands are passing through to the costal margin, the proximal margin darkened. Patria unknown.

E. carmelita H.-Schäf. (161 b) greatly resembles eurycles, above different by a somewhat broader carmelita, white band and a small spot outside in the middle of it in the angle between the median and radial vein. Beneath the hindwing exhibits an antemarginal violetish-grey band as broad as the similarly coloured fringes. From Brazil. — trebia Meclfr. (161 b, c) is quite similar, but of a blacker ground-colour, the median band broader, trebia, more coherent, the apical and subapical dots, 6 in number, form a curved line. Hindwing with a white band extending from the costal angle to the tail-appendage; hardly separable from carmelita. — nigricauda G. & S. nigricauda, differs from typical carmelita by the hyaline band of the forewing being straight, coherent and broader, from trebia by 5 subapical dots arranged in a straight line running parallel to the median band. Beneath the white band of the hindwing is broader than above.
E. chalco Hbn. (= agesilans Sws.) (160 f) is a large, beautiful species, above on the body and bases of the wings with a bluish olive-green reflection, forewings marked like carmelita (161 b), hindwings with a broad, white distal area and tail, the former extending only beneath to the costal margin. South America.

E. dominicus Plötz (= albimargo Mab.) (160 f) is smaller, with a much shorter and finer tail and a very narrow white marginal area of the hindwing, about the width of the fringes, above not with green, but only with some slate-coloured hair. South America.

E. brachius Hbn. (160 f). Above like the preceding with a short broad tail, but with a very broad inner-angular spot, almost extending to the middle of the wing; beneath on the hindwing there appear in the white marginal area 4 or 5 blackish-brown spots before the fringes, increasing in size towards the costa. —

Doryssus. The form doryssus Sws. (= nivosus Plötz, orion Drc. nec F.) (161 b) is the same, though with a somewhat narrower white area of the hindwing not extending to the middle of the wing, particularly above. — chalcos G. & S. (160 f) is presumably likewise not a separate species, but like simplicius from eurycles, it differs by the absence of the white oblique band on the forewing; the white distal part is not much broader than in doryssus. From Mexico to Brazil.

E. loko Mab. is larger than the preceding, distinguished by the fringes of the forewing being white towards the inner-angle, while in the other species they are blackish-brown. The marginal area of the hindwing is particularly beneath very broad white, towards the costa tinged blackish-brown, the black colour being continued before the margin for some distance as far as into the very broad white tail. Santa Catharina.

Albicuspis. E. albicuspis H.-Schäff. (= leucites Mab.) (168 b) closely approaches brachius and is above to be separated by a tooth of the blackish-brown ground-colour on the submedian fold projecting far towards the margin into the very broad white anal part, whereas on the submedian vein a white tooth projects far towards the base. Beneath the white colour is almost as broad as above, only towards the costal margin somewhat narrower, towards the costal angle on the border some few blackish-brown diffuse spots. Colombia, Brazil.

Herophilus. E. herophilus Plötz (= virescens Mab.) (161 b) is above the most similar to albimargo by the extent of the white colour, but towards the base on both wings and on the body strongly haired green. Beneath the hindwing is marked with an indistinct black, postmedian transverse band and a black costal-marginal spot before it. From Surinam to Rio de Janeiro.

Orion. E. orion F. (161 b) is a magnificent species, above somewhat like brachius (160 f), but with longer tails, and a much broader white discal band of hyaline spots on the forewing. Beneath very much like the following undulatus, except the broad white distal area slightly tinged reddish-brown, on the hindwing. Central America.

Undulatus. E. undulatus (= nicasius Plötz) (160 a, b). Above brown with an oblique band of hyaline spots on the forewing, being slightly tinged yellowish. Beneath reddish-brown, watered darker, with 2 partly interrupted, irregularly dentate, slate-coloured to blackish-grey transverse bands and black clouding at the base of the hindwing. Mexico to Brazil.

Elongatus. E. elongatus Plötz (160 d) most closely approximates undulatus, differs, however, by but one distal transverse band on the hindwing beneath. Brazil.

Cecus. E. cecus Mén. (161 c) from the affinity of albimargo. Very much distinguished by the very broad, yellowish-white discal band on the forewing and the almost equally broad, yellowish-white border of the hindwing, into which small spots of the ground-colour project on the ends of the veins. Beneath marked like simplicius-eurycles except the yellowish-white border. Described from Brazil.

E. eudoxus Cr. (161 c) is like the following species marked by an equally broad, yellowish-white antemarginal band on the hindwing beneath, running about parallel with the border, forming, however, a hook towards the proximal margin at the tail. Above the forewing exhibits a rather broader, white discal band reaching neither the costal margin nor the proximal angle. Body and bases of the wings with green hair. Guiana.

Leucogramma. E. leucogramma Mab. differs from eudoxus by different hyaline spots of the forewings, which are about arranged as in proteus (160 b) with which the species is at any rate best to be compared above. Beneath the red-brown hindwings show a slightly curved antemarginal band terminating at the tail and not turning round towards the proximal margin. Porto Cabella.

Cholus. E. chola Plötz (= glaphyrous Mab., leucodesma Plötz, albistria Plötz) (161 c) is above and beneath quite similar, but the tail is much shorter, and on the hindwing beneath the white band is much narrower, not sharply defined as in the preceding. Brazil.

Ganna. E. ganna Mab. (161 c) is a much smaller species with a considerably finer, neater tail, otherwise very closely allied to cholus; the white band of the hindwing is on both sides sharply defined and particularly towards the margin of a darker tinge. Venezuela.
E. piliger Mab. Similar to gamma (161 e), but larger, the middle of the wings somewhat reddish, piliger.
Forewing with yellowish spots: 3 near the apex, 3 in the disc, 1 of which is in the cell. Tail of the hindwing broad and short, fringes of the forewings grey, of the hindwings white as far as the tail; base of hindwing metallic green. Hindwing beneath of a pure brown, a straight white band, crossed by the veins, extending from veins 2 to 7. A grey spot beginning in the 8th interspace. 39 mm. In the Coll. STEAUDINGER (Berlin). From Itaituba.

E. octomaculata Sepp (= calemus Mab.) (161 d as maculata). This species initiates a group of forms, in which the discal spots are not of the shape of a band, but exhibit more a condensed group of discal spots. The colouring above is a pure olive-brown with an indistinct, brownish antennal marginal shade on all the 4 wings, being of a lighter grey tinge beneath, particularly on the hindwings. The tail is here short triangular. From Mexico through Central America to the Amazon. — The bluish-white larva with a yellow head lives on Pterocarpus indicus and changes into a reddish-yellow pupa on a leaf having been drawn together in a boat-like shape by some few threads.

E. auginus (161 d) is smaller on an average, on the body and bases of the wings haired green; above auginus, the darker nebulib bands are scarcely visible, beneath on the hindwing towards the proximal angle with a whitish spot before them. Guiana, Colombia, Brazil.

E. auginus G. & S. (161 d) is still smaller, with shorter tails terminating more pointedly; whilst in augmentus, auginus there are only 3 hyaline spots in the disc, the present species has one more above them at the costal margin; the forewing beneath is almost whitish-yellow at the proximal margin, above on the light, olive-yellow hindwing there are 2 distinct transverse bands visible. Mexico.

E. flammula H.-Schaff. (= kindorn Bltr.) (161 d) is larger than augmentus with much longer tails, flammula. The bases of the wings are not haired green, but somewhat olive-yellow. On the under surface the white spot at the proximal angle is larger and lighter. Brazil. Perhaps only a form of augmentus.

E. alcephon G. & S. (161 d) differs from augmentus by its larger size, longer and broader tails, much alcephon, larger hyaline spots, and like octomaculata dark transverse bands on the upper surface of all the wings. On the hindwing beneath with a white transverse band, distally parted by black. Mexico.

E. asine Hew. (= cinnus H.-Schaff.) (161 d) is a larger species, above dull olive-brown, with the asine, usual hyaline spots, more or less distinct nebulous bands across the wings, on the forewing yet with a small round spot or small ring-spot towards the base near the proximal margin. Beneath the forewings are lighter, the hindwings darker dusty olive-brown, the hindwings with 2 irregularly spotted, darker nebulous bands. Mexico to Nicaragua.

E. ceculus H.-Schaff. (161 d) is smaller than augmentus, with shorter, more pointed tails, without ceculus, any green; forewing without any dark marking, only the hindwing exhibits a darker cell-streak and a blurred antennal marginal band. Beneath like augmentus, though without the light inner-angular spot with a darker cell-spot. Rio de Janeiro.

E. obscurus Hew. The description runs: „Blackish-brown; forewing with 2 apical, transparent obscurus, dots. Hindwing with a short and broad tail. Beneath deep brown; forewing at the apex lighter and at the border with a brown nebulous spot near the apex. Hindwing lighter, traversed by 2 macular bands being darker than the ground of the wing.” No patria mentioned, and MAIBILE and BOULET assume it to be a simplicius, but that by the dark spot the apex the species deviates from this group.

E. hirtius Bltr. (161 e) is the largest species of this group, above like asine, but with much more extensive hirtius, hyaline spots, which are here particularly proximally bordered with a dark brown, whereby they are distinctly prominent. The hindwings beneath are only very feebly marked. From Venezuela.

E. decurtatus H.-Schaff. (161 e) is very similar but smaller, with comparatively longer hindwings, decurtatus, but shorter tails; the hyaline spots of the forewing are reduced, not so yellowish as in the preceding, the under surface is much more intensely marked with 2 dark transverse bands flowing together at the costal margin. Colombia, Brazil.

E. decussatus Mén. (161 e) is presumably to be considered as an insular form of the preceding from decussatus, which it differs little. On the forewing the advanced hyaline spot of the discal row between the median and radial vein is absent, instead of which the lowest apical spot is removed towards the margin. Beneath the dark transverse bands run more rectilinearly. Hayti.

E. ridens Hew. (= coronus Platé) (161 b) initiates a group of species with very short tails, of which ridens, ridens is the largest and finest. Above chocolate-brown with very extensive hyaline spots; the hindwing exhibits a short, white discal band and at the proximal margin a dense cover of white hair. Beneath on the hindwing,
behind the cell, a broad white band being in the distal half shortly parted by black. Panama to Brazil. —

**cachinannas.** cachinannas G. & S. (161 c) is presumably only a subform of it, the white band on the hindwing beneath being broader, and the body and base of wings being suffused with green. Likewise described from Panama.

**milita.** E. milita G. & S. (161 c) from Mexico differs by the hindwings being lighter beneath, with torn darker macular bands; the white band is only visible at the proximal angle as a diffuse spot.

**crison.** E. crison G. & S. (161 c) greatly resembles cachinannas beneath, but the band of the hindwing is above dull blue, parted at the greenish costal margin, whereby it has the shape of a Y. Central America.

**hystcr.** E. hystcr Dyar (166 d) is likewise similar, smaller, above darker with reduced discal spots. Beneath the hindwings are at the base of a dark blackish-brown, in the distal area light lilac grey with a bluish-grey dusting; the broad white transverse band shows towards the costal margin 2 dark spots near its distal edge. Sierra de Guerrero (Mexico).

**bioleyi.** E. bioleyi Mob. Forewing above with a short white band composed of 4 dissimilar spots, hindwing beneath without a white discal band, but with a spatulate, prolonged lobe with white edges and fringes.

To this genus belong yet a number of Hesperid forms having for some reason or other been described guatemala- as Thymele, Goniurus etc., and presumably do not all deserve denominations. Thus „Thymele“ guatemala- is allied to processus, though the spots are not so distinctly separated; beneath the palpi are reddish-yellow, thorax brown, abdomen ash-grey. Forewing light brown, at the proximal margin still lighter, spots like above, hindwings dark chestnut-brown with a narrow, flesh-coloured marginal band, beginning on the costa near the apex and extending to the lower median rib. All the fringes a little lighter than the ground-colour. Expanse 49 mm, the tails 6 mm. From Cayabon in Guatemala.

**borja.** „Thymele“ borja Ehrm. The body above very dark brown. Both wings in the ground fawn-coloured, with a dark brown margin, the fringes a little darker than the ground-colour. The body beneath dark brown, the forewings lighter than above, with diaphanous spots like above, and two dark brown undulate lines on the hindwings. Like the forewings, on the costa near the base a four-cornered spot, laterally to it two dark brown streaks on the band. The tails are 10½ mm long. Expanse of wings: 49 mm. — Borja, Bolivia.

**thiemei.** „Thymele“ thiemei Ehrm. seems to be allied to Eud. eurycles (160 e). Above dark brown, the tails almost blackish-brown. All the fringes light brown, at the tails black. Beneath light brown, forewing with a prominent band, in the apical area a large, dark brown, triangular spot; in the hindwing the markings are like in T. eurycles Latr. The tails are 18 mm long, the expanse of wings: 45½ mm. From Honduras.

**terracina.** „Thymele“ terracina Ehrm. ♀ above very dark brown, thorax, however, covered with long green scales. Forewing dark brown, in the basal area light greenish, at the distal end of the discl cell there is a large, V-shaped, transparent spot, above this spot on the costa there are two narrow, oblong spots of the same color. Below the discoidal cell in the limbal area, there is an almost straight row of three diaphanous lunate, in the apical area a curved row of 6 transparent spots between the costa and the upper median rib. Hindwing dark brown, the basal area dusted green. Fringes of a pure white. Forewing beneath chestnut-brown with transparent spots as above. Hindwing beneath very dark brown, at the apex ash-grey, between the median and the lower submedian some white dusting. Expanse of wings: 64 mm. — Remedios, Colombia (South America).

**viterboana.** „Thymele“ viterboana Ehrm. (sex ?). Body above olive-brown. Forewing above in the ground chestnut- brown, in the basal area bluish-green, transparent spots like in T. harpgus Feld., but less distinct. Hindwings of a darker ground-colour than the forewings, costa lighter, median area of a nice olive-green. Under surface dark brown, forewings beneath lighter than above, in the distal marginal area, however, darker, the spots as above. Hindwing dark brown, basal and costal areas lighter, in the marginal area two lighter brown streaks. Tails 4½ mm, expanse of wings 55 mm. Socorro, Colombia (South America).

**cleopatra.** Goniurus cleopatra Ehrm. from Venezuela (Suapure) only measures 39 mm, and is certainly allied to Eud. orion Cr. ♀ above dark brown, the costa from near the base to the hyaline stripe expanding across the cell is white, the stripe on the fascia and the spots in the subapical zone as in G. triplotoma, beginning from the cell the marginal area and the tails are white like the fringes. Hindwing dark brown, the dorsal area dusted white beginning from the median cell, the fringes of the apical and dorsal margins are dark brown. — Beneath the body is lighter than above, with faintly indicated two lateral bands on the venter, legs dark brown. Ground-colour of forewings much lighter than above, the dorsal area is white. In the hindwing the ground-colour is very
PLESTIA; HETEROPIA. By Dr. M. Draudt.

859
dark brown, the marginal band and the tails are of a pure white except 4 faint lunae in the apical area. Tails 1¾ mm long.

G. tripolomus Ehrm. ♀. Body above dark brown. Forewing above dark brown, on the fascia there is a transparent stripe composed of 4 dissimilar spots. In the median cell beyond this stripe there is a narrow, diaphanous spot right across the cell, in the subapical area a row of 4 very small transparent spots. Hindwings a little lighter than the forewings, the tails white. The apical fringes are white, above slightly mixed with brown. Fringes at the border and at the tails very long and of a pure white, the anal fringes shorter and brown. Under surface much lighter than above; ground-colour of forewings lighter than above, with the same markings as above, but the transparent stripe is more prominent. Ground-colour of hindwings like that of the forewings, on the fascia there are three brown stripes indicated; the border purely white, tails brown, with white fringes. Length of tails: 4½ mm. Expanse of wings: 52 mm. Bagasas, Costa Rica.


In its anatomical marks it corresponds with Endamus, but the hindwing has no tail, but a deeply dentated distal margin and a somewhat prolonged, rounded anal lobe. The antennal club represents a uniformly curved spine tapering gradually. Body and wings very hairy. 4 species:

P. stauningeri Mab. is above red-brown with yellow hyaline spots, being similarly arranged as in stauningeri.

P. dorus Edw. (172 c) from South Arizona and Mexico has a reddish-brown upper surface with 3 yellowish discal spots, 2 or 3 minute apical spots and an antemarginal band extending from the lower radial vein close to the proximal margin. The hindwing shows behind the cell a hyaline band, being distally somewhat concave. Beneath the proximal margin of the forewing is broad honey-coloured, the hindwing exhibits 3 dark brown transverse bands.

P. elwesi G. & S. (172 c). Here the distal macular band of the forewing contains two small spots more; beneath the hindwing is of a pure yellow, with a macular band above the base and 2 black median spots enclosing a white spot near the costa, and a series of black marginal dots. Very closely allied to dorus. Central America.

P. kikkawai Weeks from Venezuela is, according to the indistinct description, above dark brown, the forewing with 9 white spots, the largest of which is situated in the middle of the discal area, with darker margins. Costal margin and base of hindwing above white; in the middle of the wing a white spot with a small one attached to it, outside indistinct, small brown spots, and at the border a light brownish line. Beneath the hindwings are darker, with the white markings of the upper surface. A small species of an expanse of 30½ mm, taken in January.


Large, robust animals with a moderately strong, gradually thickened antennal club being bent like a hook and ending into a fine point. The cell of the forewing is exactly two thirds of the length of the costal margin, the ♀ has no costal fold. The upper discocellular is very short, the two lower ones turned obliquely proximad, of the same length; the upper median vein rises near the cell-end, twice as distant from the lower radial vein as from the upper one. The hindwing arc slightly angled on the inner-marginal vein. The posterior tibiae show 2 pair of spurs. The species occur in Central and South America.

H. imalena Btlr. (= imitatrix Mab.) (161 f upper surface, 171 d under surface) is above black, with a blue reflection and an oblique, white, discal hyaline band, in the angle between the radial and median vein with an isolated, longish spot and 2 or 3 minute apical spots; fringes speckled white and black. Under surface dark brownish-grey, marbled lighter, on the hindwing towards the margin lighter lilac-grey, with 4 incomplete spotted transverse bands. Costa Rica to Colombia.

H. bryaxis Hew. (161 f) is above marked the same, but like the following species above brownish-black, towards the base lighter ochreous-yellow. Beneath very much like imalena, the transverse bands of the forewings more distinctly prominent, towards the proximal margin of a deep velvety brownish-black, the lilac-grey distal area the lightest near the proximal angle. Mexico to Guatemala.

H. cyda G. & S. (161 f) is very closely allied to bryaxis, but above much darker brown, almost cyda. without any ochreous brightening, and on the hindwing with an indicated darker discal and marginal band. Beneath the ground-colour of the hindwing is of a rather uniform lilac-grey, at the anal angle almost purely white. Mexico to Honduras.

H. melon G. & S. (161 f) likewise approximates bryaxis, being somewhat larger, above also ochreous-yellow towards the bases of the wings, with mostly larger discal macular bands. Beneath the colour of the
hindwings is much more variegated, towards the margin almost whitish-grey, the marginal darkening much less, the transverse bands more torn, particularly the distal one partly only in the shape of a dentate, fine, black line distally shaded by reddish-brown, near the proximal margin expanded to a thick black spot. — f. arizonensis. arizonensis Skinn. has a somewhat lighter ground between the bands of the hindwings, and the anal angle is of a whitish ash-grey. Arizona.

H. cyclus Dyar (171 d) is above almost like the preceding. Beneath the hindwing shows a large white area in the middle of the distal margin, which is pierced from above and below by a brownish, transverse irration; the transverse bands are of a deep black, torn, the extreme band at the white area deeply concave proximally. Marginal area only very narrowly darkened by brownish. Hitherto only known from the state of Puebla (Mexico).


This genus is distinguished by a somewhat more slender antennal club turned round in the middle like a hook; the 2nd palpal joint is densely scaled, the 3rd short, obtuse conical, extending straight forward. The cell of the forewing is longer by two thirds than the costal margin; the 2 exhibits a costal fold. The transverse vein runs very obliquely, its middle part being longest; the lower median vein rises near the base, the upper one just before the cell-end. The hindwing with a distinct tooth or short tail at the inner-marginal vein; transverse vein and middle radial are very feeble, the doubly spurred posterior tibiae with fringes.

calus. G. calus Cr. (= amurene Hene., hypozonis Ploetz, gideon Ploetz) (166 c). Above blackish-brown, on the body and bases of the wings metallic green with an ochreous-yellow, hyaline discal oblique band, a minute spot behind it and 2 or 3 minute apical spots. The under surface is more brownish, the hindwing exhibits a broad, silvery white discal band. Central and South America, beginning from Mexico.

talus. G. talus Cr. (= lucidator Sepp, ansonius Latr.) (166 d) is very similar, the hindwings, however, with shorter tails and beneath without a white band, but only a darker, blurred transverse band, bordered by two small lighter spots towards the proximal angle. From Mexico to South America.

passalus. G. passalus H.-Schaff. is the most closely allied to talus (166 d); above black, body, base of forewing and almost the whole hindwings of a deep green reflection, with a nearly equally broad white hyaline band without any apical spots. Hindwing beneath almost unicolorously green, only at the border narrowly greyish-brown. Brazil. Perhaps to be placed to Thymele near eudemus.


Large, imposing animals with a very much extended apex of the forewing and a slight angle below it. Antennal club strong; 2nd palpal joint appressed, 3rd very short. Venation of forewings as in Goniusus; hindwing with a strong lobe on the inner-marginal vein. Nearly all the species have on the hindwing beneath silvery or mother-of-pearl white spots and in the hindwing yellow hyaline spots. The larvae, as far as they are known, are slender, mostly greenish, with transverse irration, the first ring being thin like a neck, whereby the mostly red or yellow head is strongly defined. They live on tree-like Papilionaceae between two leaves that are drawn together by means of strong threads. The change into a slender pupa takes place on the soil between leaves.

The pupae of E. titurus have been exported in numbers to Europe in the last years, but they easily die on the way there. The butterflies are very common in tropical America, and one species goes to the north as far as the northern parts of the United States, where it is considered to be noxious by some authors (Harrison, Packard). They fly very swiftly with an almost whizzing flight, and with their wings half open they cling to all kinds of blossoms and may be easily taken while sucking them, whereas the 2 on their coupling flight are very timid.

titus. E. titurus F. (= clarus Cr.) (166 e) is above brown with a broad ochreous-yellow discal hyaline band, a small isolated spot outwards of it, and 2 to 4 small apical spots. Beneath the same, on the hindwing with a very broad, silvery white band, being irregularly dentately bordered. From the United States to the south as far as Panama, in more southern districts in 2 or 3 generations. — The greenish larva, with a red-brown head, lives between two leaves drawn together with few strong threads, of Glycinia (Wistar) Robiniaceae, and Papilionaceae, and pupates on the ground between leaves.

exadeus. E. exadeus Cr. (= souci Hbn., clavicorns H.-Schaff.) (166 e) is much larger, with longer wings and smaller, lighter hyaline spots. On the hindwing beneath the silvery spot is more or less reduced, mostly to one larger, roundish spot in the proximal half and one or two above it; distally there is a fine, undulate, partly silvery line, and the distal part is of a light violetish grey, finely dusted darker. Widely distributed from Mexico almost through the whole of South America, and common. — The larva is green, with a fine, darker transverse
striation and a red 1st ring and feet and a dark brown head spotted red. It lives on Papilionaceae.

E. pseudexadus Dhl. & Hew. (166 c) has a very much broader ochreous-yellow discal hyaline band, and on the hindwing beneath much more silvery markings, being otherwise very much like the preceding. South America.

E. maysi Lec. (= egeus H.-Schäf.) (166 e, f) from Cuba is very closely allied to the preceding maysii, but, on the forewings much darker, since the yellow discal spots above and beneath are absent except 2 small costal-marginal spots.

E. antaeus Hew. (= cuthymides Plötz) (166 f) is most similar to the titurus above, but it has quite unspeckled fringes; beneath the hindwings are lighter, more violet-grey, and the silvery band is more equally broad and more regularly defined. Brazil.

E. boisduvalii Ehr. has an expanse of 52 mm. It is allied to antaeus Hew. Above brown, in the middle of the costa a small orange spot, below it a truncate, semi-transparent yellow spot, in the limbal area 3 small round similar spots, below in the marginal area a distinct orange spot. On the hindwing 2 small yellow spots in the middle cell of the distal area; all the fringes flesh-coloured. Beneath similar, forewings lighter, hindwings of a deep chocolate-brown, above the disc 2 silvery-white streaks, the orange spots in the distal area like above. Snapure (Venezuela).

E. asander Hew. (166 f) is above much darker, towards the base not so ochreous-yellow as the asander. preceding, with a narrower discal band; beneath on the hindwing the silvery white band is narrower, duller, only proximally sharply defined, distally more faded, the distal half light lilac-grey. — In the form panthius panthius. H.-Schäf. (= arsaces Mab.) (166 f) the silvery-white colour of the band is almost entirely absent. — f. scheba scheba.

Plötz (166 f, g) approximates the preceding, but it is somewhat smaller and on the hindwing beneath it has a straight, equally broad, silvery white band. — Common from Mexico to Brazil.

E. zestos Hbn. (166 g) resembles asander, but it is more brownish-yellow and has a broader ochreous-yellow discal hyaline band of the hindwing; on the hindwing beneath the silvery-white band is absent altogether. Guiana.

E. gaumi Godm. & Salé. is like exadens (166 e), only smaller and beneath the hindwings are gaumi unspotted. Described from Mexico.

E. enispe Hew. (166 g) looks above somewhat like exadens, but it is quite different beneath; the enispe hindwings are of a dull greyish-brown, strewn darker, with a darkened basal part and 2 transverse lines in the middle, the proximal one of which is broader and rather straight, the distal one finely undulate. — rochus rochus. Plötz (= bochus Mab.) only differs by the absence of the small apical spots. Colombia and Brazil.

E. barisses Hew. is a very variable species, above very much like titurus (166 e), but with somewhat barisses lighter discal spots, beneath like enispe (166 g), though the space between the two distal transverse lines on the forewings and hindwings is darkened by brown, whereas the marginal area of the hindwing is of a lighter, violet-grey tinge, the proximal transverse band is distally more or less broadly bordered with silvery white, towards the costal margin torm. In the smaller f. tmitus Plötz (166 g) from Argentina the silvery band is narrower titurus or almost extinct, the colouring above darker; in busiris Stgr. from Peru the hindwing shows a more strongly bent and equally broad silvery band. The type flies in Brazil. — argentea Mab. from Argentina has on the hindwing beneath a straighter silvery band, and the distal margin of all the wings is longer lilac-grey.

E. haitensis Mab. & Boull. is jet-black, bases of wings and body of a dark red with a grey luster. Forewing with 2 apical dots. Median band composed of small spots. Under surface of forewings violetish-red with a black inner-marginal area. On the more violet under surface of the hindwing the white band is broad; fringes grey, scarcely interrupted. In spite of the differences mentioned, it is, according to its authors, presumably only an insular form of asander; the contours of wings are entirely like those of enispe; Hayti.


Very similar to the preceding genus, but the forewings still longer and the apex strongly extended, without a costal fold; the cell is 3/4 of the length of the costal margin. Only one variable species with 2 separate insular forms:

P. idas Crt. (= mercurius F.) (166 d) entirely resembles above Ep. exadens, but beside the longer idas. shape of the wings it has a somewhat brighter red-yellow basal part. Beneath the colouring and marking of the hindwings is quite different; whitish-grey, some places tinted light violet and strewn darker, with a dark brown basal part and proximal margin, a postmedian, irregularly dentate band, being extinct in the middle part and towards the costal margin indicated by single small spots, and forming at the proximal margin a thick, dentiform spot; anal lobe likewise dark brown. The type is distributed from Arizona through Central and
South America and in some districts rather common. The butterfly has a very swift flight. — The larva is honey-coloured, strewn dark brown, with brown transverse bands and a red lateral stripe and head. It lives on tree-like Papilionaceae, also Cassia, and changes in to a bluish pupa in a leaf drawn together like a trough by means of 2 threads. — In Cuba flies sanantonio Luc. (167 a) with an extinct discal macular band of the forewing, only at the costal margin there is a small spot. — In Porto Rico there occurs another form: gundachii Plötz (166 d), in which the hindwing beneath is unicolorously red-brown and without any whitish-grey dusting. — In ab. angasi Godm., likewise from Porto Rico, the transparent spots on the forewings are absent altogether, nor is there any white at all on the hindwings beneath.


Some smaller species with a moderately thick antennal club bent like a hook, with a very slender, long terminal half. Forewing very broad owing to the short proximal margin and long distal margin; \( \Delta \) with a costal fold; cell of hardly \( \frac{2}{3} \) of the length of the costal margin. Hindwing at the base of the costal margin very concave, rather long, distal margin in the \( \Delta \) straight, in the \( \gamma \) convex. At the anal angle a dentiform lobe. The posterior tibiae show a cover of long fringes and 2 pair of spurs; the posterior tarsi are beneath provided with 2 dense rows of lustrous golden prickles.

\( \text{C. otiades} \) Hew. (= euphonius Mab.) (167 a) is above unicolorously blackish-brown with white fringes, beneath with a lighter inner-marginal area of the forewing and a greenish basal part, and on the hindwing with an antemarginal band consisting of small, light lunae and showing near the proximal angle 2 more purely white, small spots. From Brazil, Amazon District. — From Bahia the form bahiana Plötz (167 a) is described with also above greenish bases of the wings and body, the fringes not being purely white, but yellowish; the under surface is lighter brownish, the inner-marginal area of the forewing still lighter, the antemarginal line almost without any white.

\( \text{C. pereirosum} \) H.-Schäff. (= epicenia Btlr.) (167 a) differs from \( \text{otriades} \) by 3 large white discal hyaline spots of the forewings. Beneath on the hindwing the antemarginal band is only indicated, the green very much confined. Colombia, Brazil. — \( \text{eudicus} \) Mab. shows light yellow instead of whitish spots of the forewings, the spot below vein 2 being absent, metallic green hair cover the whole prothorax and the bases of the wings; from Santa Catharina, the type in the Collection SAVIGNY in the Berlin Museum.

\( \text{C. justus} \) Plötz (168 c), according to the figure, is very much like the preceding, the hyaline band is only somewhat steeper and has near the proximal angle another small square spot. GODMAN places the species to \( \text{Thymele} \) beside \( \text{perlicus} \). Patria unknown.


Anatomically very closely allied to the preceding genus, but the \( \Delta \) is without the costal fold. The cell is somewhat longer than \( \frac{2}{3} \) of the costal margin. Posterior tibiae fringy, with 2 pair of spurs, the tarsi without any pricks. HEUMER calls the genus \( \text{Polygonus} \). Only 1 species:

\( \text{A. amynat} \) F. (= lividus Hbn., savignyi Latr.) (146 g) is a well-known species, above blackish-brown with a light violet lustre, 3 large discal spots and 3 very small apical spots. Beneath the hindwings are lilac-grey with 2 blackish macular bands. Common and very widely distributed from Mexico across South America.


Large, strong animals. Antennal club but little and quite gradually thickened, bent almost rectangularly; the 3rd palpial joint is very short. The forewings are broad, the apex of the wing extended, whereby the distal margin is much longer than the proximal margin. The cell is longer than \( \frac{2}{3} \) of the costal margin, the \( \Delta \) without a costal fold, whereby the species are separated from the following genus. The lower median vein rises 3 times as far from the cell-end as from the base, the upper one more than twice as far from the base as from the cell-end. The hindwings are lobate at the anal angle, the distal margin is roundish, the middle radial is absent. The posterior tibiae are fringy, with 2 pair of spurs. Numerous, often very similar species from Central to South America.

\( \text{T. anaphus} \) Cr. (167 a) is above brown, on the body and bases of wings with a faint green reflection, the anal part of the hindwing yellow, beneath more extensively so and with 2 darker macular bands. From Mexico far across South America. — In \( \text{anaphides} \) Mab. & Boull. the hindwing shows the yellow marginal band reduced to a bright yellow, more prolonged than broad spot between vein 1 b and 2, and the brown of the ground of the wings does not extend pointedly to the anal angle. Beneath the bands are very distinct, and the marginal band is pale yellow, strewn with small dark scales. Brazil.
T. leucogramma Sepp is a doubtful animal, having no more been recognized since Sepp's figure. It looks like a gigantic anaphus, with a narrow white transverse line at the cell-end, something like in E. eurycles (160 e). Described from Surinam.

T. chiriquensis Stgr. (= meretrix Hec., woymeri Plotz) is above blackish-brown, with more prominently dark transverse bands and metallic blue bases of wings and body. Beneath similar to anaphus (167 a), the ground-colour lighter, more reddish, the yellow marginal area extended to the anterior angle and strewn with reddish-brown. Panama to Colombia.

T. elorus Hec. (= blasius Plotz) (167 b) resembles chiriquensis, but the hindwings are at the anal angle rounder, the colour above is still blacker, so that the transverse bands are scarcely noticeable. The marginal yellow of the hindwings beneath is very pure at the anal angle, upwards brownish, Brazil, Colombia, Bolivia.

T. ampyx G. & S. (172 b) looks above like an anaphus (167 a) without any yellow at the hindwing; ampyx body and bases of wings without any blue. Beneath also like anaphus, but without the yellow marginal part of the hindwing. The inner-marginal area of the forewing is lighter, yellowish-grey. Mexico to the Amazon.

T. alpistus Mab. is above dark brown with a reddish reflection with 2 very clear transverse bands, alpistus, the proximal one of which is interrupted by spots. Beneath yellowish-brown with 2 transverse bands on the hindwing, the distal one being distally dentately bordered with yellowish, behind it the border is blackish. Brazil. — cubana Mab. & Boull. is above lighter, the fringes on the hindwings yellowish-white; beneath the cubana yellow border of the distal transverse line of the hindwing is more sharply dentate and clearer. From Cuba.

T. galesus Mab. is a large, above somewhat lighter species, with a feeble dull green tinge on the body and bases of wings. The dark bands are on the forewing below the median closer together than in the other species. Beneath still lighter with distinct bands and a dark spot at the base of the hindwing. Brazil, Bolivia. — gressonensis Sch. is presumably only a darker form with more distinct transverse bands from the galesus West Indies (Grenada). Expanse of wings: 44 mm.

T. creteus Cr. (167 d, e) is the chief representative of a group being difficult to distinguish, and which has not yet been fully cleared up; we will therefore consider the nearest allies only as forms of this species. Above all are alike, blackish-brown, with 2 rather distinct dark transverse bands and a metallic blue base of the wings, and body. Beneath somewhat lighter and of a more reddish tone, with the same, but here more distinct transverse bands and a large, white discal spot of the forewing, which in creteus extends only to the middle of the two lower median veins and does not touch the cell; the costal margin remains dark. Brazil, Colombia. — parmenides Cr. shows the white spot much larger, upwards narrower and extending almost to the costal margin strewn with blue; the base of the hindwing is strewn with yellowish, and the distal transverse band is bordered by a lighter tinge towards the margin and shows near the anal angle two white spots. Guiana. — hopfieri Plotz from Mexico to the Amazon is somewhat smaller, the white spot similar as in the preceding, somewhat narrower, extending to the white costal margin; also on the hindwing the costal margin is at the base broad white. — pseudochalys H.-Schäff. (= alector H.-Schäff.) (167 c) is still smaller, the white spot as extensive as in creteus, but easily recognizable by 2 white spots above each other below the costal margin of the forewing. Here the bases of the wings are also beneath scaled blue; on the hindwing both bands are flown together into a dark median area. Brazil. — siges Mab. has a more metallic green body and bases of wings. Beneath there is instead of the white spot a greyish-white light part between the bands, extending to the cell; on the hindwing the transverse bands are flown together towards the costal margin. Brazil. — cretillus H.-Schäff. (167 b) is quite similar to creteus, but beneath it has a metallic green costal margin of the forewing; instead of the white spot there is also here only a greyish-white light patch not extending up to the cell. On the hindwing the distal band is distally bordered by a lighter tinge. Brazil. — bifascia H.-Schäff. is beneath of a more yellowish tone than the other species, the white spot very large, extending to the proximal angle, dusted with grey; the bands of the hindwings are closer together, though not confluent. Brazil. — jaira Blr. (= cretillus Plotz nee H.-Schäff.) (167 c) has very much more distinct dark bands, the proximal one on the hindwing very much interrupted, between both near the costal margin an isolated spot. The white spot of the forewing is extended to the base and strewn with brownish; it does not reach the cell.

T. cassander F. (= vespasius F., elorus Plotz) is above very deep blackish-brown, the bands still darker; the distal one on the forewing describes a regular arc round the cell. Body and bases of wings scantily strewed with blue. Beneath the hindwings are quite black, without any bands, strewn with small ash-grey scales. The species only flies in Cuba.

T. jariba Blr. is a doubtful species from Cuba, the description runs quite similarly. According jariba, to the figure by Plotz, it is somewhat smaller, and the hindwings beneath are without the grey scaling.

T. hahnelli Stgr. (167 b, c) is very similar, but lighter, of a more reddish tone, the transverse bands hahnelli.
looking somewhat dentate, owing to prolongations on the veins. Body and bases of wings without any green or blue at all. Beneath the same, only somewhat lighter. Colombia.

**T. xagua** Lec. (= malefida H.-Schäff.) (167 d). Above black with a blue basal half and body, also beneath the base of the forewing is blue; in the middle of the costal margin there is a square white spot which may occasionally be absent. The hindwing only shows a faded, darker median band. Cuba.

**T. hurga** Schs. seems to belong here. Above brown, towards the base green, the hindwing exhibits a darker submarginal shade which also becomes prominent on the lighter under surface and is distally bordered with yellowish. Expanse of wings: 41 mm. Peru.

**T. pheres** Mab. (167 e) is above the same; beneath the marginal area on both wings is lighter, rosy-grey, in front of it a broad, uninterrupted, black band. Brazil, Colombia, Peru, Paraguay.

**T. habana** Lec. (167 d). Above black with a metallic blue base and body, beneath brown, before the margin on all the wings whitish with brownish-grey scales. Cuba.

**T. latimargo** H.-Schäff. (= cartomes Mab., grullus Mab.) (167 e) is above the same, but the hindwing is more extended at the anal angle. Beneath the grey marginal area is present only on the hindwing and twice as broad as in **T. habana**. The forewing shows towards the costal margin 2 dark macular bands. Brazil, Colombia.

**T. alardus** Stoll. (167 e) is larger and distinguished on the hindwing beneath by the very broad whitish-grey marginal band scantly strewn with greyish-brown and being continued yet for some distance at the proximal margin; in **T. latimargo** it is blackish-brown. The forewing has likewise a light marginal band, parted and proximally bordered by dark macular bands. Distributed from Mexico to Brazil and Colombia and mostly common.

**T. herial** Mab. Above not different from the preceding. Beneath the light marginal band is absent altogether, only on the forewing it is indicated by few small whitish scales; the forewing shows a broad black postmedian band which is interrupted below the apex. Described according to a var. from Brazil.

**T. megalurus** Mab. (= consus G. & S.) (167 e) is at once recognizable by the anal angle of the hindwing, which is extended like a tail. Beneath the costal margin of the forewing is white as far as the middle of the cell, the wings show a violetish-grey marginal band which is broader on the hindwings. Mexico.

**T. apastus** Cr. (= acastus F.) (167 e) initiates a series of species exhibiting on the forewing an oblique, white hyaline band. The fringes of the hindwings are speckled black and white. Beneath the hindwings are strewed with greenish-yellow scales and show 2 indistinct, darker transverse bands. Guiana, Brazil, Peru.

**T. janeiro** Schs., according to the description, looks exactly like Th. aulestes (168 d). On the brown under surface of the hindwing, strewed with yellowish, we only notice a large, yellowish spot near the middle of the proximal margin. Expanse of wings: 49 mm. Rio de Janeiro.

**T. alector** Fldr. (168 e) is a doubtful species and belongs perhaps to *Thymele*. Recognizable by the white costal margin beneath on the fore- and hindwings, and by the large white spot in the disc of the forewing; the hindwing shows 2 thick, blackish-brown transverse bands. Bogotá.

**T. pertinax** Sepp (= schelleri Küh., alector H.-Schäff. nov Fldr.) (167 f) is somewhat smaller and very similar, but beneath it has neither on the fore- nor hindwings a white costal margin. The dark transverse bands are distally somewhat lighter, yellowish. Surinam.

**T. neobulus** Mab. differs from the very similar preceding species by the hindwing beneath being darker in the basal half than in the marginal area, both being parted by a light yellow band from the costal margin to the anal angle, being divided into regular spots by the veins, the two lowest spots being white and more posteriorly removed. Brazil.

**T. eudemus** Mab., is another doubtful species and perhaps only a darker form of *Thymele passalus* (p. 866). Base of wings and body suffused with a deep dull green. Beneath monotonously black; only the proximal margin of the forewing lighter, somewhat reddish-brown. Described according to a var. from the Chiriquí.

**T. virgatus** Mab. is larger than the preceding, above more brown, and the bases of the wings and the body with rusty-yellow, instead of green hair. Otherwise marked the same with the oblique white hyaline band of the forewing. Beneath the same. Anal angle of the hindwing extended in a hook-like bow. Described according to a var. from Páezas.

**T. probus** Mschtr. (168 d, e) certainly belongs into a special genus, and is sexually very dimorphous. The ♀ is coloured like the preceding species, but on the forewing it has instead of the oblique hyaline band 2 large, four-cornered spots obliquely above each other, and on the hindwing a curved row of black punctiform
spots. The ♀ is black with lustrous violetish-blue proximal halves of the wings, otherwise marked like the ♂, but the proximal discal hyaline spot is very much larger and oblong, the distal one much smaller. Surinam.

T. tritonaе Weeks and T. finitimus Weeks. We have had no access to the descriptions of these tritonaе, finitimus.


It has somewhat longer and ascending palpi. The inner-marginal vein is inflated in its first two thirds, in its environs the forewing beneath is bare. On the under surface the forewing shows at the rise of the costal-marginal vein a pencil of stiff hair. Posterior tibiae with 2 pair of spurs.

Ph. vulpecula Plötz (169 e). The ♀ is above unicolorously rufous, towards the margin somewhat vulpecula darkened. Beneath darker, almost blackish. The ♂ is much larger, in the apical area of the forewing darkened, with 2 large hyaline spots, similar as in probus (168 e), and on the hindwing with a row of black spots. Brazil, Colombia.

Ph. sororcula Mab. & Boull. The ♀ greatly resembles that of vulpecula; the colour is duller, the sororcula hyaline spots farther remote from each other, rounder and smaller. Beneath yellowish grey, towards the apex with a violet reflection. The row of spots on the hindwing is composed of smaller spots. Described according to 1 ♀ from French Guiana.

Ph. pausias Hew. (170 b) is very similar, but much smaller, the ♂ above unicolorously rusty-yellow pausias. with a darkened border. The hindwings beneath shows 2 small, indistinct, black dots below the middle of the wing. Amazon.

Ph. cervinus Plötz is also closely allied, but on the forewing it has 2 black apical dots and a small cervinus white hyaline spot below the lower cell-angle. The under surface is darker, at the costal margin of the forewing and proximal margin of the hindwing with a dull blue lustre. Brazil.


The forewing shows near the proximal angle a slight concave indentation. The cell is longer than two thirds of the costal margin; there is no costal-marginal fold. The lower median vein rises near the base of the wing, the upper one above the middle of the cell. The head is remarkably stout, the palpi ascending, with a very short, obtuse terminal joint; the posterior tibiae covered with long stiff hair, in which 2 pair of spurs are hidden. Antennal club rather feeble, the tip, being bent round, is just as long as the other part. Only 2 species:

P. extrusus Flöbr. (172 d) is black, thorax and base of wings metallic green, the abdomen narrowly extrusus curled green. At the costal margin and at the cell-end there are yet 2 or 3 metallic green dots each. Hindwing in the disc with a large triangular spot, and at the proximal margin with a broad, bluish-green ray. Beneath the hindwing shows an antemarginal row of small, square, bluish-white spots. Colombia.

P. affinis Mab. & Boull. is smaller; on the forewing above the green dots are absent, on the hindwing affinis. there is no inner-marginal ray. Beneath the forewing shows at the apex 4 minute, greenish-white spots, the hindwing in the middle a broad, yellowish-red transverse spot, divided by the black veins, and an antemarginal row of small bluish spots. French Guiana.

16. Genus: Thymele F.

Chiefly differs from Telegenus only by the absence of the costal fold. A lot of species resembling each other also in their exterior:

Th. fulgerator Walsh (= fulminator Sepp, mercatus F., azul Reak., trinitad Lef., misitra Plötz) fulgerator. (167 f). Above black and of a radiant bluish-green, with a white hyaline oblique band and 3 to 5 minute apical spots. Beneath more or less rusty-brown, with or without a large white inner-marginal spot of the forewing, melting away in the oblique band, the costal margin of the hindwing more or less extensively white, in the disc with 2 blackish-brown transverse bands occasionally flown together to a darkened basal part. From Mexico to Brazil and Colombia, wide-spread and nearly everywhere common.

Th. naxos Hew. (168 a) is above the same. Beneath at the distal margin of the forewing near the naxos proximal angle a greyish-white spot. The distal band of the hindwing is distally bordered by 8 small, light rusty-brown spots, in the middle of the wing there is a white discal spot. South Brazil.
The, *halesius* Hew. has above only one minute apical spot and the oblique band consists of 6, not 5 spots. Beneath in the apex of the forewing a grey band. The Hindwings are grey with a black basal spot, with 3 antemedian black spots and 2 black spots near the anal angle. Patria unknown.

The, *anthius* Mab. Forewing slightly angled below the apex, the median band narrow, linear. Beneath it is widened by white marginal scales. In front of the border towards the apex there are greyish-lilac, small scaled spots. The hindwings are black with a bluish-white submarginal band, in front of it small black spots, near the proximal margin a rectangular yellow spot; in the cell and at the base some more bluish-white spots. Bolivia, Amazon.

**brevicauda.**

The, *brevicauda* Plötz (= eniopeus G. & S., *naxos* Drc.) (167 f). The band of the forewing narrow, the lowest spot and the third from below are removed outwards. Fringes above the proximal angle speckled white. Hindwing at the anal angle prolonged. Under surface blackish, hindwing with 2 dark transverse bands. From Panama.

**palliolum.**

The, *palliolum* H. H. Drce. The oblique band of the forewing is only composed of 4 spots. Beneath dull blackish, in the basal halves strewn with yellowish, like the fringes. The middle of the hindwing is crossed by a brown macular band. Patria not mentioned.

**fusinans.**

The, *fusinans* *H.-Schäff.* (= mephitis *Hew.*) (168 c) is above almost marked like *brevicauda*, the oblique band generally somewhat broader. Beneath dull brown, the basal half of the hindwing almost black, a postmedian, lighter transverse band, which almost turns whitish towards the anal angle. From Mexico to Colombia, Brazil.

**dinora.**

The, *dinora* Plötz (168 a, b) is larger than the preceding, the oblique band still broader. The blue of the bases of the wings is dull and hazy, with but little lustre. Beneath dull black, in the cell strewn with yellowish, below the middle behind it with 2 or 3 yellowish-white spots. Peru, Bolivia, Venezuela.

**philistus.**

The, *philistus* Hpfrr. (168 d) has beside the 3 or 4 apical spots 3 larger ones below them, extending towards the median band. Fringes of hindwings of a pure white. Hindwing beneath at the border with a very broad, lilac-grey band divided into spots by the veins. Peru, Colombia.

**bolivar.**

The, *bolivar* Mab. exteriorly resembles *Eudamus multus* (161 e) which has the same marking. Spots with a yellowish tone. Bases of wings and body are not bluish-green. Peru, Bolivia.

**egregius.**

The, *egregius* Blnr. (168 b) is distinguished by an almost extinct median band composed only of 2 or 3 small spots, in the apex mostly a minute spot. On the blackish under surface of the hindwing 2 dark bands approaching each other or being confluent in the middle. Mexico to Colombia.

**passalus.**

The, *passalus* *H.-Schäff.* is without the small apical spots like the following species. On the jet-black forewing there is only the oblique band formed by 5 equally large white hyaline spots; the lowest spot touches taperingly almost the proximal angle. Bases of wings with a deep bluish-green reflection. Beneath the species is quite black. Brazil. The species greatly resembles the smaller *Theleponus eudamus* Mab.

**auletes.**

The, *auletes* Cr. (= narcosius Stoll, *colossus* *H.-Schäff.*, *granadensis* Moschtr.) (168 d). Above black with a deep slate-blue reflection, at the base with a blackish-green lustre; the middle spot of the oblique band is small and distally removed, the lowest always quadrangular. The under surface is dull black, on the hindwing distally strewn with lilac-grey or greenish, with 2 indistinct, darker transverse bands, on the forewing with a shortened, lilac-grey submarginal band. The ♀ is almost twice as large with much larger hyaline spots. Distributed from Brazil and Colombia to the south as far as Paraguay.

**briceius.**

The, *briceius* Plötz (168 c) is very similar, smaller with coherent spots, the lowest of which always terminates triangularly pointed. The hindwing beneath is of a much lighter bluish-grey. Brazil.

**orphoe.**

The, *orphoe* Plötz (167 c). Here the band of the forewing forms more a single ovoid spot. On the hindwing beneath the basal part is quite dark, towards the margin bordered by a lighter band which forms a light spot near the proximal margin. Rio de Janeiro. Perhaps = Tel. janeira Schs. ?

**christyi.**

The, *christyi* Sharpe looks entirely like a small *fulgerator* (167 f) without any apical spots and with a narrow hyaline band. Beneath the forewings are metallic green as far as the oblique band. Patria unknown.

**percivax.**

The, *percivax* Hbn. (= pertinax Stoll) (168 e) is a similar, smaller species. Above like the preceding, but of a more brown ground-colour. Beneath the bases of the wings are likewise metallic green, at the proximal margin of the forewing there is a large white spot. Patria unknown. — In aleanderi Weeks from Venezuela the discal band is absent.

**mysius.**

The, *mysius* Plötz presumably also belongs here, but it has 6 small apical spots in a curved row. The fringes are yellowish. Expanse of wings: 30 mm. Patria unknown.

**eulentus.**

The, *eulentus* Cram. (= lucidator Sepp) (167 f). The median band is composed of coherent quadrangular spots, the second from above appearing more oblong. Beneath on the forewing there are small apical spots.
The hindwings exhibit a yellowish median spot and yellowish dusting outside in front of the distal transverse band. Guiana, Colombia, Peru, Brazil.

Th. orpheus Plötz (168 c) is very much distinguished by a dark blue submarginal band on all the orpheus. wings, which is broader on the hindwing and here beneath dusted white; the forewing shows beneath a large, white inner-marginal spot. Pará.

Th. erycina Plötz (168 a) has the forewing somewhat extended below the apex and on the hindwing erycina. a prolonged and somewhat hook-shaped anal angle. The spots of the hyaline band are narrow, there may be one or two small apical spots. Owing to the speckled white fringes, the border appears somewhat dentate. Beneath the forewing is spotted somewhat rusty-red below the apex, the hindwing is strewed with lilac-grey with 2 rows of black spots being distally more or less bordered with rusty-brown. Brazil, Colombia.

Th. aulis Plötz (= fulviluna Mab.) (168 a) is above very similar, but it has red-brown fringes. aulis. Beneath the apex of the forewing is strewed with lilac and at the proximal angle there is a large, white spot dusted with a rusty brown. The hindwing shows only a somewhat curved transverse band reaching neither the costal margin nor proximal margin and being all round bordered with rusty red. Colombia, Brazil.

Th. centrites Hev. is above quite black, only at the apex of the forewing there are 3 minute white centrites. hyaline spots, the oblique band is absent altogether; instead of it there is a black antemarginal band, and on the hindwing a black cell-end streak and 1 or 2 spots near the proximal margin. Ecuador.

Th. mithras Mab. The upper surface is coppery brown, on the forewing 2 postmedian, black, mithras. dentate transverse lines, between which the ground is lighter, yellowish; a similar yellowish spot is at the cell-end. Hindwings unicolorous. Beneath blackish, the yellow markings clearer and also on the hindwings there are 2 black, undulate transverse lines approaching each other at the proximal margin. Porto Cabello.

Th. telegonoides Mab. & Boull. is above dark brown with a somewhat indistinct, darker, post- telegono- median transverse band. The hindwings have broad, yellow fringes. The thorax is metallic bluish-green. Beneath the same, but the hindwing exhibits a broad, yellow marginal spot like in anaphus (167 a), but the anal angle itself is brown. Colombia.

Th. gallius Mab. (168 b) still more resembles anaphus above, but it is smaller and on the forewing it has very small white apical spots. The yellow anal angle of the hindwing is of a different shape and terminates upwards in a fine point. On the under surface the band-marking is rather more indistinct, the yellow spot more extensive. Colombia.

Th. chrysorrhoea G. & S. is similar, but above of a purer black, so that the band-marking is scarcely prominent anymore; the small apical spots are absent, too. The hindwings are rounder, the yellow spot narrower. Panama.

Th. phalaecus G. & S. also looks like a small anaphus (167 a), but it has 3 minute apical spots; phalaecus. the hindwing is extended to a triangular apex. The under surface is blackish-grey with the same band-marking; also the proximal angle of the forewing shows a yellowish spot. Described from Mexico.

Th. sumadue Lej. is an entirely doubtful species which may also belong to Telegonus. The short description runs; above and beneath brown with a yellowish macular band, larger spots in the middle, very small ones at the apex. Forewing at the base more extensively green than the hindwing. Cuba.

Th. capucinus Lej. Doubtful like sumadue. Wings jet-black, towards the base yellowish. Forewing capucinus. of the ♂ with a small arcuate streak and beneath with an indistinct spot in the middle. The ♀ has 2 adjacent yellow spots above and beneath. The hindwing is black at the base, beneath also at the proximal margin strewed with red and grey atoms. Cuba.

Th. zopyrus Plötz (= hydarnes Mab.) (168 a) greatly resembles justus (168 e), but it has somewhat zopyrus. rounder hindwings with speckled fringes and on the forewing 3 minute white apical spots. From Brazil.

Th. bridgmani Weeks from Bolivia has remained unknown to us.


It unites the characters of Cecropus and Thymele. The ♂ exhibits a costal fold. The hindwings are long extended in the ♂, more roundish in the ♀.
**C. phrynicus** Hew. (= viridans Mab.) (168 c) is a very conspicuous species, looking like a gigantic *Cecropus*. Brown, on the forewing with a yellowish, little transparent oblique band and a similar distal margin of the hindwing, into which the ground-colour penetrates on the veins in a dentiform way. Brazil.

**polias** G. & S. is similar, but it has a white oblique band and unicolorously hindwings without a light border. Body and bases of wings are covered with hair of a somewhat olive-green lustre. Beneath the hindwing shows 2 black macular rows, being distally near the anal angle bordered with whitish. Central America.

**rhacoces** Mab. resembles the preceding and differs by a much longer oblique band, almost touching the proximal angle and being composed of yellow spots; the hindwings are likewise unicolorously brown, beneath at the base strewn with yellowish-white with 2 black transverse bands distally bordered with yellowish-white, at the anal angle with 2 distinct light teeth. Above the thorax is haired green, beneath whitish. The species described according to but 1 ♀ from Central America, is perhaps the ♀ of *Cecropus zentus* Mschlr. (comp. p. 871 (172 d)).

18. Genus: **Orneates** G. & S.

The only species shows the palpal formation of *Thymele*, the antennae being quite gradually thickened and bent round like a hook. On the forewing the cell is 2/3 of the length of the costal margin, the costal fold is present, the lower median vein rises close at the base, the upper one near the lower cell-angle. The hindwings are not prolonged, and round at the anal angle. The posterior tibiae show, beside the two pair of spurs, a thick hair-pencil.

**aegiochus** G. & S. looks above like *fulgerator* (167 f), but the blue or green on the hindwing is very much reduced. Beneath the wings are blackish, on the forewing the proximal half of the costal margin is green, on the hindwing the base is green, in the cell there is a small yellow spot, and the proximal margin is yellowish. Costa Rica, Panama to Colombia.


This genus resembles on the whole in its characters the *Thymele*, but the species are all much smaller with shorter and broader wings, particularly the hindwings being broader. The bent tips of the antennae are mostly longer than the thickened other part. The 3rd palpal joint is longer and more porrect. The ♀ shows a costal fold. About 29 species are known; the genus is confined to Tropical America and goes to the north as far as Mexico.

**amphion**

T. *amphion* Hbn. (= zethos Plötz, antiopa Plötz) (168 c, f) is a small, blackish-brown species with a black postmedian band, very small apical hyaline spots and a hyaline discal band composed of 4 spots, on the hindwing with 2 black transverse bands. Mexico to Brazil.

**lamus**

T. *lamus* Mab. is very similar, smaller, strewn over more yellow, the discal band consisting of 3 smaller, more remote spots, the small costal spot being absent. Obidos.

**misitheus**

T. *misitheus* Mab. also looks very much like *amphion* (168 e), of a lighter greyish-brown, the discal band like there, but encircled dark; the hindwings are still lighter, at the costal margin silky grey, with 2 dark brown transverse bands. The under surface is ash-grey with distinct bands. Guiana, Bolivia, Colombia.

**lurideolus**

T. *lurideolus* Mab. has the same discal band as *lamus*, but the ground-colour is a yellowish-redbrown, the hyaline spots are yellow; beside the dark brown, postmedian transverse band there is another short one at the base. The hindwings are of a darker brown, with the 2 indistinct transverse bands. Amazon.

**penidas**

T. *penidas* Hew. (172 b) is above likewise rusty-brown, but with much smaller and separated discal hyaline spots; the spot in the cell shows 2 distally directed teeth, near the proximal angle there is yet a fifth very narrow spot. The more longish hindwing exhibits 2 darker transverse bands. The type in the British Museum originates from Santarem.

**azines**

T. *azines* Hew. (168 f). Above rusty-yellow with blackish, dark apical half and yellowish hyaline spots, on the hindwing with a black cell-spot and a postmedian row of small black spots. Amazon.

**persicus**

T. *persicus* Mab. & Boull. (172 b) is quite similar, the ground-colour somewhat more olive, the 2 discal spots larger; adjoining, the small discal spot of the hindwing smaller, the macular row consisting only of 5 minute spots. Described from Surinam.

**iao**

T. *iao* Mab. The forewing is deep blackish-brown with 3 minute apical spots and 2 white hyaline spots in the disc, a punctiform spot in the cell and below it another one being twice as long as broad. The hindwing is unmarked with white fringes had a slight angle in the middle of the distal margin. Beneath the forewing
TELEMIADÉS. By Dr. M. Draudt.

869

shows an oblique band composed of 5 white spots; the hindwing is yellowish in the basal half; in the black distal part there are 2 yellow dots above the cell and 2 distally to them. The species described according to one specimen from the Coll. Staudinger, perhaps does not belong here.

T. avitus Cr. (168 f) is above rusty-yellow, in the female more yellowish-grey with 3 apical and 3 discal hyaline spots, the 2 middle ones forming a jacent U, the small third spot being situated outside; besides there are 2 rather indistinct transverse bands, and on the hindwing there is a median spot and a brown postmedian band. Beneath more yellow, in the female with more distinct spots. Guiana to the Amazon.

T. littera Mab. (169 a) is smaller and more slender, resembling ceramina above, on top more grey, litters. on the forewings similarly spotted as in the preceding; the cell-spot U-shaped, the one below it V-shaped, a third spot behind it, and between the latter and the small apical spots there are yet 2 smaller ones nearer to the distal margin. The hindwing beneath is white with a brown transverse band. South America.

T. ceramina Plötz (169 a) resembles littera above, but the 2 small hyaline spots between the discal ceramina and apical spots are absent. The under surface is greenish olive-grey, particularly light is the base of the hindwing, crossed by 2 dark brown macular bands, the distal one being more coherent. From Surinam.

T. megalalloides Schs. presumably belongs here. Above brown intermixed with ochreous-yellow hair; megalalloides, the marking is like in ceramina, the hyaline spots small, the cell-spot parted. The under surface is lighter, in the female the base of the hindwing is yellowish-grey, the transverse bands divided into spots. Expanse of wings: ♀ 34, ♂ 39 mm. Described from Peru.

T. cobarus Mschlr. (= lucida Plötz) is above rusty-brown, towards the base greenish with similar cobarus, discal spots as the preceding, behind them parallel to the distal margin a black submarginal band; a second broad dark band crosses the middle of the wing. The middle of the hindwing is crossed by a blackish transverse band, on both sides of a lighter, red-brown tint; the marginal area is of a pale violet tone. Beneath the basal inner-marginal area is whitish, in it 2 small blackish spots.

T. epicalus Hbn. (= avitus Cr. p. p.). Above rusty-brown, on the forewing with 2 small apical epicalus spots, without the discal hyaline spots and with 2 black macular bands being continued on the hindwing. Brazil.

T. diores Mab. & Boull. is very similar, but it has longer hindwings being pointedly extended at the anal angle. The apical half of the forewing is blackened; the proximal band is coherent, not composed of spots; on the hindwing the cell-spot is smaller, the proximal macular band less interrupted. South America — var. obscurus Mab. & Boull., is above more blackish-brown, only in the disc of the forewing somewhat lighter reddish-brown. French Guiana.

T. megallus Mab. is larger, above more blackish-brown, towards the base darker; the marking with megallus, the 2 black transverse bands is otherwise rather the same: the proximal one is straight and runs through the middle of the cell. The hindwing beneath is ashy-bluish towards the anal angle, in the female at the proximal margin, the distal black macular band contrasting sharply with it. Panama.

T. purpurascens H.-Schäff. resembles nicomodes (168 e); on the rusty-brown forewing it has 3 small apical spots; a straight black band runs through the base of the cell to the proximal margin, another one farther distally bifurcates at the cell-end in the shape of a Y. The hindwing is darker brown with only one band through the middle. The under surface is of a lighter red, the band of the hindwing composed of small square spots, with 2 more spots at the costal margin, Brazil.

T. nicomodes Plötz (168 e) resembles megallus, above with a slight olive tint. The transverse bands are narrow, composed of spots; the one between the median veins is on the forewing removed far inward, the hindwing begins at the costal margin with an isolated square spot. The under surface has a somewhat violet lustre, the bands are broader and more spotted. In case nicomodes Mschlr. from Colombia and Brazil, the description of which runs somewhat differently, should be identified, Plotz' species must get a new name.

T. aberrans Mab. & Boull. is above black, towards the base light rusty-brown, on the hindwing more extensive. The forewing shows 3 small apical spots, a spot at the cell-end and below it 2 more in an oblique line, the lowest being largest. The hindwing shows a black cell-spot and behind it in a curved row small black streak-spots between the veins. The middle of the distal margin is somewhat angular. Beneath similar, the bases of the wings more yellowish; the disc of the hindwing is ochreous-yellow with 2 rows of small black dots, the proximal one composed of 2, the distal one of 3. French Guiana.

T. acutipennis Mab. & Boull. has longer forewings with a pointed apex. Above rusty-brown with acutipennis, 3 apical and 3 light yellow discal spots; the marking is otherwise the same as in persens (172 a), but the colouring is darker, the spots of a lighter yellow. At the proximal margin of the hindwing beneath there is a dimple with
a hair-pencil at the upper margin, so that the species would have to be placed to the genus *Ablepsia*, if it had no costal fold. Described according to a ♀ from French Guiana.


The genus contains more than a dozen of small species greatly resembling each other. The 3rd palpal joint is shorter than in *Telemias*. No costal fold. On the forewing the upper median vein rises from the lower cell-angle or even somewhat above it. The male hindwings are much longer, in the ♀ round. It is very difficult to tell one species from another species.

*auatus*.  
C. *auatus* F. (= zarex Hbn., brontes F., longipennis Plötz, orontes Plötz) (168 f) has no small apical spots. The fringes of the hindwings are above white only in the costal-marginal half, beneath somewhat farther downward. On the hindwing beneath being somewhat streaked with yellowish, and often appearing in the ♀ rather variegated, there are 2 slightly bent bands bordered with a lighter colour. Widely distributed from Mexico to Paraguay.

*oryx*  
C. *oryx* Plötz. From the Upper Rio Negro in North Brazil entirely resembles *auatus* (168 f), but much larger (twice as large as Hübner’s figure of zarex), the band of the forewing above interrupted at the subcostal, the marginal spots and fringes of the hindwing broader and without the dark bands on the hindwing beneath.

*bipunctatus*.  
C. *bipunctatus* Gmel. (168 f) has 2 apical dots, the lower one may be absent above. The comparatively broad, white oblique band ends rather taperingly at the proximal angle; in its middle there may be a black dot. The whiteness of the fringes of the hindwing extends far downward. From Mexico to Brazil.

*dhega*.  
C. *dhega* Mob. has 4 apical dots and grey palpi. The white oblique band of the forewing is somewhat curved and terminates round below, the lowest spot is not smaller than the one above it. The fringes of the hindwings are light grey, not white in the upper half of the distal margin. Beneath the hindwing is decidedly yellowish-grey, towards the margin rosy-grey with 2 brown bands, the proximal one blurred, the distal one very broadly outside bordered with a light grey on the outside. From Rio Grande.

*zonilis*.  
C. *zonilis* Mob. has only 2 apical dots; the white band projects somewhat about in the middle, is otherwise equally broad and terminates round below. Fringes of hindwings above extensively white. On the hindwing beneath the 2 brown bands are united towards the costal margin; the distal one is very broad, below the anterior angle convex and bordered with a sharp light colour; also on the forewing beneath there is a light submarginal line. Central America to Colombia.

*luinus*.  
C. *lunulus* Plötz (168 g) has 3 apical dots, the lowest of which projects far distally; the costal-marginal spot of the oblique band is very small. The hindwing is beneath reddish-grey, towards the base lighter, the two brown bands at the costal margin confluent, the distal one near the costal margin forming an angle, below it somewhat concave, bordered with a light colour, the lightest at the anal angle; the triangular space between the two bands at the proximal margin is rosy-grey, at the apex with 2 light dots. The palpi are whiter than in *zonilis*. Brazil.

*reflexus*.  
C. *reflexus* Mob. & Boull. Of the 3 apical dots the lowest projects proximally by half its width. The white oblique band is very broad, the costal spot narrow, in the middle it distinctly projects, the lowest spot forms on the inner-marginal vein a fine apex towards the base. The hindwings beneath are light grey, marked like in the preceding. Sa. Catharina.

*neis*.  
C. *neis* Hbn. (168 g) has 3 apical dots. The white band strongly projects distally at the lower cell-angle. The fringes are above throughout brown. Hindwings beneath brown, streaked with yellowish, with 2 brown bands and a very dark border. Palpi ashy-grey. Mexico to Brazil.

*capys*.  
C. *capys* G. & S. extremely resembles *neis* (168 g); the lowest spot of the band is narrow, terminates obtusely and touches somewhat more than half the width of the spot above it. The sexual organs are very different from those of *neis*. Central America.

*bocus*.  
C. *bocus* Plötz (= integrifascia Mob.) (172 d) is very closely allied to *capys*. The white oblique band does not project so far at the cell-angle. Forewings beneath light brownish-grey, in *neis* almost black; the hindwings are reddish-grey with 2 rather narrow blackish bands. Fringes brown. Guiana, Colombia, Brazil.

*stylus*.  
C. *stylus* Hbn. (168 g) is smaller, with broader wings, without or with 1 or 2 apical dots, the white band rather narrow, particularly the costal-marginal spot; at the lower cell-angle there is no spot at all, the lowest is narrow and touches the one above it only in the distal half. Fringes of the hindwings grey. Guiana to Brazil.

*cinctus*.  
C. *cinctus* H.-Schöff. (= rotundatus Mob.) (168 g) has 4 apical dots in one line. The lowest spot of the band is distally removed by about a quarter of its width, at the lower cell-angle there is a minute triangular spot. Hindwing comparatively round with white fringes. Distributed from Mexico to Brazil.
C. electrus Mab. is very conspicuous owing to its orange-yellow palpi; the forewing exhibits 3 apical electrus. dots. The band ends pointedly below. Beneath the hindwing is quite black, only in the disc with few yellow scales. Brazil.

C. zeus Mab. (= koluthos Plötz (172 d) has no apical dots; the thorax is above olive-green zeus. like the bases of the wings. Body beneath yellowish-white. The white band of the forewing is light yellow at the costal margin. Fringes at the proximal angle of the forewing and of the whole hindwing white. Hindwing beneath strewn with greenish, the 2 black bands bordered with a lighter colour. Guiana, Colombia.

C. sulfuricus Mab. has a light sulfurous band and 3 apical dots in one line; fringes of the hindwings sulfuricus. narrow yellow. Hindwing beneath reddish-grey with 2 darker narrow bands and a dot at the base. Brazil.

C. vectilicus Bltr. (168 g) has 4 apical dots, otherwise the same. Fringes of the hindwings more vectilicus. yellowish-grey than the narrow distal margin. Hindwing beneath blackish-brown, similarly marked. Guatemala to Colombia.


It has the same characters as Cecropeterus, but the hindwing is rounded like a lobe at the costal margin and covered with a membrane like a pocket. Beneath the forewing shows a hair-pencil at the base of the lower median vein. The posterior tibiae are covered with long, bent hair and exhibit 2 pair of spurs. Only 1 species:

E. adoxa Mab. is quite black, on the forewing with a hyaline spot parted by the veins, in the shape of a short median band growing broader downward; above it at the costal margin the band is continued by white dusting. Beneath similar, but the hyaline band is broadly bordered with white. Described according to a specimen from Cayenne. In the British Museum there is said to be another quite black animal devoid of the hyaline spot.


Antennal club moderately thickened, bent round to a long hook. The 3rd palpal joint is conical and somewhat longer extended. On the forewing the upper median vein rises before the lower cell-angle; the cell itself is covered with short hair. There is no costal fold; posterior tibie as in Ectomis.

R. cellus Brsl. & Leec. (= festus Hbn.) (169 a, b) is above deep blackish-brown with a beautiful cellus. chrome-yellow, partly transparent oblique band and on the hindwing with speckled yellow fringes. Beneath the hindwing is strewn with a lilac grey towards the margin and exhibits 2 blackish-grey macular bands. Widespread in North and Central America. — From Mexico there is a form before me from Orizaba: mexicana f. mexicana. nov. (169 a) in both sexes, with an almost coarse as broad, deep orange-yellow band terminating round below, the small apical spots still smaller, reduced to 2, the yellow fringes of the hindwings narrower. — pseudocellus pseudocellus. Cool. From Arizona has also an orange-yellow band, but it is much smaller, with grey fringes of the hindwings, and beneath the lilac-grey scales are absent on the hindwings.

R. casica H.-Schäff. (= epigena Bltr.) (169 b) is dark brown with minute hyaline spots in the disc casica. and before the apex, the hindwing with broadly white fringes. The hindwing is white in the marginal third, otherwise grey, watered with black, with 2 dentate bands bordered with bluish-black. From Arizona to Colombia.

R. tehuacana sp. nov. (169 b) I as yet consider to be a distinct species, since there are also typical casica tehuacana. before me from the same district. It greatly resembles casica above, but it is of a somewhat duller, greyer tone, with smaller, partly almost extinct hyaline spots. On the hindwing beneath the white marginal area is much broader, proximally convex, almost without any black dashes, the other space of a pure ashy-grey without the jet-black transverse bands which are merely indicated, and near the proximal margin with 2 whitish spots. The forewing is somewhat more tapering at the apex. From Tehuacan (Puebla).

R. jalapus Plötz (169 b) is a doubtful species; above blackish-brown with a dark leaden-grey, curved jalapus. antemarginal band, and a similar cell-end streak, the hindwings with white fringes. Beneath more reddish-grey with the same marking, but in black; the hindwing is yellowish-brown with 2 blackish transverse bands. The species was described from Jalapa (Mexico) and is perhaps only a variable M. albociliata (170 c).


Antennal club gradually thickened and extended into a twice as long, fine, scarcely bent tip. The 3rd palpal joint is scarcely visible. Venation as in the preceding genus. The cell of the forewing is covered with
long hairs, only in *midas* they are shorter. Tibiae as in *Rhobdoideis*. The genus contains about a dozen of beautiful, large, very sexually dimorphous species.

1. **midas** *Cr. (= rhetus *F.*, astylus *Cr.*, corentinus *Plötz*) (169 c) is above rusty-yellow with few small black spots. Very characteristic are the hindwings, being black at the costal margin, with a deep ultramarine reflection. The ♦ having been described as *astylus* is quite different, much larger, blackish-brown with a discal hyaline band and yellow fringes. Known from Guiana, Colombia, Bolivia, Peru, and the Amazon.

2. **ramusis** *Cr. (= astrapaeus *Hew., damias *Plötz*) (169 b, c) is darker, more coppery brown, the small black spots partly with pupils, without any blue at the costal margin of the hindwing. Little is known of the ♦, the white spots partly with black rings being extremely variable, unless they be quite different species. Guiana, Colombia, Peru, Brazil, everywhere rare.

3. **dexo** *Mab.* resembles *nicephorus* (172 b), being above rusty-brown with a row of small yellowish punctiform spots near the border of the forewing. The hindwing shows a small yellow cell-spot and a curved row of 5 similar small spots behind it. Beneath the same, though darker. The ♦ is much larger with broader wings and the same small spots, but the cell-spot of the hindwing is absent. From the Chiriqui.

4. **nicephorus** *Hew. (172 b)* greatly resembles *dexo*, but the forewing is without any marking, and on the hindwing there are 2 small spots in the cell. The ♦ is not known. Described from Colombia.

5. **zohra** *Machlr.* is smaller than *dexo*, but very similar. The wings are much darker towards the margin; the forewing shows only one small yellowish dot between the lower radial veins. The under surface is monotonously blackish-brown without any markings. French Guiana.

6. **phraxator** *Hew. (= heras *Mab.*) (169 d) is above dark brown, towards the margin darker with a large, tripartite, yellow hyaline spot in the disc and 2 or 3 rather large apical spots. In the cell of the hindwing there is a large, oblong spot and behind it a curved row of 5 or 6 black dots which are yellowish beneath. The ♦ is larger, blackish-brown, with 4 light yellow spots forming an oblique median band. Colombia.

7. **polygus** *Latr. (172 b, c)* is very similar, somewhat smaller and lighter with the same discal spots and a small double dot encircled by black below it. The hindwing also exhibits small, yellow hyaline spots surrounded by black in the cell and a curved row behind them. The ♦ is larger, darker, the spots are narrower, more like a median band; on the hindwing there are only 2 small spots behind the cell-spot. Brazil.

8. **eriopsis** *Hew. (= etias *Hew.* ) is of a darker blackish-brown, beside the discal spots of the preceding there is a fifth spot in the cell. The hindwings are marked as in *phraxator*. Beneath somewhat lighter. The ♦ is more yellowish-brown, otherwise very similarly marked. From Tapajós.

9. **erythrus** *Cr. (169 d)*. This extremely rare species from Peru, known to us only from *Cramer’s* bad figure, is not to be confounded with any other by the speckled, somewhat dentate fringes of the hindwings. The ♦ is similar, but it has broader wings. Perhaps it is better placed to *Nasens*.

10. **salatis** *Cr. (= muretus *F., tychios *Plötz*) (169 e). The forewings are above unicolorously rusty-yellow with a black cell-spot, a postmedian row of black streak-spots and a white apical dot; the hindwings are marked the same. The ♦ presumably belonging here is of a lighter yellow with 3 apical dots and a large apical hyaline spot composed of 4 small ones, the hindwings like in the ♦. Colombia. Brazil.

11. **sebrus** *Bldr. (= peligros *Hew., gonatas *Hew., ophonicus *Plötz*) (169 d) has broad, rusty-brown wings darkened towards the margin. Before the apex a punctiform spot, below it in an oblique line 2 somewhat larger hyaline spots. On the hindwing there is a black cell-spot, behind it in a curved row 5 small black spots, of which that between the median veins is pupilled white. The under surface is more blackish. The ♦ is larger, somewhat lighter, with the same spots, besides with a spot in the cell and a double spot below the submarginal spots. On the hindwing the cell-spot and 3 or 4 of the postmedian row are pupilled white. Colombia, Peru.


Distinguished by the anal angle of the hindwing being extended into a small, rounded tail, the border of the hindwing being slightly undulate. The second palpal joint is very broad, the 3rd short, ascending obliquely. Only one species:

1. **labriaris** *Bldr. (= seneca *Plötz*) (172 c) is above brown with small hyaline spots: a large square one, exhibiting 2 teeth towards the margin, at the cell-end and a similar one below it, 3 in the apex and 4 below it. Hindwing with 2 yellowish postmedian macular bands and a round hyaline spot in the cell near the base. Patria unknown.
25. Genus: Discophellus G. & S.

Antennal club moderately thickened, with a very fine point uniformly turned round. Costal fold present. On the forewing the lower median vein rises nearer to the base than to the upper. The hindwing is somewhat angular before the anal angle and sinuated in the middle of the distal margin; otherwise like the preceding.

D. porcios Fldr. (= dorisus Hew., cocentians H.-Schäff.) (169 c) is above of a dim reddish-yellow, porcios, towards the border brownish with a cellular hyaline spot on all the wings, which, however, may be also absent on the hindwings; on the forewing there is below it a darker double ring-spot and behind it a series of darker, small ring-spots or punctiform spots. The ♀ has broader wings with more extensive hyaline spots, particularly in the disc of the forewing. Central America to Peru and Colombia.

D. sebaldus Cr. (= crameri Latr.) (169 f) is scarcely to be mistaken for any other species by the numerous sebaldus, hyaline spots on both wings, most of which are encircled by dark. The ground-colour is a beautiful, warm, ferruginous brown, towards the border somewhat darker. French Guiana.

D. fulvius Plötz (= erythras Mab.) (169 e, f) is a somewhat smaller species of a fiery ferruginous fulvius, yellow ground-colour; the ♀ has no hyaline spots, instead of them black dots; on the forewing, a small one at the cell-end and 2 below it situate beneath each other; on the hindwing there is behind the double cell-dot, which may also be confluent, a postmedian row of black dots; the border is very much darkened. The ♀ has in the disc of the forewing 3 discal hyaline spots greatly varying in size. A small apical hyaline spot may be present. erythras described by Mabille has somewhat smaller hyaline spots hollowed out towards the margin, for which reason it may be separated. Colombia.


Chiefly distinguished by the much stronger, cylindrical antennal club; the end, being turned over, is extended into a fine, very long point. Costal fold present. In the ♀ the anal angle is extended into a rather long lobe, in the ♀ the hindwing is broader and often undulate at the border. 18 mostly large, beautiful species.

N. phocus Cr. (= pherenice Hew., morphus Cr.) (169 f) has dark brown wings with an olive tint, phocus, sometimes exhibiting a slate-coloured lustre, with 4 small, yellowish apical spots connected by 1 or 2 small hyaline spots below them with the 4 discal spots. The costal margin of the hindwing is broadly black, and through the middle extend 2 similar faded transverse bands. Beneath the hindwing is more extensively yellow in the disc. The ♀ is much larger with broader, rounder wings, and larger and white hyaline spots. Distributed from Mexico to Brazil and Colombia. — dianina Plötz has above bright yellowish-red hindwings, whilst beneath dianina, it is much darker, almost black. Brazil, Paraguay.

N. euribates Cr. (= hesus Dbl., gaurus Plötz, nicias F., ? tychios Plötz) (170 a) is above bright reddish- euribates, yellow with 5 small apical spots and 3 large, yellow discal spots distally gnawed out. The hindwing with a blackened distal margin exhibits a black cell-dot and behind it a row of 5 more spots. Guiana to Brazil. Mabille presumes that tychios placed by Godman as the ♀ to B. ramusus may belong hereto as the ♀ or to an unknown species.

N. cous Mschl. (= coris Mab, ex errore, engaman G. & S,) differs from phocus (169 f) by its light cous, brown wings with white, not yellow hyaline spots, 5 of which are situate in the apex. 4 in the disc. The hindwing is light yellow; in the distal third broadly brownish. Venezuela, Guiana to Brazil. — solon Plötz differs by its shorter, small apical spots crowded together, so that the impression of a single oval spot is created; in the disc there are but 3 hyaline spots. On the upper surface the colour of the hindwings and the base of the forewing are more greenish-brown. — decemmaculata Sepp presumably also belongs hereto. The markings are exactly as in cous. The body, base of the forewing and the hindwing are of a still more intense green, the fringes of the hindwings speckled with black. In case the bad figure is to represent the type itself, Sepp's name would have to be inserted for it. Described from Surinam.

N. phaselis Hew. (= faustinus Burn., coenosas Mschl.) (169 d) is above light ferruginous brown phases, with 5 apical spots and 4 widely separated hyaline spots in the middle, the latter distally gnawed out, and all of them encircled by black. Hindwing in the cell and behind it spotted black. Fringes of hindwings distinctly speckled white. The ♀ is larger with larger hyaline spots, and it is therefore not out of the question that Bungablotis erythus Cr. (169 d) belongs hereto as the ♀. Widely distributed from Venezuela to Argentina almost over the whole of South America.

V 110


N. caepio H.-Schäff. (170 b). A smaller species, above dark brown, in the disc somewhat lighter, yellowish, with 4 yellow apical streaks and 4 discal spots. Hindwing above unmarked, only beneath spotted black. Honduras to Colombia.

N. mernessos Mab. is much smaller, otherwise very similar. Above lighter brown with the discal spots much more crowded together, so that the impression of a single large spot is created. The hindwing is less extended at the anal angle. The antennal club is much shorter, the point bent down shorter than in caepio. Brazil.

N. glarus Mab. is dark brown, in the proximal half of the forewing obliquely cut off and in the disc of the hindwing dully reddish-yellow. The 4 discal spots form an oblique row on the border between the 2 colours; in the apex of the forewing there are only 2 hyaline spots. On the hindwing the usual cell-spot and the bent row of 5 spots behind it. From the Lower Amazon.

N. advena Mab. very much resembles glarus and is above likewise rusty brown, but it has 3 small apical spots; in the disc there are 4 golden yellow hyaline spots only separated by the veins, the one situate below the cell being gnawed out inside and outside. The hindwings are darker. The antennae exhibit a yellow ring before the club. Costa Rica to Colombia.

N. gildo Mab. is above dark brown with a remarkably broad costal fold; of the 4 yellow discal hyaline spots the one situate in the cell is gnawed out towards the costa; the spots are besides small, separated far from each other. Hindwing as in the preceding. Coary.

N. gizala Möschl. (= cephisus Hew. evathlus Mab.) (170 a). The brown forewing is haired yellow at the base; at the apex there are 4 apical dots, the disc is traversed by the 4 hyaline spots in the shape of an oblique band from the costal margin to the proximal angle, the lowest being bent somewhat inwards. Hindwing in the middle slightly angled, unmarked. Beneath the proximal half of the wing is unmarked dull yellow. The □ is somewhat larger and lighter and more extensively yellow. Panama, Colombia.

N. cephis H.-Schäff. (170 b) is above lighter ferruginous brown than caepio, the yellow discal spots somewhat more of the shape of an oblique band owing to the lowest spot being enlarged; the 3 small apical spots form a row inwards convex, in caepio distally. The hindwings are unmarked, the fringes somewhat speckled. Beneath on the forewing, the proximal margin is whitish, and on the hindwing the postmedian band of spots exhibits two distinct yellowish spots at the anal angle. The □ has broader wings and white instead of yellow spots. Brazil. — orina Schh. I daresay belongs hereto as a form with somewhat more markings: on the forewing there is in the discal spot in the angle between the radial and median vein a small brown dot, and the hindwing shows two darker transverse lines. Petropolis.

N. broteas Cr. (169 f) is above blackish-brown with 4 apical streaks and a white oblique band and a punctiform spot in the middle before it. Hindwing in the middle angled, above in the basal part with ochreous-yellow hair, beneath in the proximal half light yellow, at the costal margin with the beginning of a band of black spots. Of this species only □□ is known, of costs only □□, so that both may belong together. Guiana, Brazil.

N. annulicornis Mosch. (170 a) is smaller than broteas, above rusty brown, towards the base lighter, on the hindwing very extensive. On the forewing there are 5 small apical spots in a straight line, beside 4 small black dots. The middle is traversed by an oblique band of 4 white hyaline spots from the costal margin to the inner-marginal vein; the two uppermost are the largest and on both sides gnawed out. The middle of the hindwing is traversed by 2 straight rows of faded black spots. The under surface is lighter, otherwise marked the same, but on the hindwing the 2 maculare bands are coherent. Here likewise only □□ seem to be known. Nicaragua to Brazil.

N. ebreus Cr. (170 b) is known only from the figure. Above blackish-brown, towards the base yellowish. On the forewing there are 3 small apical spots and a straight band of white hyaline spots in the middle, the three upper ones of which are coherent, whilst the two smaller lower ones are separated from each other; in the angle between the median and radial vein there is another small spot. The hindwings are darker brown, unmarked, the body is covered with ferruginous brown hair. The position of the insect described from Surinam remains doubtful.

N. orita Schh. is known to us only from the description and seems to be most closely allied to zopyrus (168 a) placed by MABILLE to the genus Nascus as a synonym to his hyalarnes. Wings dark brown with light olive-brown hair at the base. The forewing shows 3 small white apical spots and a quadrupartite discal band, the uppermost spot of which is yellowish at the costal margin, whilst the others are white, transparent. Hindwing extended into a short, obtuse, bent, small tail with white-speckled fringes. Beneath the discal spots are all white, the apex of the forewing is strewn a little with white; the hindwing shows 2 indistinct transverse shades, the distal one being outside analwars spotted whitish. Expanse of wings: 38 mm. Described from Peru.
N. lucca Plötz (170 b) is united with gizala by Godman, but according to Malpil it differs very lucca. much from it. Above blackish-brown, towards the base and on the hindwings light ferruginous brown; forewings with 3 small apical spots and a discal band as in gizala of 4 spots. Hindwing with a bent median row of black dots exhibited beneath as lighter, black-ringed spots. Patria unknown.

N. adrastor Mab. & Boull. (172 b) very much resembles lucca, but it is larger, on the forewings the subepical spots are absent altogether, and in the discal oblique band the costal-marginal spot is absent, whilst the hindwings are above without any markings. The fringes are greyish-white, speckled with brown. Beneath the ring-spots of the hindwings are greyish-white, not pupilled yellowish. Described according to 1 ♫ from South America.

N. diaphorus Mab. & Boull. (Mschlr. ?)(172 b), according to the authors' opinion, may be the ♀ of adrastor diaphorus or lucca. In its exterior it entirely resembles the ♀ of Buogalaom ramosis (169 c), but it has light, almost white fringes which are dentate and somewhat speckled particularly distinctly on the hindwings; the hindwing is extended and angled on the lower median vein. Described according to 1 ♀ from Surinam.

27. Genus: Ablepsis Wits.

Smaller species with a moderately thick antennal club of the shape of a flattened sickle; palpi rising, the 2nd joint closely pressed to the face, the 3rd very short. Costal fold absent. The cell is longer than two thirds of the costal margin. Between the two inner-marginal veins of the hindwing there is a flat depression with a hair-pencil next to it. Posterior tibiae densely fringed, with 2 pair of spurs.

A. vulpinus Hbn. (170 b) is above reddish-brown, on the forewings with 3 small apical dots and 3 large, vulpinus. yellow discal hyaline spots: one being distally gnawed out in the cell, a large, oblong-quadragular one below it, and a small, quadrangular one at the upper, distal corner of the latter. The hindwing shows the usual marking of the black discal spot and of the row of spots behind it; on the under surface this row of spots is distally of a lighter yellow shade. Brazil.

A. guyanensis Mab. & Boull. differs from the preceding by its more yellowish, towards the margin guyanensis. darkened colour, the discal spots being distally bordered with black, and by 2 more, longitudinal, black spots in the cell. The groove on the hindwing is much deeper, inside clad with yellow hair and white scales, the yellowish-red hair-pencil next to it is much longer. 1 ♀ from French Guiana.


Here the antennal club is very slender, ensiform with a fine point; the 3rd palpal joint is very short, obtusely conical. Costal fold present; the cell of the forewing is as long as two thirds of the costal margin. The upper median vein rises far before the cell-end, the lower nearer to the base than to the upper one; the proximal margin is very convex and covers a lustrous silvery spot of the costal margin on the hindwing, which exhibits a hair-tuft; the anal fold of the hindwing is clad with long, hair-shaped scales. Only one species:

P. omphale Btlr. (168 c) is unmistakable: above black with an orange oblique band, the base of the forewing and the whole middle of the hindwing with a brilliant blue reflection. Amazon District to Bolivia.

29. Genus: Murgaria Wits.

Antennal club gradually thickened and ending into a fine point, behind its thickest part uncommonly bent. The porrect 2nd palpal joint is densely scaled, the 3rd very short. Costal fold present. The cell of the forewing is of more than 2/3 of the length of the costal margin; the upper median vein rises more than 3 times as distant from the base as from the cell-end. The hindwing is insignificantly lobated; the transverse vein is straight; the middle radial is absent. Tibiae as in the preceding.

M. albociliata Mab. (170 e) is above black with white fringes of the hindwings and grey fringes of the forewings. On the wings there are two or less distinct transverse bands formed of dark leaden grey spots. Beneath the ground-colour is more brownish-grey, the marking of the bands blackish. Mexico to Colombia. — nigrociliata Mab. & Boull. has quite black fringes and originates likewise from Mexico.

M. leucophrys Mab. from Panama is quite deep blackish-brown without the marking of the bands, leucophrys. with white fringes on all the wings.

M. toxeus Plötz has quite black fringes as nigrociliata has, and beneath on the forewing in the costal- marginal half the beginnings of two white transverse bands. Mexico.

This genus contains large, mostly dark insects with triangular hindwings broadly and uniformly rounded off at the border, the chief mark being the upper median vein rising far before the cell-end. The σ exhibits a long hair-tuft on the posterior tibiae armed as usually with two pair of spurs; the middle radial is entirely absent. The σ has no costal fold.

A. echina Hew. (170 e) is a beautiful species above purple blackish-brown, with indistinct darker transverse bands. Beneath easily discernible by the beautiful, whitish-blue border of the hindwing, which exhibits yet a crescentiform spot inwards between the median veins and is crossed by a fine notched line. Before me from Mexico, distributed through the whole of Central America to Panama and farther to Colombia and oeclydes. Ecuador.—oeclydes is the name of forms in which the light border of the hindwing beneath disappears more or less, so that at last only the crescentiform spot remains, being situated farther inwards. It seems to melas. occur more to the south and is before me from Colombia.—melas Plotz (170 e, d) is perhaps also only a quite black form of it, from Rio de Janeiro.

A. elegusinia Hew. is above dark brown, on the forewing with 2 darker brown bands; hindwing with a cell-spot and a postdisal, indistinct band; fringes white. Beneath coloured as above, but without the bands and towards the distal margin lighter. Expanse of wings: 2½ inches. From Quito.

A. haber Mab. is allied to coracina (170 e): above deep reddish-brown with a purple reflection and violettish-blue bands and spots, a band at the base of the forewing touching neither the costal margin nor the proximal margin, one in the middle, one oblique spot each at the apex and at the proximal angle; towards the margin lighter reddish or violettish-grey, more broadly so on the hindwing. Beneath more reddish-brown, similarly marked. Expanse of wings: 52 mm. From the Andes of Peru.

A. subviolacea Mab. is above violettish-black, all the wings above crossed by 3 faded black bands. Beneath the same, but dull, and on the hindwing towards the margin slightly violet or bluish; outside of the black median band there are here 3 white spots with a slight blue tint. Described from Ecuador.

A. coracina Bltr. (170 e) is above quite similar; beneath the wings are of a duller brown, both close in front of the margin narrowly strewn with a bluish-white, the hindwing in the basal part quite dark, the distal band broken up into small spots. Amazon District.

A. epica Hew. is above dark brown with white fringes, both pair of wings exhibit near the middle 2 darker transverse bands. Beneath the forewing is as above; hindwing in the anal half of the distal margin grey, above the anal angle with a short, white margin, distally indented. As in elegusinia, the distal margin of both pair of wings forms a single bent line; the apex is sharp. Expanse of wings: 2½ inches. Ecuador.

A. lavochrea Bltr. (=athymnios Mschlr.) (170 d) is above lighter and beneath similar to Telegonus anaphus (167 a) with a yellow, large marginal spot on the hindwing. In Central and South America.

A. memniun Bltr. (170 d) is distinguished by green dusting beneath, particularly towards the margin; towards the anal angle there are 2 or 3 antemarginal, high, yellow crescentiform spots. From Venezuela.

A. later Mab. is above black mixed with a reddish-brown; at the base of the forewing 3 light reddish-brown spots; at the costal margin a large, long, excised spot, from the centre of which a jet-black band extends to the inner-marginal vein, behind it two light rust-coloured brown spots between the median veins; in the marginal area there are two extinct bluish-black bands. On the dark hindwing there is a ferruginous spot at the base, behind it a strongly dentate band of the same colour, behind it a band of violettish-grey spots. Beneath the wings are black in the basal halves, outside slightly reddish-brown, on the forewing with a black band, on the hindwing with a bluish-white one being only distinct at the proximal margin. Peru.

A. primus Plotz, from Brazil, resembles echina (170 e) above, the whole basal parts of the wings are very much darkened. Beneath the ground-colour is a dull brown, at the apex of the forewing and at the border of the hindwing very little dusted with a whitish-grey, with a light cell-end spot of the hindwing and two narrow, faded darker bands behind it, the distal one of which parts the whitish-grey marginal dusting.

A. nocera Plotz is a smaller species with a somewhat produced anal angle of the hindwing. Above uni-coloured brown, beneath duller with 2 undulate, darker transverse lines and a white limbal line before the brown fringes; before this light line the margin is deeply darkened. From Colombia.

A. gigas Mab. The description of this Peruvian species has unfortunately not been accessible for us.

A. peruviana Mab. is somewhat smaller than coracina (170 e). Above the wings are black with a reddish-brown reflection. The under surface is of a purer black, on the forewing with a narrow reddish-brown distal margin; the hindwing shows a broader reddish-brown margin. Fringes on both sides black. Peru.
A. buffumi Weeks is a species having remained unknown to me, and it seems to me very doubtfully placed here. Above dark brown, strewn with grey except the apex; from the middle of the costal margin across the cell-end to the proximal angle extends a series of very prominent white hyaline spots: 2 small subcostal ones, in and below the cell-end one large one each, and in the angle of the median veins behind it a smaller one; 2 small subapical dots; an antemedian and a postmedian darker band, the same on the hindwing very much dusted with grey. Beneath the same, the hyaline spots more coherent, the proximal angle of a lighter colour, from where a lighter part extends to the apex parallel with the margin. Hindwing with more faded bands. Expanse of wings: 1 1/3 inch. Suapure (Venezuela).


The only species also has rounded hindwings, but with a very slightly produced anal-angular apex, the upper median likewise rises somewhat before the cell-end. The ♀ has no hair-tuft on the posterior tibiae. Costal fold present.

A. lycidas Abb. & Sm. (= lycides Hbn.) (170 d). Above dark brown with speckled fringes and yellow lycidas. Discal hyaline spots of the forewing, the middle one being small and quadrangular and protruding before the others towards the margin. Beneath the hindwing exhibits a white marginal area, and it is very much transversely watered with black. North and Central America.

32. Genus: **Cogia** Btlr.

Well distinguished by a star-shaped hair-tuft exhibited by the ♀ on the upper surface of the hindwing which is entirely rounded off, not produced at the angle. The posterior tibiae do not exhibit a hair-tuft, the ♀ is without a costal fold.

C. hassan Btlr. (170 d) is a small, above dull blackish-brown species with speckled fringes and 4 minute hassan. Subapical spots on the forewing. Beneath the proximal margin of the forewing is reddish-yellow, the hindwing exhibits 4 whitish undulate lines and the space between the two middle ones darkened. Brazil.

C. cajeta H.-Schäff. (170 d, e) is larger, above towards the base faintly haired olive-greenish, beside cajeta, the small apical spots with 6 small, white, discal hyaline spots partly bordered with a darker shade. The hindwing exhibits 2 irregularly undulate macular bands. The under surface is lighter yellowish-brown, otherwise marked the same, the distal macular band of the hindwing outside light. South America.

C. hippalus Edw. (= gila Plötz) (170 c) is still larger; the lowest discal spot of the forewing which is hippalus, in cajeta divided into 2 small ones, is here large, outside and inside somewhat gnawed out. The under surface of the hindwing is light ash-grey, towards the margin almost white, strewn with brownish, with 3 bands of brownish-grey spots. From Arizona to Mexico.

C. calchas H.-Schäff. (= terranea Btlr.) (170 e). Here the discal spots of the forewing are absent calchas, except 1 to 3 small yellowish costal-marginal spots below each other. The hindwing is beneath brown, strewn darker, with similar macular bands as in hippalus, but instead of the light marginal part there is another brownish margin, the median band and antemarginal band being lead-coloured, the apex of the forewing strewn with a whitish grey. South America.

C. valeriana Plötz (= valeria Plötz m. s.) (170 e) is midway between hippalus and calchas, with caleriana, somewhat smaller discal hyaline spots than hippalus, whilst the under surface is coloured and marked more like in calchas; the basal part of the hindwing is uni-coloured dark. From Mexico.

C. troilus Mab. is above coloured like calchas, but with broader wings, with 4 small subapical spots troilus, in an oblique line; fringes greyish-black. Beneath the forewing is reddish-grey in the two basal thirds, distally lilac-grey, the proximal margin whitish. Hindwing light violet-grey, with two blackish bands which are very broad and only leave a narrow stripe of the ground-colour between them. Hair-pencil at the proximal margin of the hindwing long, ash-grey, almost white. Bolivia.

C. helenus Mab. is above very similar, with 5 small subapical spots. Fringes speckled somewhat helenus, darker. Beneath the forewing is brown, at the apex light violet. Hindwing violet-grey with two regular, dentate, blackish bands. The hair-pencil at the proximal margin of the hindwing is short and of the same colour as the ground of the wing. Brazil.

C. eluina G. & S. (170 e, f) is above dull brown with the same small spots as in calchas, with 2 irregular undulate macular transverse bands across both wings. Fringes slightly undulate and particularly on the hindwing speckled somewhat darker. Beneath coloured and marked the same, the forewing somewhat lighter than the hindwing. Mexico and Central America.
punctilia. C. punctilia Plätz (170 e) is closely allied to calchas, but smaller; above the small costal-marginal spots of the forewing are altogether absent, beneath there are 2 light striiform spots before and close behind the middle. Hindwing violetish-brown with 2 dark brown sinuate transverse bands, the distal one very broad. Marginal area not darker. Santarem.

philus. C. philus Plätz resembles eluina (170 e, f), but it is still larger, more blackish-grey; instead of the discal spots a black cell-end spot and one below it; on the forewing an antennomarginal, irregular macular band partly spotted white outside. Hindwing as in eluina. Brazil.

33. Genus: Cabares G. & S.

Chiefly distinguished by the forewing being slightly angled below the apex, so that the apex looks somewhat cut off, and by the forewing being angled in the middle. Only 3 species.

potrillo. C. potrillo Luc. (170 f) looks above like the hyaline-spotted species of the preceding genus, but the discal hyaline spots form more a narrow oblique band. Beneath the forewing is in the middle light greyish-brownish, the hindwing like-grey with 2 brown transverse bands, the distal one of which is cloudily widened towards the margin. Fringes dark brown. Mexico, Central-America, Cuba.

elops. C. elups G. & S. (172 a) looks somewhat like a small potrillo without the discal hyaline spots in the cell and above it, but instead there is a dark spot at the cell-end. Under surface likewise somewhat similar, but the more yellowish hindwing is without the distal median band, instead of which there is an antennomarginal row of moon-spots. Known from Mexico and Honduras.

Nicola. C. nicola Plätz (170 f) somewhat resembles potrillo, the discal band of hyaline spots is shortened, it does not reach the costal margin nor has it any small spot below the lower median vein. The under surface is more uni-coloured, the transverse bands are much narrower. Pará.

34. Genus: Ephyriades Hbn.

Costal fold absent. On the hindwing the upper median vein rises close at the lower cell-angle, the lower one very close to it. Otherwise very much like the preceding genus, but the wings without the feeble angles.

otrus. E. oturus Or. (= clericus F., zephyrdes Hbn.) (172 a) is a large, brown species with 3 broad, faded darker transverse bands on both wings; the forewing exhibits in the disc behind the cell two large white hyaline spots forming an oblique band, and behind them 6 subapical spots arranged in a bow. Beneath very similar. South America.

pekahia. E. pekahia Hew. is above dark greyish-brown, at the distal margin and a postmedian transverse band on both wings darker brown. On the forewing there are 8 small, white hyaline spots: 2 in the middle, 3 in a line rectangular to the costal margin behind them, and 3 small subapical spots. Beneath coloured and marked the same. Expanse of wings: 1½ inches. From Venezuela.

35. Genus: Typhedanus Btr.

Here the shows a hair-tuft on the hindwing above, the costal fold being absent. The apex of the forewing is rather sharp, the anal angle of the hindwing is extended, in umber very long. The upper median vein rises on the hindwing before the cell-end, the lower one close at the base. Only 2 species.

umber. T. umber H.-Schäfl. (= zephyus Btr.) (170 f). Above olive-brown with darker transverse bands, 4 apical hyaline spots, 3 hyaline spots below each other in the middle of the costal margin and 2 somewhat larger ones outside and below them obliquely below each other. Beneath marked the same, but the transverse bands are here more distinctly prominent, since the ground is lighter, strewn somewhat darker. Venezuela.

alladius. T. alladius G. & S. (170 f, g) looks exactly like a small Teleg. anaphus (167 a): brown, with darker, faded transverse bands and above with a narrowly, beneath broadly yellow anal angle of the hindwing. Mexico to Colombia.


This genus, in contrast with the preceding genus, has beside the hair-tuft on the hindwing above also a costal fold. The forewing has below the apex a slight, somewhat rounded angle, below it the margin is concave. The antennal club is ensiform.
ANCISTROCAMPTA; SPATHILEPIA; OECHYDRUS; THORYBES. By Dr. M. Draudt. 879

C. calathana Hew. (170 g) in its colouring and marking entirely resembles T. alqualis from which, calathana. however, it is at once discernible by the different shape of the wings. Central and South America.

C. compusa Hew. (170 g) is above and beneath marked the same, only of a duller colouring, the transverse bands somewhat more distinct, without any yellow colour on the hindwing. Amazon District.

C. calanus G. & S. (173 a) is likewise similar to calathana, but it has much broader wings. The hindwing calanus, is not produced so far at the anal angle and above only the fringes are ochreous-yellow. Known from Mexico, Guatemala and Panama.


In contrast with the neighbouring genera, the antennal club is here only moderately thickened, at the pointed end angularly flawed, not bent, and at the exterior edge it shows scanty, minute bristles. Costal fold absent; on the forewing the upper median vein rises far before the lower cell-angle. The posterior tibiae armed with 2 pairs of spurs exhibit a bent hair-pencil.

A. hiarbas Cr. (= ozias Hew.) (170 g) is above deep velvety brown with a large, yellow discal hiarbas. hyaline spot narrowed on both sides, very much widened beneath at the proximal angle. The hindwing is beneath brownish-or violetish-grey with a dark brown costal-marginal spot and such a transverse band from the middle of the proximal margin to the costal-marginal angle. South America.

A. celsus F. (= clearchus Plts.) (171 a) is similar, smaller, and the yellow discal band extends celsus. in about the same width from the costal margin to the proximal angle; the under surface is just like above, only of a duller brown. There are doubts about the nomenclature of this species and of the preceding. We are of Godman’s opinion that it is thus most correctly placed. South America.

A. amyrus Mab. is closely allied to hiarbas. The ground-colour is above and beneath uni-coloured amyrus. black; the yellow discal band begins broadly at the costal margin and grows narrower towards the proximal margin; beside it there is a similar, yellow subapical hyaline band divided into 6 small spots by the veins. The palpi are dirty yellow, haired black. Colombia. Rio San Juan.


Well distinguished by the shape of the wings with a very much projecting angle below the apex of the forewing and a dentate border particularly on the hindwing, which is somewhat produced in the middle of the distal margin and at the anal angle. Costal fold present. Posterior tibiae with hairy fringes and 2 pairs of spurs. Only one species.

Sp. clonius C. (171 a) is above black with a white discal hyaline band, a series of minute apical clonius. spots and between them with a small oblong spot. Beneath very variegated with the same marking of the forewing as above, only the oblique band being much broader at the proximal angle. Hindwing brownish, at the costal margin mixed with bluish-grey and with large, dark brown spots bordered with light, the largest at the costal margin triangular, with its apex crossing the cell and extending close to the proximal margin. Very common from Mexico almost through the whole of South America.


The shape of the wings is very much like in the preceding genus, but the margin is not dentate, but entire. Costal fold present; all the rest is like the Spathilepia, except the hindwing of the $T$ exhibiting a hair-tuft on the upper surface.

O. chersis H.-Schöff. (= evelinda Bdbr.) (171 a) shows above the same colouring and marking as chersis. Sp. clonius, and there also exist resemblances beneath; the apex of the forewing and a large discal spot on the hindwing are reddish-brown; the costal margin and base are mixed with a bluish-grey. Brazil, Amazon.

O. ochrilinea Schs. is the same, but the discal band is yellow. Described from Peru. ochrilinea.

O. aziris Hew. (171 a) differs above by only one small hyaline costal-marginal spot and the absence of apical spots. The under surface is very variegated: forewing light reddish-brown, towards the apex speckled with a whitish-grey, with some black antemarginal spots, the margin itself being more grey. Hindwing light ash-grey with some dark brown spots partly tinted white on both sides. Rio de Janeiro.

40. Genus: Thorybes Sodd.

The genus is closely allied to Cogia and chiefly differs by the absence of the hair-tuft on the hindwing. Costal fold absent.
PHAEDINUS; COCECIUS. By Dr. M. DRAUDT.

5exicanus. Th. mexicanus H.-Schöff. (= nevada Sodd., ananus Plötz) (171 b). Above brown with scanty, small discal hyaline spots; fringes of the forewings speckled, on the hindwing light, almost unspeckled. Beneath the brown wings are very much strewn with a whitish-grey towards the margins, unmarked, before this the hindwing shows two broad, faded transverse bands. From the Rocky Mountains through California to Mexico.

daunus. Th. daunus Gr. (= bathyillus Sosn.) (171 b) is similar, larger, with larger hyaline spots and also on the hindwing with somewhat speckled fringes. Beneath likewise similar, but the marginal area is not so light strewn whitish-grey, the transverse bands are more or less lead-coloured. In the south of the Atlantic United States. — The green larva with a yellowish subdorsal stripe, red collar and black head, lives on Papilionaceae, such as Glycine, and pupates on the stalk of the food-plant.

paucipunctata Dyar (171 c) is very closely allied to daunus, somewhat smaller, the discal spots very much reduced, often scarcely visible. Beneath likewise similar, the forewing towards the margin scarcely brightened up, the hindwing only in the middle of the distal margin, otherwise with the same transverse lines; fringes of the hindwing almost white. Sierra de Guerrero (Mexico).

mysie. Th. mysie Dyar (171 b, c) is considerably larger, above very light fawn-coloured, the hyaline spots somewhat more reduced than in daunus, the fringes of the hindwing somewhat speckled. Beneath marked as the other species on a ground very much strewn with a whitish grey, with 2 irregularly spotted transverse bands, the proximal one darker. From Mexico.

thedea. Th. thedea Dyar looks above somewhat like Copia elicina (170 c, f): brown with a blackish transverse band through the middle, on the median veins distally dentate, behind it two small white spots in the cell and one at the costal margin, before the apex 4 minute hyaline spots; some more, small, antemarginal spots are ringed blackish: one above the upper median vein, a double one above the lower, and a double one above the inner-marginal vein. Hindwing with traces of a postmedian row of spots. Expanse of wings: 40 mm. Mexico (Tehuacan).

uvydixa Dyar (171 c) is the largest, most beautiful species of the genus, above nut-coloured brown, outside darker, with the hyaline spots of daunus and very dark-speckled fringes. Beneath the hindwing is almost white in the larger distal half, with 2 fine, distinctly black dentate lines; on the forewing an antemarginal line of light moon-spots. Mexico (Guerrero), taken in June.

41. Genus: Phaedinus G. & S.

Very closely allied to the preceding genus, distinguished by a much longer 3rd palpal joint which is porrect; the antennal apex is turned down and shorter.

caicus. Ph. caicus H.-Schöff. (= moschus Edw., schäfferi Plötz) (171 c) looks above almost like Thor. daunus, but the discal spots are somewhat narrower. The fringes of the forewing brownish, speckled darker, the fringes of the hindwings almost white. Beneath the hindwing is not so brightly strewn, with two broad, lead-coloured black transverse bands, the proximal one broken up into 2 spots. Arizona and Mexico.

aventinus. Ph. aventinus G. & S. (173 b) is somewhat like caicus, smaller, with more extended hindwings and quite dark fringes. The hyaline spots of the forewings are much smaller, almost punctiform and more numerous. The under surface is quite uni-coloured dark, almost without any traces of transverse bands. Described from Mexico.

42. Genus: Cocecius G. & S.

Distinguished from the preceding only by the presence of a costal fold in the ♀.

pyladus. C. pylades Sodd. (171 b) is the most similar to Thorybes mexicanus (171 b), only somewhat larger with somewhat larger discal hyaline spots, all the fringes distinctly speckled. Beneath the marginal part is not so very bright, the 2 macular bands on the hindwing are somewhat narrower. Atlantic States.

drusius. C. drusius Edw. looks like Ph. caicus (171 c), it has less and smaller hyaline spots arranged somewhat differently. The darker is the under surface, the bands of the hindwings indistinct; on the ventral side of the abdomen the ventral line is absent; the palpi are dark grey, mixed with brown, in caicus yellowish. Expanse of wings: 1.7 inches. Southern Arizona.

sylas. C. sylas Mab. is as large as Th. daunus (171 b). On the forewing there is an oblique band composed of 5 hyaline spots, the spot above the upper median vein projects towards the margin. Fringes of the forewing broad, in the middle dark, towards the apex and proximal angle whitish, the fringes of the hindwing almost white; speckled dark. Beneath the hindwing is blackish, traversed by 2 still darker macular bands. Described from Cayenne.

Contains 1 small species with a shorter antennal tip. The 3 rd palpal joint is thin, bare, porrect. The distal margin of the forewing near the proximal angle somewhat concave. Costal fold present. The distal margin of the hindwing is likewise concavely indented below the middle and on the whole undulately dentate.

H. orcinus Fltr, (= albicuspis H.-Schaff.) (171 c). Above brown, at the base and margin black orcinus. with 2 darker transverse bands bordered by large and small hyaline spots on both wings. Beneath the hindwing is almost white with 3 black transverse bands parted by the light veins. South America.

44. Genus: Drephalys Wts.

The chief mark of this genus based upon one single species consists in the lower median vein of the hindwing rising close at the lower cell-angle. The 3 shows a costal fold; the border of the wings is entire, the hindwing at the anal angle produced into a triangular point.

D. helixus Hew, (173 a, b). Above dark brown, at the base haircd yellowish-green, on the forewing with helixus. 4 large and 3 minute hyaline spots, on the hindwing with 2 yellowish macular transverse bands. Beneath the hindwing shows a broad, white discal band on a lilac-grey ground, reaching neither the costal margin nor the proximal margin. From Panama.


Allied to the following genus and also closely approximating Hydraenomia. Chiefly distinguished by the prolonged hindwings with an entire margin. On the forewing the lower median vein rises close at the base. The antennae are longer than in Lignyostola.

P. phoenice Hew. (171 d) is above blackish-brown with numerous white spots, yellow on the hindwing. phoenice. Beneath the hindwing is yellowish-grey in the basal part, in the distal part violettish-grey, between the two colours with a black transverse line. Costal margins orange-yellow. Brazil.

P. eos Hew, (171 d) is smaller, above very similar, but on the hindwing the yellow spots are reduced, eos. in the middle there is only an oval transverse spot. Beneath quite different, on the hindwing reddish-brown with a large, reddish-white transverse spot and a smaller, almost square spot in the black anal angle. From Brazil (Parâ).

P. acon Cr, (171 d) differs by its white hindwing with a broad black border, also beneath coloured acon. and marked the same. Guiana to Brazil.

P. oriander Hew. is above dark reddish-brown, on the forewing with 2 cellular hyaline spots, 2 behind oriander. them and 3 subapical spots; near the proximal margin there are 2 yellow spots; the hindwing shows 2 transverse bands, each of 3 yellow spots. Forewing beneath the same, but at the apex lighter reddish. Hindwing reddish-brown with a round orange-yellow central spot and 2 similar spots near the proximal margin behind the middle. Anal angle black. Expanse of wings; 1.9 inches. Amazon.

P. formosus Fltr, (171 c) entirely resembles phoenice above, but beneath it is quite different, in formosus. the larger distal-marginal and costal-marginal half violettish-brown or cherry-brown, at the base and proximal margin yellowish, at the anal angle black with a round white postcellular spot terminating in the 3 like a band into the proximal margin. Widely distributed from Panama to Brazil.

P. dumerili Latr. (171 c) looks very much like formosus, but the white hyaline spots are larger, the dumerili. yellow median band of the hindwing is distally concave. The hindwing beneath is dark brown in the 3, bluish-grey in the 2, distally tinted violet, only at the proximal margin yellow, instead of the white central spot there are the yellow spots of the upper surface, in the 2 much lighter, almost whitish-yellow. From Surinam.

46. Genus: Lignyostola Mab.

Antennal club moderately thick, uniformly bent and finely pointed. Palpi porrect, dehiscent, with a slender bare terminal joint. The cell of the forewing is longer than two thirds of the costal margin; the lower median vein does not rise so near at the base as in Paradros. Hindwing decidedly lobate, the distal margin before it somewhat excised. Costal fold present. Posterior tibiae densely fringed with 2 pair of spurs, the upper pair short. Half a dozen species from Tropical America.
Hyalothyrus

L. lacydus Drc. (= pamphygarya Mab., aon Plötz) is a uni-coloured blackish-brown insect with ochreous-yellow palpi. Nicaragua, Panama to Pará.

H. miocris. L. crinisius Cr. (171 e) is above blackish-brown, in the basal half haired ochreous-yellow, at the body olive-green; on the following in the cell and below it a hyaline spot distally extended into 2 teeth, 3 minute subapical spots and between them an oblong striiform spot, below it two more; the hindwing is of a more intense ochre-colour, in the middle traces of a blurred median band. On the under surface the basal parts of both wings are olive-green, the hindwing exhibits in the middle a broad, behind it a narrower ochreous-yellow macular band and a yellowish-white proximal margin. Widely distributed in South America.

despecta. L. despecta Bltr. (171 f) is above brown, with 2 small square hyaline spots on the forewing. Beneath marked the same, at the base and at the proximal margin of the forewing, and on almost the whole hindwing olive-yellowish. Brazil (Pará).

ferrugineus. L. ferrugineus Plötz (171 f) is above brown, towards the base fox-coloured, the same on the body and hindwing of which only the apex is dark brown, the distal margin narrow and the anal angle broader dark brown. On the forewing a minute postcellular hyaline spot between the radial and median vein. Bahia.

epimethea. L. epimethea Plötz (171 f) is somewhat larger than ferrugineus, the proximal third of the forewing brighter and rather sharply defined reddish-yellow, with 3 very fine, small subapical spots. Beneath lighter brown, towards the base and at the proximal margin of the hindwing olive-yellowish, on the hindwing traces of a broad, darker, postmedian transverse band. Brazil.

cydana. L. cydana Sch. has remained unknown to me and, according to the description, it may belong to epimethea. Wings dark brown, the basal third of the forewing rusty-yellow. Hindwing thickly haired ochreous-brown, except the costal margin and apex. Beneath lighter brown, at the bases of the wings and at the proximal margin of the hindwing tinted greenish-yellow. Expanse of wings: 46 mm. Petropolis.

47. Genus: Hyalothyrus Mab.

Distinguished from the preceding genus chiefly by the posterior tibiae which are without a hair-tuft.

neleus. H. neleus L. (171 f) is above black, on the forewing with numerous small, white hyaline spots, the hindwing in the disc and at the proximal margin extensively white, in the 3 somewhat brownish, particularly beneath. Widely distributed in South America.

priscus. H. priscus Plötz is described as a dark black-brown insect, with 6 white hyaline spots in the disc and 5 small subapical spots in a bent row, the hindwing with a large, white, round discal spot. According to 1 3 from the Rio Negro.

nitocris. H. nitocris Cr. (171 f, g) differs from neleus by its entirely black hindwing being white only beneath at the base like the body. Surinam.

leucomelas. H. leucomelas Hbs. (171 g) has much more extensive hyaline spots on the forewing and is well distinguished by a large reniform, in the 2 almost circular hyaline spot of the hindwing, whilst beneath the hindwing is all white except the broad black border. South America.


It entirely resembles the preceding genus, but the posterior tibiae exhibit only 1 pair of spurs. Only one species.

infernalis. M. internalis Macl. (171 g) is above like nitocris except much smaller hyaline spots, but it is easily discernible by the ochreous-yellow under surface of the hindwing with a blackish-brown apical spot. Guiana.


It is unlike the allied genera owing to the peculiar shape of the wings, the hindwing with an undulate border and before the anal angle with a very lobate distal margin. The club of the long antenna is hardly thicker than the shaft, the 3rd palpal joint short, a hidden costal fold present. Posterior tibiae only with terminal spurs.

coelestis. G. coelestis Db. & Hoc. (171 g) is above black with a bright slate-blue reflection, large hyaline spots and speckled fringes. Beneath the hindwing is of a deep orange-yellow except the black distal margin. Colombia, Brazil.
50. Genus: **Marela** Mab.

The species on the whole remind us of *Spathilepia donius* (171 a), by the shape of the wings with the stunted apex of the forewing as well as by the marking and colouring, but they are without the costal fold. The submedian vein is beneath in its whole length set with stiff bristles. The lower median vein rises nearer at the base than at the cell-angle.

**M. tamyroides** Feldr. (172 d) is above black, at the bases of the wings with some slate-blue lustre, *tamyroides*, with a large tripalate discal spot, a small one below it, 4 small subapical spots and a number of very small ones below them; fringes speckled light. Beneath the apex of the forewing is brightened up by brownish, the inner-marginal area bluish-white, like the base of the hindwing, the hindwing itself being brown with 2 dentate black transverse bands. Colombia, Brazil.

**M. tamyris** Mab. (172 d) is smaller, the hyaline spots rather larger, in the submedian space there *tamyris*. are two distantly separated spots. The brown hindwing is extensively mixed with white, also at the proximal margin, at the base, however, not white. Amazon.

51. Genus: **Phanus** Hbn.

Antennal club very slender, almost semicircularly bent. Palpi short, appressed. Costal fold present. On the forewing in the submedian area, in the basal half and at the proximal margin with long hair, the inner-marginal part of the hindwing being also densely clad with hair; the anal part of the hindwing is extended into a lobe forming a tooth on the inner-marginal vein. Only one species.

**Ph. vitreus** Cr. (= momus *E.*, marshalli Ky.) (173 c). Above black with an olive-brown tint, with vitreus. particularly in the longish hyaline spots in all the cell-spaces, also on the hindwing, though they vary greatly in their development. Widely distributed from Mexico to South America, in open places even in gardens on flowers common.

52. Genus: **Entheus** Hbn.

Antennae as in the preceding genus, but the palpi more porrect and diverging. On the forewing the costal fold is absent. Characteristic are the short posterior tibiae with a hair-pencil and only one pair of spurs, whilst the first tarsal joint is almost twice as long as the tibia, flattened and bulged. The species are distinguished by a very pronounced sexual dimorphism: the ♀♂ are mostly black and orange-red or yellow, the ♀♂ dark brown with large white spots, also on the hindwing, and often with an orange wedge-shaped spot near the base of the forewing. The species being very much alike and the sexes rather indefinite, there is a want of clearness in this genus.

**E. priassus** L. (= talaus *L.*, peleus *Cr.*, telemus *Plötz*) (172 e). ♀ above velvety blackish-brown *priassus*. with a broad, orange transverse band, an orange wedge-shaped precapical spot, and with a more transparent, oblong spot projecting from the middle of the transverse band towards the margin. The ♀ is somewhat browner, in the cell there is an orange wedge-shaped spot, a discal transverse band, 6 subapical spots forming a chain, and a longish spot between these two, as well as a large, round spot in the disc of the hindwing are white, the spots of the forewings half showing through. Fringes black. Widely distributed in South America.

**E. cramerianus** Mab. (= talaus *Cr. nec L.*, peleus *Cl. nec Cr.*) (172 e) is very similar, somewhat smaller, stouter, the orange bands much broader, all the 3 spots broadly confluent, so that they enclose a small, black triangular spot. The ♀ still more resembles that of *priassus*, the row of subapical spots on the forewing is interrupted, the discal spot on the hindwing extends farther to the proximal margin and is distally extended to a point, downward somewhat dentate. On the forewing there is another small white spot in the submedian area, the discal spot is interrupted in the cell. Fringes of the forewing near the anal angle white. Guiana.

**E. dius** Mab. (172 e, f) is larger than *priassus*, in the ♀ the transverse band is very broad, of a richer *dius*. yellow, the spot behind it small, separated from the transverse band and subapical spot, in the basal part of the cell an indistinct orange stripe. At the proximal margin of the hindwing a fold set with white scales. The ♀ likewise similar to *priassus*, but the subapical and discal spots are divided each into 2 groups, the white discal area of the hindwing is very large, the proximal margin white, too. Costa Rica to Colombia.

**E. sirius** Mab. is a fourth extremely similar species, hitherto ascertained only in the female sex. *sirius*. Spots similar to those in *cramerianus* (172 e). The discal spot in the cell is still farther separated from the lower ones. The white spot of the hindwing is almost quadrangular, its lower edge straight, extending to the grey proximal margin. *Mabille* presumes this rather uncertain species to belong to *genius*, but this is probably wrong. Described from Cayenne.
E. mati G. & S. (172 f) resembles priassus, in the ½ with more reddish wings and a large, red, basal wing-wedge-shaped spot of the forewing, the discal band of a deeper yellow, the proximal margin of the hindwing broadly whitish. In the ¾ the small spot between the two bands is very small and nearer to the distal band. Guatemala, Nicaragua, Costa Rica.

E. concina Plötz (172 e) looks very much like the ¾ of cramerianus, but in the basal part of the forewing there is a large triangular, sulphureous spot, the hindwings are quite yellow with a narrow black border. From Pará.

E. lemma Bltr. (= annae Plötz, berytus Hew.) (172 f). The ½ is black, with a large yellow basal area inclusive of the costal margin and proximal margin, with two broad yellow oblique bands, often between the two latter with a small yellow spot, hindwing yellow with a black border. The ¾ described as annae differs from that of priassus by the absence of the white spot below the subapical band and a more extensive, somewhat brownish discal spot of the hindwing. Brazil (Pará).

E. gentii Cramer. (172 f) almost looks like lemma, but the colour is a beautiful orange-yellow, the spot below the subapical band is large, obliquely quadrangular. The body is orange, too. Colombia.

E. eumenus Cramer. (= serenus Plötz) (172 g) is black with a narrow ½ in the ½ shortened orange stripe in the cell and very narrow white oblique bands and spot. The hindwing is in the ½ orange with a narrow black border, in the ¾ black with a white discal spot. Guiana.

53. Genus: **Cabirus** Hbn.

Almost the same as the preceding, but the posterior tibiae show beside the hair-pencil two pair of spurs. The palpi are more sessile, the 3rd joint short, conical. Only one species.

C. proca Cramer. (= julettus Stoll) (172 f) in the male entirely resembles the numerous yellow and black Cyllopoda-species of South America: dark yellow with black margins and a black oblique band before the apex of the forewing. The ½ is quite different, the yellow colour is replaced by white hyaline spots with broad brownish-black veins and folds. Guiana to Peru.

**Group B.**

In the species of this group the antennal club is mostly not so semi-circularly bent, occasionally with an obtuse end. The cell of the forewing never attains two thirds of the length of the costal margin; the middle radial vein always rises nearer at the upper than at the lower one. The anal angle of the hindwing is often extended, forming a lobate or dentiform projection; the middle radial vein is always rudimentary. Most of the neartic forms exhibit a costal-marginal fold in the ½, never a discal stigma. In a great number of genera the ½ exhibits a hair-tuft on the posterior tibiae or foreships; the former always exhibits 2 pair of spurs. All the species of this group, as far as they are known, rest with their wings flatly spread out, frequently on the underside of leaves. (Group A comp. p. 849).

1. Genus: **Garga** Mab.

Antennal club strong, bent, whit a short point, the 3rd palpal joint porrect, conical. Costal fold absent. On the forewing the upper median vein rises a little before the lower cell-angle, the lower much nearer at the base, on the hindwing with a prolonged anal angle the same. Only one species.

G. platon Plötz (= odena Mab.). Size of Sophista aristotles (172 g), but the wings narrower, the forewing in the apex, the hindwing in the anal part more produced. Wings above dark brown, forewing speckled grey and black, the discal macula forms an X-shaped spot, before the apex 3 hyaline dots. Hindwing with a whitish, bipartite subcostal macula, the posterior region blackish with 2 grey bands, the proximal margin and anal part densely haired. Under surface ochreous-brown, the hindwing shows beside the hyaline spots above a cell-spot; the small discal bands and the bipartite anal macula whitish in a brown ground, the hindwing with a partly extinct whitish discal band, the proximal margin light with a black subanal macula, before which there is another dark brown one. Palpi, chest and stripes on the ventral sides white. From the Upper Rio Negro and Ecuador.

2. Genus: **Dichelura** Mab.

Antennal club obtuse. Shape of the wings very characteristic: the distal margin of the forewing below the apex produced in the shape of a tooth, the same on the lower median vein, between concave. Hindwing with a long, lobular tooth on the lower median vein with a minute tooth below it, above it and below it deeply gnawed out, the anal angle itself again produced. Only one species.

D. tricuspidata Mab. (173 a) is brown with 2 black transverse bands, on the forewing with a hyaline oblique band and small apical spots. Under surface marbled brown with black, torn macular bands. Ecuador.

Only one conspicuous species owing to the hindwing being considerably prolonged at the anal angle and showing a silky hirsute scent-scale spot in the apical half above, without the costal fold. The antennal club is strong, bent, the final point shorter than half the length of the club, the short 3rd palpal joint obtuse conic.

A. tractipennis Blr. (= ribbei Sgr.) (172 g) is above olive-brown, before the apex of the forewing tractipennis with a velvety-brown triangular spot, in it one, behind it 2 small hyaline spots, before the somewhat darkened border a lighter antennomarginal line, in the basal half at the costal margin and below the cell small dark spots. From Mexico and Panama.

4. Genus: **Sophista** Pltz.

Antennal club thinner than in the preceding, the final point very slender. Palpi as in the preceding. Hindwing not so much prolonged, more of the shape of a broad lobe, and without the scent-spot; the lower median vein rises in the middle between the base and cell-end. The costal fold of the ♂ is but slightly developed or absent. Three very similar species.

S. aristoteses Dbl. & Hew. (172 g). Black, towards the margin with 2 brownish undulate dentate aristoteses lines before the somewhat speckled fringes which are bent inward at the apex of the forewing. The middle of the wings is crossed by a white band very broad particularly on the hindwings and extending on the forewing only to the upper median vein and ending broadly rounded above, whilst on the hindwing it extends broadly to the proximal margin. Rio Negro (Amazon).

S. plinius Pltz (172 g) is extremely similar, of a somewhat duller shade, the white band narrower, plinius. ending upward pointed on the forewing, rounded off on the hindwing, the whole proximal margin being left black. Novo Friburgo, Bolivia.

S. calindris Hew. (= chinnas Mab., epipola Pltz) (173 a). Here the white band on the hindwing calindris. has changed into a narrow, bent median line parted on the veins, whilst on the forewing it is entirely absent. The distal part of the hindwing and an indistinct transverse band on the forewing are dusted bluish-grey, on the forewing there are inside and outside of it several small hyaline spots, before the border of the hindwing small black internerval spots. Guiana, Amazon.

5. Genus: **Celaenorrhinus** Hbn.

The antennal club is only moderately thickened; the palpi are ascending, the 3rd joint very short. The hindwing is here quite round, the distal margin somewhat undulate; the transverse vein is very feebly developed, the middle radial vein scarcely present, the lower median vein rises much nearer at the cell-end than at the base. The posterior tibiae exhibit 2 pair of spurrs, the ♂ has besides a hair-tuft at the proximal end. The species are preferably distributed in the Indo-Australian region, about half a dozen are neartic.

C. eligius Cr. (= hiera Pltz) (173 a) is above brown, in the apex of the forewing there are eligius. 3 large hyaline spots, below it 2 small ones, in the disc 2 very large ones, behind them 1, below them 2 small ones, at the costal margin a somewhat larger hyaline spot; before the margin and on the hindwing, also in the disc, several small, lighter spots. The under surface is a little duller, on the hindwing the small light spots are more distinctly prominent. From Mexico and South America, widely distributed. — From the Rio Songo from Bolivia there are specimens before me from Fassl: — songensis form. nov. (173 b) — of a smaller and songensis, neater habitus; the small subapical spots are reduced to small dots, of which the middle one of the 3 upper ones seems to be placed more proximad, the discal hyaline spots are likewise smaller, the hindwing slightly rounder.

C. fritzgartneri Bail. (= variegatus G. & S.) (173 b) on an average is somewhat larger than eligius fritzgartneri. with somewhat narrower wings, the hyaline spots smaller, below the middle of the cell another minute, dark-ringed spot. Hindwing in the disc lighter with a larger dark discal spot and a similar macular band behind it. Mexico and Central America. It flies in December, rests on the keystones in dark tunnels and caves, and on being scared up it flies furiously about, though not into the open air.

C. shema Hew. (= ochrogutta Machr.) (173 b) is smaller, darker, the hyaline spots smaller, more shema. uniformly round and more distantly separated. A small discal spot and behind it a curved row of minute round spots on the hindwing are yellowish, beneath still more distinct, and near the base there are 3 more. From Cayenne.

C. monarirus Pltz (= chiriquensis Mab.) (173 b) has still much smaller spots, the hindwing as monarirus. in fritzgartneri, but darker. Mexico to Panama.
C. astrigera Blr. is not unlike monarthus, larger, the hyaline spots increased; in and above the cell there are 3, the antennomarginal row contains 9 spots, and below the cell there is one more. Beneath the submarginal row of spots on the hindwing is brick-coloured reddish. Tapajoz.

C. cynapes Hc. Above dark brown, hindwing more reddish. Forewing in front before the middle of the costal margin to the proximal angle traversed by an equally broad, lustrous transparent white band parted by the veins, before the apex with 7 minute hyaline spots in a bent row. Hindwing in the middle angularly projecting. Beneath as above, but the brown area is strewn with an ochre-yellowish tint, particularly at the base and proximal margin of the hindwing; behind the band of the forewing there is a yellow spot, at the cell-end of the hindwing a light streak. Spanne of wings: 2.1 inches. Ecuador.

C. vidius Mab. is like the following placed by MAREILLE into his genus Narga which, according to GODMAN is synonymous with Celaenorrhinus. It is described, as follows: blackish, at the margin somewhat lighter, at the costal margin and in the cell 1 or 2 darker spots. Hindwing in the disk blacker. Under surface black, forewing watered with lilac-grey, two more distinct patches at the costal margin and apex. Hindwing watered with a deep lilac-grey, bordered by a black band from the costal angle to the proximal margin. A spot at the base and a shade at the posterior margin blackish, in an oblique light appearing as 2 greyish-lilac bands, the broad basal band enclosing a square black spot at the costal margin. Expans of wings: 19 to 21 mm. Sao Paulo.

C. scopus Mab. Blackish-brown, fringes more reddish, speckled darker, forewing with 2 dust-grey spots between the lower radial veins. Forewing beneath blackish with a lilac-grey spot at the apex and 4 silvery streaks at the rise of the upper branches. Hindwing whitish-grey, at the base and distal margin reddish-brown, traversed by a rust-brown band of spots very broad at the costal angle. The middle of the distal margin almost white; before the fringes a lustrous yellow line bordered with black. Expans of wings: 23 mm. Venezuela (Merida).


The moderately strong antennal club is somewhat bent, but not angularly; the short, obtuse palpi turned in front. The forewing is much larger than the distal margin, the costal margin in some species very convex, the distal margin above the proximal angle somewhat concave. Costal fold absent. Neuration as in Celaenorrhinus. Many species show a brilliant blue on the hindwings, particularly beneath, exhibiting a bright gleam when the insect is on the wing.

P. cerialis Or. (= orcus F., cerberus Hbn.) (173 c) is above brown, in the somewhat more prominently dark median band of the forewing there are several small hyaline spots, behind it in the shape of a band a bluish dusting, on the hindwing also in the disc. Beneath the hindwing is silvery sky-blue with a black marginal band. According to CRAMER, the larva is dark grey with a lighter dorsal line and 2 similar lateral lines and a red-brown head. From Mexico widely distributed in South America. — majorinus form. nov. (173 c) from Bolivia (Songo) is very much larger and more variegated, more profusely strewn with blue.

P. contubernalis Mab. (= praxis Plötz) (173 c) is somewhat smaller, of a purer black, on the forewing in the disc and subapically with much smaller hyaline dots, on the hindwing with 2 light blue transverse bands. Beneath the hindwing is light blue with a black marginal band partly broken up into small spots, and 2 or 3 costal-marginal stripe-shaped spots. From Mexico to Colombia, Brazil.

P. anicius G. & S. (173 c) extremely approximates contubernalis and differs by almost or entirely extinct hyaline spots on the forewings and more intensely blue bands on the hindwings. The somewhat different genitals prove the insect to be a good species. Founded on two from Guatemala.

P. parallelus Mab. looks somewhat like a large cerialis (173 c), in the cell-end two oblong, not united spots, 4 small subapical spots two of which are closer together. On the hindwing the distal one of the blue bands is not bent, but almost parallel to the proximal band, at the costal margin almost united. Fringes black. Hindwing beneath as in cerialis. Bolivia.

P. cordus Mab. (173 c) is very closely allied to contubernalis; on the forewing there are only 3 subapical dots; the hyaline spot before the cell-end consists of 3 small separate spots situated in one line below each other. The apical dots are surrounded by a band of blue scales continued in front of the border to the proximal margin. On the blue hindwing beneath the black marginal band is broadly interrupted between the lower radial veins; at the costal margin there are yet 2 large black spots, the distal one of which is continued towards the proximal margin as a more or less complete macular band. Brazil (Sa. Catharina).

P. hoyti Weeks has remained unknown to me. Body above brown with golden brown hair, beneath lighter; on the brown forewing there is in the disc a T-shaped hyaline spot with a streak behind it, below it a similar spot and above the apex of the latter a quadrangular spot; 3 small, oblong subapical spots, before and below which there is a brown, dark area; near the base and below the middle of the cell one dark-brown, not distinctly defined band each. Hindwing above with 2 similar dark brown bands. Under surface
with the same marking on the light brown ground with a darkened costal margin and apex. Suapure (Venezuela). Expanse of wings: 1.8 inches.

P. bellii G. & S. ( = paterculus Hw. nec H.-Schäff.) (173 d) is not unlike paterculus, distinguished bellii. by the longer anal angle of the hindwing, the colour above being more grey, and by 3 hyaline spots bordered with black in the distal part of the wing, as well as 3 subapical dots; particularly the hindwings are marked with more distinct black macular lines. Hindwing beneath radiantly blue with a black costal-angular spot. Nicaragua.

P. lugubris Plötz. (= ophia Bltr., sepbara Hw., caboar Musbr., ambla Plotz) (173 d). Greyish-brown lugubris. with a slight olive tint; a narrow, dark brown antemarginal line somewhat widened at the costal margin and proximal angle; and behind a darker median band there are numerous hyaline spots. Hindwing at the base with a brown transverse band, apex pointedly produced, before it a small, short, brown streak-spot. Beneath very much duller, without any blue. From Mexico to Colombia and Brazil.

P. truncata Hw. (173 d) is similar, easily discernible by less strongly angled hindwings being beneath truncata. of a greyish-blue colour except the margin. From Bolivia.

P. paterculus H.-Schäff. (= balma Plotz, xera Bltr.) (173 d) is easily recognizable by the proximal paterculus. angle on the forewing being produced almost in a conical shape, whilst the costal margin appears somewhat concave right before the apex. Of a deep red-brown mixed with slate-grey or violetish-grey, before the margin rusty, below the cell-end 1 or 2 small, roundish hyaline spots. Beneath lighter rusty, two inner-marginal thirds of the hindwing light blue. From Panama to South America. — Small specimens from Bolivia, the hindwings of which are beneath quite rusty yellow without any blue, may be denominated: deflorata form. nov. (173 d). deflorata.

P. mendedemus G. & S. (173 d) is above of a warm brown with a deep velvety-brown oblique band mendedemus. to the base of the proximal marginal, the distal margin of the forewing is likewise darkened, before the apex there is a smaller spot with 2 or 3 minute hyaline spots. Beneath lighter red-brown, two inner-marginal thirds greyish-white. Panama (Chiriqui).

P. hyacinthinus Mab. (= servius Plötz) (173 c) is larger, otherwise above very similar. Hindwing hyacinthinus. beneath in the inner-marginal half light blue, in the costal-marginal part darker ferruginous. Nicaragua, Panama, Colombia, Bolivia, Peru.

P. scybis G. & S. (173 c) is still larger, above of a warm violet-brownish-brown, with more rounded hind- scybis. wings, the whole basal parts of the fore- and hindwings occupied by a large, deep velvety brown spot pointedly extended distally at the lower cell-angle on the forewing. On the hindwing beneath the blue is of a variable extent. Distributed from Mexico to Bolivia.

P. phila G. & S. (173 c) looks above exactly like scybis, but beneath it is entirely without the blue phila. colour on the hindwing; the colouring beneath is on the whole darker. Described from Panama; it may be only a form of scybis.

P. pelopea G. & S. (173 c) is likewise very similar. The upper surface is darker with a black marginal pelopea. band being inwardly faded; there is only a small subapical hyaline dot. The under surface is still much darker brown. From Mexico to the Amazon District.

P. erisichthon Plötz (= gellius Mab.) (173 c, f) is allied to the two preceding species, the dark erisichthon. basalmark, however, is more interrupted than in mendedemus; on the hindwing there are in a slightly curved row 4 or 5 darker, small punctiform spots in the middle. Beneath light reddish-yellow or ochreous-yellow, the forewing with a similar, dark brown marking as above, the hindwing with 2 rows of dark dots, the proximal row mostly confined to one costal-marginal spot, and with a large costal-angular spot. Ecuador, Bolivia.

P. noeckeni Mab. is twice as large as hyacinthinus; the forewing with a large, black spot as far noeckeni. as the cell-end, covering also the base of the forewing; from the 3 apical hyaline dots a black band extends encircling the cell and turning towards a large black spot bordering on a hyaline dot between the lower radial veins. Wings with an intense violet lustre, at the margin more reddish. The under surface is ochreous-yellow with a faint black marking. Hindwing almost quite whitish-blue, only at the costal-angle ochreous-yellow with a black dot in it. Expanse of wings: 43 mm. Bogotá.

P. insulatus sp. nov. (173 f) in its exterior entirely resembles an Achlyodes, but according to the neum- insulatus. ration it certainly belongs hereto. Large, brown with a violet reflection as scybis. The forewing only exhibits 3 small apical hyaline spots, the brownish-black velvety spots in the basal area are arranged in the same way as in scybis, but they are much duller and more blurred; from the lower cell-angle a similar nebulous stripe extends to the distal quarter of the proximal margin. Hindwing likewise similar, the dull, postmedian macular band more complete. Under surface dull ochreous-brown with the same marking as above, but very indistinct. According to a specimen of the Collection Seitz from South Brazil.
**P. inexpectus** sp. nov. (173 f) is very different. Above dark violetish-brown, from the cell-end a large, darker, almost oval spot extends obliquely before the middle of the proximal margin, and before the margin there is a dark band, leaving the margin itself lighter; in the middle of the costal margin there are 2 oblong hyaline spots below each other; in the middle between them and the apex 3 minute hyaline spots, between the median veins close below the cell-end an oblong, quadrangular spot and above it a punctiform hyaline spot. Hindwing at the base and behind the middle with a broad band, before the margin with a narrow band. Forewing beneath lighter brown, at the base of the costal margin blue, near the proximal angle lighter greyish-white, with the hyaline spots as above. Hindwing radiantly silvery blue with a narrow black marginal band with 3 minute blue lunae in it in a slight expansion between the median veins and lower radial veins. 1 g from Peru in the Coll. Seitz.

**P. festivus** Erichs. (= portulana Plötz) (173 f) is a small, black species with some minute hyaline dots on the forewings and 2 sky-blue transverse bands across the hindwings, both of which do not reach to the costal margin. Beneath the hindwing is monotonously black, in the basal half slightly tinged blue. Guiana, Colombia.

**P. lucullea** Hew. (173 f) is above very similar, somewhat strewn with white, the small hyaline spots in the disc more closely together; the blue bands of the hindwings are narrower and extend farther to the proximal margin. Beneath the hindwing is light blue with a narrow black marginal band, in front of it a black macular band, and in the disc 3 or 4 black spots. Brazil (Ega, Santos).

**P. adamantinus** Mob. (173 f) is larger than cronion which it approximates. Black, strewn with blue atoms, 4 small precapital hyaline spots approaching each other in two couples, below them 4 more small, little visible ones in one line towards the proximal margin and a streak-spot at the cell-end; before the fringes there is a narrow line of blue spots. Hindwing black, with a postmedian band composed of blue atoms. Beneath the forewing is similar, the costal margin as far as the cell-end blue. Hindwing blue with a broad black border growing narrower towards the anal angle. Near the costal angle a large, below it a smaller black spot. Bolivia.

**P. cronion** Plötz. (173 g) has only one broad sky-blue band on the hindwing, extending to the blue proximal margin. The forewing is brown marbled with black, strewn with white scales and 2 or 3 minute subapical dots. Beneath the proximal margin of the forewing is broadly lacteal blue, the hindwing almost quite blue, only at the costal angle black with single small black marginal spots. Brazil.

**P. assecla** Mob. (= cerealis Plötz, nec cerialis Cr.) (173 g) is larger, brownish-black, with well separated, small discal spots and 6 small subapical spots. The hindwing is almost entirely blue, only at the base, costal margin and costal angle black with an indistinct median band; beneath similar, but the hindwing as far as the base blue with a fine black border which is expanded at the costal angle and proximal angle. Brazil.

**P. lusorius** Mob. is black, with 3 small apical spots and 8 in the cell and behind it, outside with a double blue band. The hindwing with a metallic blue marginal band, near the costal angle with a black spot in it. The hindwing being blue beneath exhibits 2 bands of black spots in the disc, which are united at the proximal margin. Expanse of wings: 30 mm. Rio de Janeiro.

**P. enidus** Plötz (173 g) is very different: above coloured as cerialis, olive greyish-brown, in the basal part of the forewing and in the distal half of the hindwing with a light blue reflection, here with a dark brown middle dot and an undulate line behind it. On the forewing there are only outside of the cell 2 discal hyaline spots, before them a large, oval brown spot, behind it an undulate brown line behind which there are 4 minute subapical hyaline spots. South America (?).

**P. u.-lucida** Plötz (173 g) is a species having remained unknown to me, presumably approximating lugubris. Above light brown, with antennomarginal and median dark brown bands; in the median band there is a U-shaped hyaline spot distally opened, and above and below it with 2 more small hyaline spots each. Hindwing beneath in the anal half white, towards the base bluish-grey, the costal margin brown with the beginnings of 3 transverse bands. Paraguay.

### 7. Genus: Ate G. & S.

Almost the same as the preceding genus, but the posterior tibiae only exhibit 1 pair of spurs; on the hindwing the upper median vein rises somewhat nearer at the cell-angle.

**A. lagis** Hew. (173 g) is very closely allied to the following, but it has 2 or 3 more discal spots and on the hindwing beneath the blue is more uniform and extensive, the black marking reduced. Presumably only a southern form from Guiana and Brazil.
A. proenus G. & S. (173 g) is above blackish-brown, behind the middle on the forewing scantly proenus. dusted blue with 2 minute hyaline spots below the lower cell-angle and 2 or 3 minute subapical dots. Hindwing with a broad cyanaceous marginal band. Beneath the hindwing is light blue with a brown costal margin and undulate antemarginal line, as well as 2 or 3 shortened macular bands proceeding from the costal margin. From Mexico through Central America.

A. pteras G. & S. (173 h) has no hyaline spots at all on the forewing, but instead of them some pteras. small postmedian dust-spots formed of blue scales. On the hindwing the blue marginal band is narrower and more tarnished and of a duller blue. Beneath the hindwing is almost quite blue, only at the costal margin and costal angle blackish-brown. Described according to 2 & from Panama.

A. jovianus Cr. (173 h) is a large, magnificent species, black with 4 small subapical spots situate in jovianus. a straight line, two large discal hyaline spots, the lower being tripartite, and a blue submarginal macular band. Hindwing of a brilliant azure colour with a black costal margin and border, radiating proximally on the veins. Beneath very similar. Guatemala, Guiana to Brazil.

A. amaryllis Stgr. (173 h) differs by the much larger oval discal spot and enlarged subapical spots of amaryllis. the forewings. Guatemala, Panama, Colombia, Brazil.

A. fabrici Ky. (= jovianus F. nec Cr.) (173 h) differs by a large, white discal spot in the blue of fabricii. the hindwing and larger discal spots of the forewing. Colombia, Brazil, Bolivia.

A. suppar sp. nov. (173 h) entirely resembles jovianus above; the discal hyaline spots of the forewing suppar. are somewhat more oblique, on the hindwing the black marginal band is broader and proximally not faded as in jovianus, but sharply defined. As in fabricii there is in the blue disc a white spot divided into five parts by the black veins. Eastern Colombia (Medina) in the Coll. Fassl.

A. lancea Hew. (= tertullianus F.) (173 h) resembles the preceding, but the subapical spots are lancea. absent; the discal spot is much larger, and on the hindwing in the cell and behind it there is a white diaphanous longitudinal spot growing more roundish in the 3. Hindhead and palpi orange-yellow. Brazil: Minas-Geraes, Sao Paulo, common near Santos.

A. lerina Hew. (173 i) has a large, quadripartite discal spot on the forewing, in the middle of the lerina. hindwing a round blue spot not sharply defined. Beneath the hindwing is blue with a black border, proximal margin and veins. Guiana, Brazil.

A. aquatoria Mab. is still larger than jovianus, jet-black, with three subapical dots situate in aquatoria. a triangle, below them two more and still farther down three larger ones; in the cell and at the costal margin there are 2 longitudinal hyaline spots, below them two more. The hindwing exhibits 2 narrow blue bands connected at the costal margin, separated in the disc. Beneath the proximal margin of the forewing is broad whitish, the hindwing quite blue, except a black spot at the costal angle. From Ecuador.

8. Genus: Paches G. & S.

It is likewise very closely allied to the two preceding genera, the antennal club is somewhat longer, the 3rd palpal joint longer. The posterior tibiae exhibit beside 2 pair of spurs in the 3 a long hair-pencil. Half a dozen of sexually dimorphous species with mostly blue 2.2.

P. loxus Dbl. & Hew. (173 i) is in the 3 above of a lustrous deep ultramarine, with a black border loxus. and spot at the cell-end and costal margin. Beneath black with 3 indistinct darker transverse bands. The 3 is blackish-brown, with 3 small subapical dots and a slate-blue band of scales in the middle. Mexico to Panama.

P. gladiatus Bldr. (173 i). Instead of the black costal marginal spot there is here a median band more gladiatus. or less distinctly noticeable also on the hindwing. Brazil. Probably only the southern form of loxus.

P. polla Mab. (173 i) has almost black forewings with 2 or 3 small subapical hyaline spots, near polla. the proximal angle with some blue scales. The hindwings are lustrous blue, with an indistinct, lighter greyish-blue median band and mostly another one behind it. Beneath scantly strum with a light tint. Mexico to Costa Rica.

P. narycus Mab. (173 i) is above in the disc of the hindwing deep blue. Forewing almost black narycus. with a row of whitish-blue spots which is interrupted below the apex, behind it a grey band with a dull silvery lustre, passing over to the hindwing and often indistinct towards the margin; in the cell of the forewing there is a longitudinal row of some dots. Beneath quite blackish-brown. Described from Ecuador, before me also from Peru (Pozuzo, Huancabamba).
P. subalbatus Plötz (= subornatus Mab., zonula Mab.) (174 a). Hitherto only the ♂ seems to be known; above blackish-brown with a median band formed of blue scattered scales on both wings and 3 small, white subapical dots on the forewing. Beneath the anal half of the hindwing is white with a blackish antennomarginal line; the bordering towards the base is brightened up in a bluish grey and tinged brownish-red. Panama, Venezuela, Colombia, Brazil.

P. geometricus Fldr. (= hadina Btlr., corbinianus Plötz) (174 a) has brown wings being lighter towards the margin, traversed by 2 darker transverse bands bordered by a lighter colour and parallel to the distal margin. Beneath lighter, on the forewing strewn with a reddish yellow and with a reddish-yellow discal macula, the hindwing scantily strewn with white, and with 2 whitish transverse lines. Panama to Southern Brazil.

P. phalaena Mab. (Stgr. i. 1.) is apparently very closely allied to geometricus. Yellowish brown with black transverse bands across both wings; the base brownish, behind it a black, distally bent band across the cell-end; on the hindwing the band is narrower; a proximally curved postmedian band terminates on the fore- and hindwing at the proximal margin with a thick black spot; at the margin another broad band. The under surface is greyish-brown with an ochreous spot in the middle, before it a grey band spotted white at the proximal margin, behind it a grey band being ochreous-yellow below the cell and terminating in a grey spot bordered with yellow. Hindwing bluish greyish-white, at the base brown with a grey median band and a blackish grey border. Bolivia.

P. limaca Hew. (= jabea Btlr., aerules Plötz) (174 a). Forewing similar as in subalbatus, but the hindwing with a broad blue marginal band. Beneath the hindwing is extensively blue with a more or less spotted blackish-brown costal margin, often there is only one spot at the costal angle. Brazil (Amazon).


Antennal club moderately thick with a short, bent apex; the 3rd joint of the porrect palpi is hidden. The apex of the forewing somewhat stunted. The costal fold is absent. Hindwing prolonged. The posterior tibiae with 2 pair of spurs and a hair-pencil.

Sp. artenides Gr. (174 a). Forewing blackish-brown with white scales strewn in the shape of a band, several minute discal and subapical hyaline dots. Hindwing in the anal half white, in the ♂ tinted somewhat brownish with a more or less distinct marginal band before the fringes. From Panama through Guiana to Southern Brazil.

Sp. abbreviatus Mab. (174 a) is somewhat larger, the forewing shorter and broader with larger hyaline spots, the hindwing not so much prolonged, the white anal part of the hindwing reduced, the marginal band divided into spots, the lowest more distantly remote from the proximal angle than in the preceding. Nicaragua, Costa Rica, Panama, Colombia to Bolivia.


In the characters it entirely corresponds to the genus Cogia of the preceding group, but the cell of the forewing is shorter than $\frac{2}{3}$ of the length of the costal margin. Only one species:

N. fibrena Hew. (= mumiae Mab.) (177 e) is above dark brown, the forewing with 11 hyaline dots: one at the costal margin, 2 in the cell, and one below it of the shape of the number 2; farther towards the margin 3 and an isolated one above it and 3 subapical ones. The hindwing exhibits at the base a tuft of yellowish-red hair, the anal angle is broadly white, parted by a brown band. Beneath the same, only of a paler tint; hindwing entirely white, costal margin, 2 spots below it near the base, an irregular transverse band and a spot at the anal angle yellowish reddish-brown. Expanse of wings: $1\frac{1}{10}$ inches. Amazon (Tonantins).


In its anatomical marks it is very closely allied to the genus Pellicia, but the posterior tibiae in the ♂ exhibit a long hair-pencil, and the prolonged hindwing shows above at the base of the costal margin a hair-tuft. The forewing exhibits a black spot in the cell as in Cyclosaemia.

E. biternata Mab. is dark brown with 3 darker transverse bands, in the disc of the forewing with a large black spot with two white hyaline dots in it and one above it: 3 minute, subapical, white hyaline spots in a triangle. Beneath lighter and more reddish brown. The body beneath is whitish. Panama (Chiriqui),
E. bufonia Masch. (174 b) has almost the wing-contours of Artenueria tricuspennis (172 h); above bufonia. brown, in the larger basal half dusted violettish-grey with a large, black, quadrangular discal spot, from where an extinct band extends to the proximal margin, with a second transverse, postmedian band. Hindwing similarly marked. Under surface lighter brown, at the proximal angle of the forewing and in the middle of the hindwing with quadrangular, large, yellow spots, behind them with an irregular row of smaller spots and similar ones at the costal margin, proximal margin and anal angle. Colombia.

E. inops Mab. is above reddish-brown with 4 bands of black spots; beneath more reddish-grey, inops. the lines extinct. Patria unknown.

12. Genus: Gorgopas G. & S.

From the closely allied following genus Pellicia separated by the presence of a costal fold and the absence of the hair-pencil on the posterior tibiae.

G. viridiceps Bhir. (174 b) is deep dark brown, before the distal margin lighter in the shape of viridiceps. spots, with 3 small, white, subapical spots. Head, collar, anterior half of the shoulder-covers and palpi above metallic green. From Nicaragua to Peru and Brazil.

G. hybrida Mab. looks like a Cyclosoma (p. 894) with a green head; light brown, forewing with hybrida. a blackish marginal band, separated from the margin by a row of small lighter spots, in front of it a dark band with 3 subapical hyaline dots; in the cell there is a black spot with 2 white dots in it, the head and thorax metallic green. Expanse of wings: 28 mm. Brazil.

G. chlorocephala Latr. (174 b) is of a lighter ground-colour than viridiceps, and metallic green scales chloroce- phala. are also at the bases of the wings. Guiana.


One of the most difficult groups to describe. Godman says that the attempt of ascertaining the species according to descriptions is hopeless. More than 2 dozens of almost uni-coloured blackish-brown species have been described. The forewing is rather pointed, the distal margin convex, no costal fold. The hindwing is analwards somewhat prolonged. The posterior tibiae are provided with hairy fringes and 2 pair of spurs, without a hair-pencil. The ♂ besides exhibit a long hair-tuft at the base of the costal margin on the hindwing; the subcostal vein mostly shows a slight swelling.

P. ephora H.-Schäff. (= tiphis G. & S.) (174 b) is one of the most common Hesperids in the whole ephora. of Central and South America. Deep dark brown with 3 still darker, faded transverse bands and 3 white sub- apical dots situate in a triangle, the marginal band being separated from the median bands. The under surface is coloured lighter, the ♀ also above. Widely distributed from Mexico to Colombia and Guiana.

P. bessus Masch. (= sordidulus Mab.) (174 b) is extremely similar, darker, the hindwings much rounder; bessus. with differently shaped genitals. Surinam.

P. macareus H.-Schäff. (174 b, c) is likewise scarcely distinguishable from ephora in its exterior, but macareus. the shape of the wings is much rounder, particularly of the hindwings, and the hair-pencil at the costal margin of the hindwing is considerably shorter. It occurs from Mexico through the whole of Central America to the Amazon.

P. criton Mab. is very closely allied to ephora (174 b), but smaller and discernible by the under surface, criton. The 3 white subapical dots are situate more in a line; the black antterminal band is indistinctly spot-shaped. Beneath on the forewing the costal margin and apex are grey, the hindwing pinkish-grey, only at the base and costal margin blackish; before the fringes extends a narrow, interrupted band, through the middle a broader one. Bolivia.

P. bipuncta Schs. (174 c) is distinguished from ephora (174 b) by only 2 small subapical hyaline bipuncta. dots and less undulate transverse bands which are more broadly fused with each other. Expanse of wings: 29 mm. Brazil (Novo Fribrugo).

P. nyctineme Bhir. above entirely resembles macareus (174 b, c); it is discernible by the hindwing nyctiame. beneath, where the spots of the median band are tinted light towards the base. From Nicaragua to Colombia and the Amazon.

P. bromias G. & S. (174 c) is a somewhat smaller species with rather distinctly prominent bands; bromias. the most characteristic mark is the fusion of the submarginal and median bands below the cell, so that a Y-shaped, dark marking is created. Common in Mexico and southward to Panama.
PELLICIA. By Dr. M. Draudt.

costimacula. P. costimacula H.-Schäff. (174 c) is more easily recognizable by the wings exhibiting violettish-grey costal and basal halves; in this ground the beginnings of the 3 dark brown bands are distinctly prominent, the two interior ones almost exactly rectangular to the costal margin, the distal one more oblique towards the margin. This species and the following are without the small subapical spots. From Mexico down to Peru and Brazil, common.

violacea. P. violacea Mab. Forewing brown, glazed in a violetish blue, thereon three brown or ferruginous bands, the middle band only forming a spot at the cell-end. Hindwing rusty black with 2 scarcely noticeable violet bands, at the costal margin lighter ferruginous. Beneath the forewing is rusty-black with 2 scarcely visible violet bands, at the costal margin lighter ferruginous. Beneath the forewing is rusty black, at the costal margin and apex dusted ash-blue like the proximal margin. Hindwing in the basal half rusty black, outside light ash-blue, in it 2 faint, brown bands. Expanse of wings: 29 mm. Patria unknown.

dimidata. P. dimidata H.-Schäff. (= didia Mächl., corinna Plötz, nivonicus Plötz, bilinea Mab.) (174 c) is marked the same as costimacula, but somewhat smaller, with broader, rounder wings and entirely without the purple-grey suffusion of the costal parts of the wings. The anal part of the hindwing is prolonged, but more in the shape of a broadly rounded lobe. Likewise most common beginning from Mexico, but the species seems not to go so far to the south, reaching its southern extremity at Guiana.

meno. P. meno Mab. (174 c) has a somewhat longer anal part of the hindwing than the preceding; this part being beneath whitish with a large, dark brown spot in it; in the disc there are besides 2 whitish spots, and the proximal margin of the forewing is light, too. The costal-marginal part of the forewing is above suffused with lilac-grey as in costimacula. This little species has apparently been hitherto only found in Panama.

vecina. P. vecina Schs. (174 d) very much resembles costimacula (174 c) above, but the hindwing beneath is very different. Forewing dark greyish-brown with the darker brown bands as there. The hindwing is lighter at the costal and proximal margins. Beneath the forewing is dark brown, the proximal margin very light. The hindwing is dark brown in the costal half, in the anal half whitish grey; in the middle, behind it and before the margin traces of darker lines. Expanse of wings: 32 mm. Petropolis.

pericles. P. pericles Mab. (88r. i. 1.) (174 d) is likewise not dissimilar; above deep velvety-black before the margin, with a lighter reflecting violet macular band, which grows broader and still lighter towards the apex; the beginnings of 2 similarly coloured bands commence at the costal margin before the cell-end and before the middle of the cell and extend almost to the median. Hindwing similar; beneath almost uni-coloured blackish-brown, the proximal margin of the forewing lighter reddish. Bolivia.

licisca. P. licisca Plötz (= thyestes G. & S.) (174 d) is recognizable by the entirely rounded hindwing without an extended anal part. The colour of the wings is very dark, so that the bands are scarcely prominent, only on the lighter under surface and in the ♀ they are more distinct. Found from Mexico to Panama.

capitans. P. capitans Schs. externally resembles G. viridiceps (174 b) by its brilliant metallic-green head and collar. The wings are dark velvety-brown in the basal halves, distally somewhat lighter with a darker shade at the distal margin. The forewing shows 3 subapical hyaline dots in a darker oblique shade, the hindwing a narrow, antennomarginal nebulose band. Beneath lighter brown with traces of darker lines. Expanse of wings: 27 mm. Venezuela (Aroa).

polyctor. P. polyctor Pritz., (= ithrana Btlr.) (174 d) is quite differently coloured and marked: white with a dark brown basal and distal third, in the latter 3 subapical hyaline spots, farther below 2 larger, square hyaline spots scarcely noticeable in the white ground; in the discal area besides some brownish dentate lines; hindwing in the costal part almost entirely white. Very common from Mexico to Colombia and Southern Brazil.

castolus. P. castolus Hew. (174 c) by its under surface is most closely allied to vecina (174 d), but above it is almost uni-coloured blackish-brown, on both wings quite indistinctly spotted grey; the forewing shows 3 subapical hyaline dots, situate in a grey spot beneath. The anal half of the hindwing is whitish-grey, undulated blackish-brown. Described from Brazil.

zamia. P. zamia Plötz (174 d). Above monotonously blackish-brown, beneath the forewing is lighter in the proximal-marginal area; the hindwing is tinted ferruginous and the anal half powdered greyish-white, the margin itself, however, remaining dark and 2 dark stripes in the disc penetrating the lighter area. South America.

theon. P. theon Plötz (174 d) entirely resembles zamia, but it is larger and the upper surface is not so deep blackish-brown, so that a curved stripe before the marginal area on all the wings, a nebulous spot at the cell-end and another nebulose stripe at the end of the basal third are distinctly standing out. Beneath the anal parts of all the wings are lighter, of a dim whitish, and in this light part the nebulose stripes of the uppersurface show through as a chain of dark spots. From South America (the exact patria is not stated in Plötz' table).

demetrius. P. demetrius (174 e) is above uni-coloured dark brown with 2 dark ante- and postmedian transverse lines on the forewing. Beneath the apical part of the forewing and the greater part of the disc of the hindwing is suffused with a bluish grey, the powdered patches being traversed by dark brown lines of the ground-colour. Brazil.
P. albangula H.-Schäfl. (174 e) is a charming, tiny insect, in which the apex of the forewing is
eusiformly extended and the margin of the hindwing projects in the middle like a tooth. Above purple-brown
with deep dark transverse bands and ferruginous spots in a row before the margin of the forewing and in a
treble row above the anal marginal part. Forewing with the 3 subapical, most minute spots and a fourth in
the cell-end area. Beneath in the costal and basal parts ferruginous, dusted over and speckled with black;
at the anal angle on all the wings lighter yellowish-white with ferruginous markings. It is reported to originate
from Rio de Janeiro.

P. meris Plötz (174 e) differs only little from the preceding, above black with 2 deeper black transverse meris.
bands and 3 small white subapical dots. Beneath somewhat duller, tinted more olive. Hindwing extended
rather long. Colombia.


Distinguished from Pellia by the longer, rectangularly bent antennal club, the presence of a costal
fold in the ♂, and a longer 3rd palpal joint. Here the hindwing also shows a hair-pencil at the base of
the costal margin and the fringed posterior tibiae show 2 pair of spurs. Only one species:

P. corbulo Cr. (174 e) looks like a large Pellia, deep blackish-brown with faded black transverse
corbulo. bands and 3 minute subapical spots. In the ♂ the costal margin of the hindwing is of a light reddish-brown,
from which the dark pencil stands out distinctly. Beneath lighter, otherwise marked the same, at the proximal
margin of the hindwing and on the ventrum bluish-grey. From Surinam.

15. Genus: Mycteris Mab.

Likewise extremely approaching Pellia and, as there, with the hair-pencil of the hindwing and the
swelling of the subcostal veins. The palpi are much longer, rostriform, and have a rather pointed, straightly
porrect terminal joint. On the hindwing the subcostal vein rises much nearer at the base. No costal fold. 4
species are known:

M. caerulea Mab. (174 f). Above almost uni-coloured brownish-black, particularly in the ♂ with caerulea.
traces of darker bands, at the costal margin of the hindwing somewhat lighter. Beneath lighter, the proximal
margin of the forewing lila-grey, the proximal half of the hindwing light greyish-blue, in the ♂ darker. Guate-
mala to Colombia.

M. tyana Plötz (174 f) is similar, somewhat smaller and with a lighter, violetish-grey tyana.
costal-marginal area of the forewing, in which the beginnings of darker bands are to be noticed in a similar
way as in Pellia costimaculata (174 e). Beneath the proximal half of the hindwing is violetish-grey or bluish-
grey, both wings show traces of dark, brown bands. Brazil (Sao Paulo).

M. cambyseis Hew. (174 f) is allied to caerulea. Upper surface deep blackish-brown, both wings cambyseis.
with a submarginal row of grey spots, towards the apex larger, dying away analwards; the forewing exhibits
an indistinct, short grey band from the middle of the costal margin, the hindwing a similar one in the middle.
Beneath dark brown, the apex paler, the proximal margin grey; hindwing reddish-brown, the costal margin
and 2 indistinct transverse bands darker brown. Bolivia.

M. crispus Plötz (174 f) is above deep purple-brown with a violet shine, with a darkened margin crispus.
and 3 scarcely visible darker transverse bands similar to the Pellia-species; between the distal band and the
margin the ground-colour appears lighter. The under surface is also very dark, without any marking, the inner-
marginal area of the forewing brownish, the proximal half of the hindwing lighter, more violetish-grey, with
slightly darker veins. Venezuela.


Antennal club moderately thick, the pointed end uniformly bent; the 3rd palpal joint shortly porrect.
Costal fold absent; shape of wings rather narrow, the cell of the forewing narrow, too. Veins scarcely deviating
from Pellia; hindwing rounded off. Posterior tibiae fringed with 2 pair of spurs.

N. bromius Stoll (= fissimaculata Mab.) (174 f). Above dark brown, at the cell-end with a thick, bromius.
black spot with two white pupils; before the apex there are 3 small subapical dots, 2 more between the median
and lower radial veins. Beneath much lighter olive-brown, at the anal part of the hindwing more bluish-grey
with the spots as above. From Surinam. — The larva, according to Stoll, living on Solanum spinosum, is green
with a black head and an interrupted black dorsal line and changes into a brownish pupa on the upper surface
of the leaf being somewhat drawn together by few threads.

N. pelarge G. de S. (174 f, g) is perhaps of the same species, above with somewhat more distinct pelarge.
bands; beneath the hindwing is much more extensively blue or like-grey, towards the costal margin with 3
darker bands. Nicaragua.
17. Genus: Cyclosaemia Mab.

Scarcely to be separated from Nisoniades. The forewing is comparatively a little broader, the hindwing still rounder, the terminal joint of the palpi longer. Quite a number of mostly rather similar forms.

herennius. C. herennius Cr. (174 g). Above deep blackish-brown, in the basal half almost black, at the cell-end with a large, black spot twice pupilled white, and behind it besides 2 black bands. Hindwing the same, though without the cell-spot. Beneath the forewing is lighter brown, at the proximal margin light brownish; the hindwing is bluish-grey with 3 black transverse bands, the proximal one of which bifurcated in the shape of a Y near the costal margin. South America.

caeceus. C. caeceus Plötz (174 g) is somewhat similar, discernible particularly by the non-pupilled discal spot on the forewing. The colour is a lighter, duller brown, the bands are narrower. Beneath the hindwing is lighter lilac-grey, the bands pale brownish, the proximal one not forked. Patria unknown.

morus. C. morus Plötz (174 g) is very much larger, it has only a singly pupilled cell-spot, only one curved band behind it, in which there are 3 white subapical dots below the costal margin; hindwing at the distal margin somewhat lighter with small darker spots in the spaces between the veins. Beneath the proximal third of the hindwing is bluish, at the proximal margin almost entirely white. Brazil.

monophthalma. C. monophthalma Plötz (= trigonilla Šech.) (174 g) is smaller, above similar to morus, but much lighter brown; the singly pupilled cell-spot is situated in a yellowish ring; the subapical spots are absent. Beneath the hindwing is monotonously light brown with 2 fine brown transverse bands, and in front of a marginal line with a row of dark triangular spots. Brazil.

phidyle. C. phidyle G. & S. (174 g) like caeceus, has a non-pupilled black cell-spot, but it is much larger; the brown wings are lighter in the disc, 3 subapical dots in one line are encircled by black. The species is easily recognized by the light reddish-yellow apical half of the forewing beneath, in which the cell-spot is entirely absent. It seems hitherto only to be known from Panama.

myris. C. myris Mab. is just as large as phidyle; the apex of the forewing is prolonged. Above reddish-brown, without apical dots, with an indistinct blackish postdiscal band, which is angled on the upper radial vein and runs obliquely to the proximal margin; in the large black cell-spot there is a white dot, from where a brown shade extends to the proximal margin. The hindwing shows traces of 2 darker postmedian nebulos bands. Beneath monotonously yellow-brown, the cell-spot indicated by reddish-brown, the bands are more distinct than above. It is perhaps no Cyclosaemia. Described according to 1 ♀ from Sa. Catharina.

anastomosis. C. anastomosis Mab. (174 h) is a more common species, above brown with 2 darker transverse bands and the cell-spot encircled by yellowish, with 2 white dots there in. Beneath lighter, the bands narrower, on the hindwing spot-shaped; the proximal margin of the hindwing is bluish-grey. Widely distributed from Mexico to Brazil.

binocularis. C. binocularis Mskhl. (= earina Hew.) (174 h) differs by more spot-shaped transverse bands, the proximal one being only indicated on the forewing, the margin darkened. Beneath the bluish-grey colour is absent at the proximal margin of the hindwing, instead of which there is a large black spot at the anal angle. Pará.

gratiosa. C. gratiosa Mab. resembles binocularis. Forewing above yellowish brown with a broad, brown marginal band and a curved postdiscal band; the cell-spot as in the two preceding encircled by yellow with 2 white dots, the basal area darker brown. Hindwing with 3 bent bands. Beneath light brown, the bands more distinct, the forewing at the proximal margin light ash-grey. Hindwing at the costal and distal margins light grey, from the middle to the proximal angle bluish-white; the bands on the brown ground distinctly defined, on the white ground dying away except the marginal band remaining dark. Panama (Chiriquí).

jacobus. C. jacobus Plötz (174 h) differs by the cell-spot above exhibiting 3 white dots and by 3 subapical hyaline dots. Beneath the hindwing is quite light blue with an irregular black border. From Rio.

paullinus. C. paullinus Cr. (174 h) is above quite similar to gratiosa, but it has a white subapical dot; beneath the whitish parts are coloured ochreous reddish-yellow. Guiana.

metallica. C. metallica Mab. is easily recognized by the metallic green head and thorax; above coppery brown, the forewing with 3 white subapical dots encircled by black; an antemarginal, a postdiscal and a discal brown band, the two distal ones spotted, the proximal one extending to the proximal margin as the continuation of the large, black twice white-pupilled cell-spot. The hindwing shows 3 bands of brown spots. The under surface is light grey, almost white, the bands pale dirty brown. Guiana, Brazil.

diophthalma. C. diophthalma Plötz (174 h) in its colour and marking resembles rather much monophthalma, but the cell-spot itself is divided into 2 separate spots beneath each other, and the antterminal macular band
bifurcates towards the costal margin like a Y, the hindwing shows at the cell-end a third transverse band reaching neither the costal margin nor the proximal margin. Beneath the hindwing is extensively whitish, towards the base and at the proximal margin dusted with blue with a dark brown marginal macular band. Patria unknown.

**C. eleae** Hew. is most closely allied to *jacobus* (174 h), distinguished by 2 postdiscal transverse bands, *eleae*, a third, shortened band extends from the oval, twice white-pupilled discal spot to the proximal margin; inwardly the discal spot is bordered lighter. Beneath the brown forewing is lighter at the proximal margin, at the base blue; the hindwing is entirely sky-blue, only at the apex there is a black spot and the fringes are dark brown. Expanse of wings: 1 \( \frac{1}{2} \) inches. Cayenne.

**C. lathae** Hew. (174 i) stands between *herennius* and *jacobus* (174 h). Above reddish-brown, marked *lathae* as *herennius*. Beneath the forewing is also a little tinted blue at the base; the hindwing is pale blue only as far as the distal transverse band; in the place of the proximal transverse band there is a row of grey spots. Described from Bolivia.

**C. falsica** Hew. is most closely allied to *paullimus* (174 h), distinguished by 3 small subapical dots *falsica* and a fourth farther below; an antterminal, dark macular band is situated between the postdiscal band and marginal band. Beneath the forewing shows an ochreous-yellow spot near the apex. Hindwing yellow with some costal-marginal spots, a brown, indistinct, postdiscal transverse band and a brown margin, in front of which is a row of indistinct spots, and at the anal angle a black spot. Cayenne.

**C. parus** Mab. is very closely allied to *falsica*, distinguished by the absence of all the transverse bands, *parus*, only the margin is darkened by a violet lustre, with a white subapical dot. The black discal spot shows only one white pupil. Hindwing with a broader margin. Beneath the forewing is dull black, at the proximal angle with 2 yellow spots. Hindwing blackish with 3 yellow bands: a narrow one at the margin, before it a broader one proximally dentate, and the discal band extending from the proximal margin only to the middle. From Porto Cabello.

**C. albata** Mab. (174 i) deviates very much from the other species by the wings showing an almost *albata*, white discal area. The basal and marginal areas are yellowish-brown, the latter towards the distal margin darkened; at the cell-end there are, as in *dioptratum*, 2 separate, white-pupilled spots. The hindwing shows at the margin 3 black transverse bands. Colombia, Bolivia, Peru.

18. Genus: **Anastrus** Hbn.

The antennae have a long, slender, gradually thickened club terminating equably bent into the thin point. The short, obtuse terminal joint of the palpi is perfect. Forewing with a costal fold, the apex somewhat produced, the distal margin convex; the cell long and narrow. The anal angle of the hindwing somewhat produced. Posterior tibiae with 2 pair of spurs and a long hair-tuft at the proximal end. The genus is very closely allied to the following genus and so far contains 6 species.

**A. obscurus** Hbn. (174 i) is above deep blackish-brown, at the costal margin, the distal margin of *obscurus*, both wings and a discal band of the hindwing with a violet reflection; the ? is lighter brown with faintly visible darker bands and a discal spot of the forewing. Under surface much lighter and more reddish brown, with 2 narrow transverse bands removed rather far towards the margin. Widely distributed in South America.

**A. neaeris** Meschr. (= *obscurus* Bttr. nec Hbn.) (174 i) is above very similar, the costal margin not *neaeris*, so extensively reflecting violet, this colour being more confined to a subapical costal-marginal spot; easily discernible by the whitish greyish-blue anal part of the hindwing beneath. Widely distributed from Mexico to Colombia, Venezuela.

**A. petius** Meschr. (174 i) is likewise similar, above deep purple-black, the forewing exhibits towards *petius*, the proximal angle near the margin, the hindwing along the whole distal margin bluish-grey dusting; here also a spot in the disc is coloured the same. Beneath almost uni-coloured reddish-brown. From Surinam.

**A. austera** Pritte. One ? without the patria being stated, but described by v. Prettie with a *austera*, great number of Brazilian lepidoptera from Rio de Janeiro, according to the denomination by Herrich-Schaeffer, has the size and shape of *Eoantis thorax* (176 b), but above the colour turns more bluish. The apex of the forewing is obtuse; the wings above without lighter spots. At the costal margin, in front of the distal margin and at the proximal margin dispersed, light bluish-grey atoms; the distal margins of both wings are without this dusting. Under surface dark cinnamon-brown. Forewing scantily, hindwing almost entirely covered with small light blue scales, nearly of the colouring of *Lycaena corydon*. Head, abdomen and antennae dark brown; beneath the whole insect is silvery grey.

**A. subchalybeus** Mab. is above violaceous black with a bluish-violet reflection; the forewing shows *subchalybeus*, 2 broad black bands growing broader and Anastomosing in the disc, and a third at the base, besides a black
marginal band which is broader on the hindwing; the discal band is angled on the hindwing. The under surface is lighter, more brownish, with the same, though fainter markings. Expanse of wings: 37 mm. Manaos.

A. obliqua Plötz (174 i) is very different: above purple blackish-brown, with 3 broad, oblique transverse bands, the middle one of which extends on the forewing from the middle of the costal margin to the proximal angle, the short distal one from the distal fourth of the costal margin to the upper third of the distal margin, which is darkened. Beneath uni-coloured light reddish-brown. Brazil, Colombia.

19. Genus: **Gorgophone** G. u. S.

Different by the absence of the costal fold and of the hair-pencil on the posterior tibiae. Only 1 species:

E. meliboea G. & S. (175 a) resembles rather much *Anastr. neaeris* (174 e), but it is larger, deep purple-black, with lighter hirsute violet antemarginal bands, beneath the same as *neaeris*. Described from Panama.

G. patens Plötz (175 a) may belong hereto. Above as *Echel. varius*, but only with one distinct discal band; hindwing at the proximal margin narrowly ochreous-yellow. Beneath reddish-brown, in the disc particularly of the hindwing lighter, tinged violet, the hindwing with a broad, reddish-brown, postdiscal transverse band. Described from Rio.

20. Genus: **Echelatus** G. u. S.

Likewise very closely allied to *Anastrus*; distinguished by the absence of the pencil at the posterior tibiae, whereas the costal fold is mostly very well developed. The forewing is generally somewhat longer, narrower, with a less truncate apex, the hindwing comparatively smaller.

E. varius Mab. (175 a, b) is a common species, distributed from Mexico through the whole of Central America to Colombia and Venezuela. Above dark brown, towards the margin darker with 2 broad, faded, darker transverse bands. Beneath lighter, reddish-brown, on the hindwing in the anal part light bluish-grey, with 3 darker transverse bands. Costal fold well developed.

E. eugramma Mab. differs from *varius* by 3 small subapical dots and 2 more below them, all being encircled by black; the transverse bands are black and distinct. The hindwing is in the anal half of a bright blue, otherwise ferruginous with 3 dark transverse bands therein. From Panama (Chiriqui).

E. robigus Plötz (= *luctuosus* G. & S.) (175 a) is above the same as *varius*, beneath on the hindwing the anal half is not bluish-white, but of the same colour with the rest of the wing. If the genitals were not constantly different from *varius*, we might think it to be a local form, since the species is known from Western Mexico, where *varius* is absent, besides from Southern Brazil and Colombia.

E. sempiterinus Bltr. & Dec. (175 a) has above a somewhat lighter ground-colour with more distinct transverse bands and a large, black, quadrangular cell-macula; the hindwings are also distinctly marked. Beneath scarcely different from *varius*. Separated by the costal fold being almost absent in the ♂. Common and widely distributed from Mexico to the Amazon.

E. polyacenus Mab. resembles *platypterus* in its shape, the forewing with a more pointed apex, brownish-red with 2 discal bands, one near the base, the other extending through the disc and bifurcating at the cell-end, sending one branch to the costa at the margin a more deeply coloured, badly demarcated band. In the hindwing similar marking, the space between the two bands rather genuinely reddish-brown. Colombia.

E. platypterus Mab. This imago unknown to us is compared by *Marille* with *Achlyodes itandii* Latr. (Encycl. Méthod. 9, p. 761, Nr. 95 Note) which, however, is not at all stated in the Hesperid catalogue by *Marille* himself. The patria is known neither of this nor of *platypterus*; it is described to be of a shape similar to *itandii*, blackish-brown, with 2 badly defined bands on the forewing; the first very broad, occupying the whole cell and dissolved in the basal brown; the second very broad; at the margin a broad band.

E. diversus Mab. approaches *luctuosus*; smaller with distinct, black macular bands, the wings in a certain exposure to light with a violet reflection. Beneath brown with an ochreous-yellow apical spot, also the proximal margin of the same colour; hindwing ochreous-red with 3 distinct macular bands. Colombia, Brazil.

E. simplior Plötz (= ♀ alburnea Plötz) (175 b) resembles *sempiterinus* above by the distinct band-saving and the cell-spot, but beneath the hindwing is quite brown as in *robigus*, without the blue anal part; the transverse bands extend almost to the proximal margin. Brazil, Paraguay.
GRAIS; MYLON; EUDAMIDAS; XENOPHANES. By Dr. M. Draudt.


Is very closely allied to Anastrus, chiefly distinguished by its longer and narrower cell of the forewing; costal fold and hair-pencils on the posterior tibiae are absent.

G. stigmaticus Mab. (= fumosus Plötz) (175 b). A common, widely distributed, large species. Above stigmaticus. brown with 2 spotted darker transverse bands, the proximal one being shortened and provided with 2 or 3 minute, white, subapical hyaline dots. Beneath somewhat lighter, otherwise marked the same. From Mexico to Panama, Colombia and southern Brazil, occurring also in Jamaica.

G. choricus Schs. is just as large, dark brown, with a violet lustre, at the distal margin darker, the choricus. transverse bands somewhat spotted; 3 small, subapical, hyaline dots. Beneath separated by the anal part of the hindwing being scaled lilac-grey, the distal brown macular band being more distinctly prominent. From Mexico (Paso de San Juan).

22. Genus: Mylon G. & S.

The third joint of the horizontally erected pulpi is very short. The forewings are broad, at the apex somewhat stunted. The posterior tibiae exhibit a hair-pencil and 2 pair of spurs.

M. lassia Hew. (175 c) is above whitish, dusted grey, in the basal and marginal thirds of the fore- lassia. wing, and more narrowly at the margin of the hindwing densely dusted with brown and very much like Euda- midas melander from which it is easily separated by 4 small, hyaline, subapical spots and the long hair-pencils of the posterior tibiae. Very common and widely distributed from Mexico to Colombia and Bolivia.

M. pulcherius Fbr. (175 c) is very similar, larger, the discal area of the hindwing more uniformly pulcherius. dusted brown, faintly contrasting with the basal and marginal areas; the dark marginal area of the hindwing broader. Mexico to Colombia and Brazil.

M. pelopidas F. Forewing above dark ash-grey with a dark brown discal line. Hindwing ash-grey, pelopidas. Body dark brown, antennae black. Hindwing with darker marginal dots. Under surface ash-grey. — This very short description which fits to quite a number of species mentions as patria: „in Indiis“, which probably means the West Indies formerly constituted by great parts of tropical America.

23. Genus: Eudamidas G. & S.

Different from Mylon merely by the absence of the hair-pencil of the posterior tibiae.

E. melander Cr. (175 c) is a well-known, very common species with greyish-white wings dusted melander. brown in the basal and marginal areas, with torn, dark macular bands; easily discernible from the very similar Mylon lassia by the absence of the small hyaline spots and of the hair-pencils. From Mexico to Paraguay; — From Peru f. obscurior Schs. was described; above darker and browner, forewing without a discal spot, the subterminal shade darker and not dentate.

E. ozema Bttr. (175 c) is similar, smaller, paler, more thinly scaled, somewhat iridescent, the marginal ozema. and basal areas only slightly darkened. Very common from Mexico to Colombia and Southern Brazil.

E. cajus Plötz (175 c) is somewhat larger, with a more bent costal margin of the forewing and cajus. a more pointed apex. The whitish wings are dusted more reddish-brown, the discal area of the forewing is not remarkably lighter, the dark antemarginal band is particularly on the forewing less dentate and more blurred. Beneath almost without markings except the antemarginal bands. Hitherto apparently only known from Peru and Bolivia.


Separated from the preceding genera by the shorter, more rounded wings without a costal fold; nor do the posterior tibiae exhibit a hair-pencil.

V
CARRHENES. By Dr. M. Draudt.

Tryxus. X. tryxus Cr. (175 e). Above brownish-grey, dusted bluish with numerous hyaline spots arranged like a band; beneath at the proximal margin of the forewing and in the disc of the hindwing almost purely white. Everywhere very common from Mexico to Southern Brazil, generally not rising beyond altitudes of 3 to 4000 ft.

Ruatanensis. X. ruatanensis G. & S. is probably of the same species. It is smaller and much darker, particularly on the under surface of the hindwing the white area is very narrowly confined, the hyaline spots smaller. Known only from the Island of Ruatan (Honduras).

25. Genus: Carrhenes G. & S.

Jusceceus. C. fusceceus Mab. (175 d) is above dark greyish-brown with a reddish shine, spotted darker in the shape of transverse bands, and with 7 minute hyaline spots, one of them in the cell, 3 subapical ones and 3 below them. Beneath somewhat lighter, of a reddish-yellow, marked as above with a black spot at the anal angle of the hindwing. Mexico to Honduras.

Calidius. C. calidius G. & S. (175 d) is very similar, in the middle of the proximal margin of the forewing and in the disc of the hindwing brightened up by lilac whitish, whereby the macular band of the hindwing is more distinct. Beneath the hindwings are more whitish, the macular bands often almost extinct. Mexico to the Amazon.

Chaeremon. C. chaeremon Mab. (175 d) is considerably larger, very similar, but with clearer and more distinct markings; wings in the basal and marginal areas more blackish-grey, in the disc lighter, particularly on the hindwing almost white. The ? is still larger, the bases of the wings darker, the rest whiter, the markings more feeble. Expanse of wings: 35 to 38 mm. Sao Paulo.

Autander. C. autander Mab. resembles Chionara asychis (178 a). Wings greyish-black with a marginal band of minute black spots being anteriorly pupilled whitish; at the apex there are 3 quadrangular hyaline spots, below them a blackish band; in the disc there are 2 black, interrupted dentate lines, between them whitish; in the submedian area a red-brown spot. The hindwing is brownish black, with an antemedian white band bordered with black, near the margin with a reddish-white macular band. Beneath the hindwing is white, at the proximal margin bluish with 3 blackish macular bands in the disc. Expanse of wings: 34 mm. Buenos Ayres.

Besa. C. besa Mab. is dark greyish-yellow with 3 apical hyaline dots on the forewing, an oblong cell-spot with a small one at the costal margin above it and 4 behind it between the median and lower radial veins. Hindwing with a dark discal band, along the margin with small, indistinct, yellowish spots, also in the middle. The under surface is lighter, more yellow, the forewing with a bent row of 5 or 6 yellowish spots before the apex; on the hindwing beneath the light macular bands are more distinct, particularly the distal one; in the cell a round, yellowish-white spot. Expanse of wings: 28 mm. Patria unknown.

Andraemon. C. andraemon Mab. has the size and shape of chaeremon (175 d). Wings dirty white, dusted light reddish-brown, the base of the forewing brown bordered by a darker colour, projecting below the cell, here with a quadrangular, light yellow spot; the discal area is almost white, at the costal margin with a brown triangle, the apex of which is situated at the cell-end; into the light brown marginal area the white discal area projects in 2 small spots between the radial veins. Hindwing brown, the costal margin as far as the middle white, behind it with 2 brown bands. Under surface white with a brown costal-marginal triangle. Colombia.

Callipetes. C. callipetes G. & S. (175 d) resembles jusceceus, but it has more numerous hyaline spots; the spot at the cell-end is double, above them there is another spot at the costal margin; the discal spots are larger and extend almost to the proximal margin. The hindwing also shows 2 hyaline spots in the disc. Beneath the hindwing does not show a spot at the anal angle. From Southern Mexico to Colombia, everywhere rare.

Meridensis. C. meridensis G. & S. (175 d) approaches callipetes and is easily discernible by the whitish-blue anal half of the hindwing beneath. Costa Rica, Venezuela.

Canescens. C. canescens Flbr. (175 d, e) is another very similar species, smaller, Of a paler colour, with smaller hyaline spots; on the forewing the dark spots are more distinct. Beneath the colour is still much paler, the spots very irregular. Widely distributed and common from Mexico to Colombia.

Leada. C. leada Flbr. (175 e) is above in the disc still much paler, almost yellowish-white, so that a large, darker apical spot is very prominent, the basal area being darkened, too. Costa Rica to Paraguay.

Dilucida. C. dilucida Mabfl. (175 e) is a species placed here as doubtful by Mabille. Above greyish-brown, in the discal area strewn with red with 3 small apical hyaline spots and a broad discal hyaline band. The hind-
wing shows a very broad hyaline discal band and a narrow one behind it. Beneath white with greyish-black, spotted transverse bands. From Surinam.


This genus contains more than a dozen of rather small species with comparatively short and broad forewings, with a rather rounded apex, mostly dark-coloured, with a whitish or yellowish discal area. The antennal club is strong, bent. The 3rd palpal joint is rather long, straightly porrect. The cell of the forewing is short and narrow, the lower median vein rises almost just as distant from the base as from the upper median vein, the latter rising rather near the lower cell-angle. The posterior tibiae exhibit 2 pair of spurs, but no hair-pencil.

P. pammene G. & S. (175 e) is a small species, above blackish-brown with a rather broad, white discal band which is rounded and narrowed on the forewing, not reaching the costal margin and with a faint yellow tint towards the proximal margin. The dark ground-colour is postdiscally somewhat lighter in the shape of a band. The under surface is much lighter, the hindwing as far as the base greyish-white. From Nicaragua.

P. unifasciata Fldr. (175 e) approximates the preceding, but it is easily discernible by 5 minute, unifasciata. white, subapical dots and orange-yellow colouring at the proximal margin of the white discal band on the forewing. Colombia (Bogotá).

P. thoria Hev. differs from pammene (175 e) by a considerably narrower white discal area, particularly thoria. on the forewing. Ecuador.

P. melicertes G. & S. (175 e) is likewise closely allied to the preceding and separable by the white melicertes. discal area being slightly smoked in a brownish shade, reaching the costal margin on the forewing and being somewhat snapped off below the median veins, whilst on the hindwing it does not reach the proximal margin. From Panama (Chiriqui) and Costa Rica.

P. flavofasciata Hev. (175 f) has only on the forewing a band of yellow colour shaped as in pammene, flavofasciata, the hindwing remaining quite black, except a lighter part at the costal margin at most. Ecuador, Bolivia.

P. xantholeuce Mab. (175 f) has likewise a yellow discal band occurring, however, also on the hind- xantholeuce. wing. The wings are of a lighter brown, before the margin somewhat dark in the shape of a band, and also postdiscally at the costal margin and behind the cell clouded darker. Beneath the hindwing is bluish-grey in the anal half and at the base. Panama.

P. fassli sp. nov. (175 f) is somewhat similar, but the yellow discal band on the forewing has the fassli. shape of an oval spot and reaches neither the costal margin nor the proximal margin. The light distal area is veined dark, while the band is not. The spot of the hindwing is of a purer white, at the costal margin very much expanded and scarcely extends beyond the median. Beneath the hindwing is almost entirely white, except a narrow brownish-grey marginal part with some small light spots in it, at the base it is somewhat bluish. Several specimens from Colombia (Rio Negro, Sosomoco) and Bolivia (Songo).

P. latrea Hev. (175 f) initiates another group of mostly somewhat larger species, in which the forewing latrea. shows behind the white, mostly darker veined discal area a second brownish, smoked band sharply intersected by the black veins, appearing in the present species between the median vein and lower radial vein and exhibiting above it towards the margin 2 smaller spots besides; the forewing exhibits an indistinct, antemarginal row of brownish dots. The white discal area is smoked brown towards the costal margin. From Nicaragua.

P. thestia Hev. (175 f) is in the ♀ similar, the band of the forewing broader, as far as the costal thestia. margin of a pure white, not reaching the proximal margin on the hindwing; on the forewing there is a yellow spot in the submedian area near the base. In the ♀ the band of the forewing is smoked grey. Ecuador.

P. paralus G. & S. (= thestia Dru. nov Hev.) (175 f, ♀) is almost the same, but it has a considerably paralus. narrower white band being still more shortened particularly on the hindwing. Peru.

P. effusa sp. nov. (175 g) is the most closely allied to fassli (175 f). The ground-colour is a much effusa. duller greyish-brown, the broad, whitish band extending from the costal margin to the proximal margin is distally not sharply defined; behind it there are yet some whitish diffuse spots, particularly distinct in the submedian area and between the radial veins. Hindwing as in fassli. Beneath almost entirely white. From East Colombia (Rio Negro).

P. confusa sp. nov. (175 g) is very similar, the band much narrower, quite faded and ochreous- confusa. yellow; also on the hindwing it is narrower and extends farther to the proximal margin, which is haired light greyish-blue. Beneath white, tinted ochreous, with a light blue base of the hindwing and a light brownish-grey apical part of the forewing and distal margin of the hindwing in which there are small light spots. From Panama.
ACHLYODES. By Dr. M. Draudt.

caliadne. P. caliadne G. & S. (175 g) is likewise very closely allied to thestia, more variegated owing to the much broader, light brown postdiscal band and the light yellowish marginal dots; in the submedian area near the base of the forewing there is a large, white spot parted black by the fold; the broad, white discal area of the hindwing does not reach the proximal margin. Described from Costa Rica.

violaceus. P. violaceus Mob. (175 g) has an exterior somewhat similar to the preceding, but it probably scarcely belongs hereto owing to the shorter palpi and some other slight differences. Its size is very variable. The broad, white, black-veined discal band is at the proximal margin more or less yellow; at the cell-end small black discal spots may be present or absent; the marginal area on the forewing is extensively violetish-grey. From Peru and Bolivia. — As fimida form, nov. (175 h) I denominate specimens from the valley of the Rio Aguna from the West Colombian Cordilleras, entirely dusted brownish-grey, except a conspicuous yellow spot on the proximal margin of the forewing and the light yellowish costal-marginal part of the hindwing. They look rather different, but are probably not a species of their own.


Distinguished from the preceding by the much shorter terminal joint of the palpi, and a less strong and less bent antennal club. On the forewing the lower median vein rises somewhat nearer at the base.

fridericus. A. fridericus Hbn. (175 h) is one of the smaller species; above black, on the forewing postdiscal irregulary blackish-brown band-shaped lighter, on the hindwing with a very indistinct lighter discal band. Beneath somewhat lighter with 2 scarcely lighter submarginal bands; on the hindwing the distal margin is greyish towards the anal angle, at the anal angle itself at least in more northern specimens distinctly spotted white; the light area crossed by a darker band. Panama to the Amazon and Brazil.

colligena. A. calligena Mob. (175 h) is very similar, on an average larger, and beneath always without whitish-grey on the hindwing. Mexico to Venezuela and Colombia.

calavis. A. calavis G. & S. (175 h) is an entirely monotonous blackish-brown species, beneath just a little lighter, at the proximal margin of the hindwing still lighter. Guatemala, Nicaragua, Panama.

bubaris. A. bubaris G. & S. (175 h) shows a small, apical hyaline dot and a light submarginal area on both wings. Described from Mexico.

simplex. A. simplex G. & S. (175 h, i) differs from bubaris by its larger size and 3 subapical dots. From Panama.

cyrna. A. cyrna Mob. (= fasciata G. & S.) (175 i) looks above exactly like simplex, but beneath the distal third of the forewing is orange or ochreous yellow in which there are 3 subapical dots. Panama.

braco. A. braco Pltz (175 i) is above deep blackish-brown with lighter antennae, median and postmedian parts, more distinct in the 2, in the shape of transverse bands. Beneath lighter, particularly towards the proximal margin more reddish-brown with darker macular bands in it. Panama to Brazil, Cuba.

prudens. A. prudens Pltz (175 i) is of a deep violetish-black, on the forewing postdiscal with a curved black macular band, behind it antemarginally lighter reddish-brown. Beneath lighter brownish, towards the proximal margin greyish with a darker, indistinct postdiscal band. Surinam, Cayenne.

thiena. A. thiena Pltz (175 i). Purple-brown, in the middle of the proximal margin of the forewing as far as the median black, above it with a cell-spot, and the beginnings of ante- and postmedian bands at the costal margin, before the darkened marginal part the band of the ground-colour is parted by a narrow, black, undulate line. Beneath somewhat lighter, more reddish brown, forewing indistinctly marked, hindwing with a cell-spot, a curved band behind it and a darkened margin. British Guiana; Pará.

serapion. A. serapion Pltz (175 i) is a very small species, doubtfully placed here. Above purple-brown with black transverse bands forming an angle on the median vein; on the hindwing they are somewhat finer and more indistinct. Beneath lighter, strewed darker, with indistinct markings. From Novo Friburgo.

protius. A. protius Pltz (= pulverea Mob.) (175 i). Above slate-coloured black with 2 curved black transverse bands and a similar antemarginal band interrupted in the middle on the forewing. Beneath lighter brownish, at the proximal angle of the forewing brightened up; here the proximal transverse band is absent. Brazil (Rio de Janeiro).

violetta. A. violetta Mob. is said to be a form of fridericus. Forewing without hyaline spots, black with deep violet macular bands, as if impressed, one at the base, one in the cell of 2 spots each, at the cell-end a broad band as far as the inner-marginal vein, behind it an undulate band of smaller spots, and before the black fringes a row of dots. Hindwing with 3 basal spots, 1 hina in the cell, behind it 3 separate macular bands. Beneath blackish, only at the base of the forewing light red-brown with the bands as above. Bolivia.
A. cyclops *Mab.* from Colombia and Guatemala has very broad forewings with a pointed apex, and *cyclops* rounded hindwings protracted in the middle of the margin, with a slightly lobate anal part. All the wings are black, tinted reddish; at the apex lighter, traversed by dark bands. In the forewing before the apex a curved row of black dots from the costa to the middle of the wing, where it often disappears, at the costa centre white and behind exhibiting a whitish macula, and also above the dot very finely papilled white.

A. colotes *G. & S.* (176 a). This species established according to but 2 ♀♂ entirely resembles *simplex colotes.* (175 h, i) above, but beneath it is very different: greyish-brown, on the hindwing and in the antemarginal area of the forewing lighter; the hindwing exhibits at the cell-end a band-shaped, dark spot and behind it a slightly bent, somewhat longer band, the base and margin being likewise darkened. Nicaragua and Panama.

A. oculus *Mab.* is dark red-brown, the forewing with 2 broad, straight bands touching the proximal *oculus* margin in a right angle, and with 3 small subapical dots; hindwing with a rounded spot at the base, behind it a semicircular band. Beneath lighter brown, the hindwing in the anal half of the distal margin yellow into which a piece of the black postdiscal band extends. Panama (Chiriqui).

A. orsus *Mab.* This species is unknown to me and its appertaining to this genus is questionable, *orsus.* Above reddish-brown, with 3 small subapical dots and 2 broad, black, faded bands suffused with violet; the hindwing shows a similar cell-spot and a curved median band, the margin being darkened, too. Beneath lustrous lilac-grey, hindwing with 2 curved bands, one postdiscal and one antemarginal band, which terminate before the proximal margin. From Porto Cabello.

28. Genus: *Pachyneuria* *Mab.*

A very peculiar genus deviating by the doubly bent, very strong costal-marginal vein excelling the subcostal vein in thickness, and by the remarkably strong submedian fold. Distal margin nearly just as long as the proximal margin; on the forewing the middle radial vein is much nearer to the upper one than to the lower. Terminal joint of the palpi conical, rather long, set straight forward. Antennae with a long club and a fine, bent apex. Posterior tibiae fringed with 2 pair of spurs.

*P. obscura* *Mab.* (176 a) is lustrous olive-grey with thick, black veins and a dentate antemarginal *obscura* line. Beneath dull black. Colombia, Peru, Bolivia.

29. Genus: *Praxis* *Mab.*

The only species known is a small insect with horizontally prorect palpi. Antennae with a fusiform club, bent round in the second third. Distal margin of forewing below the lower median vein with a concavity so that above it a small angle arises. Hindwing somewhat angled. Posterior tibiae with long, fluffy hair and 2 pair of short spurs.

*P. quadrata* *Mab.* is dark brown with a black basal stripe and a large, obliquely quadrangular spot *quadrata* in the disc, one point of which touches the costal margin; apex likewise darkened. Hindwing with 2 shortened bands from the costal margin. Beneath reddish-brown, at the proximal margin of the forewing whitish. Described according to 1 ♀ from Massaury.

30. Genus: *Sostrata* *G. & S.*

The antennal club is longer than in the preceding genus, the 3rd palpal joint likewise longer. Forewing longer and narrower with a rounded distal margin and costal fold. Posterior tibiae with 2 pair of spurs. On the whole not dissimilar to the species of *Pachytes* and to some blue *Pythonides.*

*S. scintillans* *Mab.* (176 a) is blackish, towards the margin with a lilac reflection, strewn with numerous *scintillans* silvery-blue, small scale-spots, and some narrow, black undulate bands, some postmedian, rather inconspicuous, small hyaline spots. Beneath lighter brown with darker, undulate transverse lines. Mexico to Brazil.

*S. adamas* *H.-Schäff.* (= *leucorrhoea* *G. & S.*) (176 a) is above the same, but beneath the anal part *adamas* of the hindwing is bluish-white; also on the forewing the proximal margin is spotted white. From Panama to Colombia.

*S. pusilla* *G. & S.* (176 a) is considerably smaller, of a purer black and only towards the base *pusilla* strewn with silvery blue; the subapical dots of the forewings are absent. Nicaragua; Panama; Amazon.

*S. plumbrago* *Pötz* (= *chalybs* *Mab.*) (176 a) is brown with a broad, black transverse band strewn *plumbrago* with silvery blue. Beneath lighter brown with a yellowish base and proximal margin, the hindwing suffused with a lustrous grey, with a black macular band, in the middle double. From Peru (Chanchamayo).

Distinguished by the oblong shape of the wings with a comparatively short distal margin. The cell of the forewing is broad and short; costal fold absent. Antennal club long and sharp. Palpi thickly scaled with a long, black terminal joint. Posterior tibiae with a hair-tuft and 2 pair of spurs.

M. hemes Cr. (176 b) is black with small, white discal and cellular spots, and 5 white subapical dots in a curved row. The hindwing shows a very broad, white discal band extending from the costal margin to the proximal margin. In the ♀ the discal spots and the white area of the hindwing are enlarged. Guiana, Brazil.

M. marciana G. & S. (176 b) is very closely allied to hemes, but the white area of the hindwing is much broader and the forewing is without the white cell-spot. From Panama.

M. marica G. & S. (176 b) almost looks like a Potamanax, the discal band of the forewing being much steeper and standing rectangularly on the proximal margin; the hindwings are longer, too, and thereby also the discal band ending at the anal angle appears steeper. Nicaragua.

M. leucaspi Mab. is above blackish-brown with 5 subapical and 4 discal white spots. Of the latter that at the costal margin is small, in the cell there is a larger one. Hindwing with a broad, white transverse band. Beneath marked the same, but of a paler colour; on the hindwing the basal part is white, the white band broader. Abdomen above black, beneath white with a black annulus whereby it differs from the closely allied, smaller hemes the abdomen of which is above belted white. From Cayenne and Brazil.

M. elito F. (176 b) resembles hemes, but it has about the same shape of wings as marica, with a convex projection of the hindwing in the middle of the margin and a concavity below it so that a somewhat rounded anal lobe is created. The discal spots situate below the cell of the forewing are somewhat extended and the white spot of the hindwing has an oval shape and touches neither the costal nor proximal margins. Guiana, Brazil.


The genus contains some conspicuous representatives with a slender, bent antennal club, porrect palpi, with a broad second and rather short, conical terminal joint. The apex of the forewing is almost ensiformly pointed, the distal margin very convex, the hindwing very broad, rounded quadrangular. The posterior tibiae with a hair-pencil and 2 pair of spurs. Some species are very common; the black insects are fond of resting on umbels and other white blossoms, noticeable from afar, with their wings flatly spread, the apical part of the forewing being very bent above the surface and hanging down.

E. thraso Hbn. (176 b) is a well-known, common species from Mexico through almost the whole of South America as far as Paraguay, also in the Antilles. Black, in the distal costal-marginal half of the forewing with an oblong-oval, brownish-grey, lighter part, in it at the costal margin itself a narrow dark spot; on both wings bluish-grey anterior marginal spots, in the disc towards the proximal margin larger, brownish-grey, round spots which are more or less extinct in the darker ♀.

E. ulpianus Poe y (= rossine Bttr.) (176 c) is somewhat similar, the bluish-grey marginal macular band appears as a straight, narrow band extending from the apex to the proximal angle and cutting off the strongly bulging distal margin. Instead of the light inner-marginal spots there is a broad, dark brown band projecting pointedly on the middle radial vein and being flawed towards the margin. Beneath very much dusted bluish-grey, particularly on the hindwing. From Brazil and Cuba.

E. papinianus Poe y (176 c) approximates ulpianus, the dark band of the forewing is here at the costal margin much broader, flown together with the cell-spot; the light marginal band is not prominent at all, instead of it a dark oblique line appears parting the apex and extending to the distal third of the proximal margin. Beneath only the anal half of the hindwing is dusted bluish-grey. Described from Cuba.

E. pallida Fldr. (♀ = mithridates F. ? = ozotes Bttr.) (176 d) is brownish-olive, with a lighter antimargarial oblique band and two indistinct, darker, undulate transverse bands and cell-spot. Beneath lighter brownish, the distal-marginal half almost whitish. Very common from Mexico to Colombia and Bolivia. Specimens flying at the latter locality seem to be constantly darker, but they are also found elsewhere.

E. agylla Mab. is somewhat larger and darker brownish-black than the preceding, in the basal third almost black, in the middle with an olive-green shine, before the apex are 3 white subapical dots, behind it a blackish-brown band expanded at the proximal margin; marginal area with a rather broad, black margin. The light area of the hindwing is reduced, with 3 dark brown bands. The under surface is light yellowish-brown, the hindwing blacker, the markings more distinct. The ♀ is larger, the apical dots more intense, behind them 2 more dots encircled by brown, in the cell a black spot. From Bolivia.
E. chlorocepha/ sp. nov. (176 d) is somewhat doubtful as to its position. Smaller than pallida, other- wise similar in the colour and marking, but the marginal area is not so broadly darkened, but only with a rather narrow, darker submarginal line. Three small, white subapical dots, the middle one being the smallest. Head and collar with a metallic green reflection. Under surface almost as above, but the hindwings are much darker brownish-black than the forewings. Bolivia (Rio Songo).

33. Genus: Sebaldia Mab.

Scarcely different from the preceding, but the ♀ exhibits a hair-tuft at the base of the costal margin of the hindwing above and a spot corresponding to it beneath. Only one well-known species:

S. busirus Cr. (= se baldus F.) (176 e) is above deep dark brown with still darker macular markings, busirus. Beneath the anal distal-marginal part of the hindwing is of a bright orange-yellow, in the ♀ with dark spots therein. From Mexico through Central America, Venezuela, Colombia, South East Brazil to Paraguay. In the Upper Amazon district the yellow of the hindwing beneath is reduced, in the Lower Amazon district and Guiana, also in Colombia, it disappears altogether: ♀ obscura Mab. — The larva is violetish-brown with alternate yellow and white belts, and lives on Citrus.

34. Genus: Doberes G. & S.

Separated from Eantis by the longer terminal joint of the palpi and much less ensiform apex of the forewing. The posterior tibiae exhibit only one pair of spurs and on the inside a hair-comb with short spiny bristles in it. Costal fold absent. Only 1 species.

D. hewitonius Reak. (= mexicanus Fldr., ananus Plötz) (176 d). Light brown with 2 chestnut-hewitonius brown costal-marginal spots, the proximal one rectangular, the distal one before the apex triangular, two undulate darker bands particularly on the hindwing broadly surrounded with a lighter colour. Beneath especially the hindwings are strewn violet. Mexico.

35. Genus: Masices G. & S.

Distinguished from the preceding genus by the longer antennal club and shorter terminal joint of the palpi. The middle radial vein of the hindwing is almost absent.

M. anticus Plötz (176 d) is dark blackish-brown with a violet reflection, 2 black cell-spots and an anticus oblique band of the forewing expanded towards the proximal margin, the margin darkened. Hindwing the same, but instead of the cell-spots there are 2 transverse bands. Beneath only little lighter, the cell-spots absent, and the apical half of the forewing somewhat lighter. From East Mexico. — In West Mexico, Costa Rica and Guatemala flies: ♀ sobrinus G. & S., in which the apical half of the forewing beneath shows decidedly yellow sobrinus colour. The ♀ is considerably larger.


Well distinguished by the peculiar shape of the wings: the proximal margin of the forewing is very concave, the proximal angle extended to a lobe, the hindwing is extended like a tooth on the upper radial vein. The antennal club is semicircularly bent. Palpi as in Eantis. Posterior tibiae with hair-pencil and 2 pair of spurs. The ♀ exhibits a costal fold.

A. nearchus Latr. (= ustus Hbn., paurus Warr., hippocalus Fldr., sataspes Fldr.) (176 e) is above nearchus deep blackish-brown with darker macular bands, between them in some places with a violet reflection. The under surface is reddish-brown, in the ♀ more yellowish-brown, of the macular bands only the distal border-lines are dark, the bands themselves somewhat darker brown. Very common from Mexico to Southern Brazil.


In its structure very near the preceding genus, but the tooth of the hindwing is shorter, mostly another small one below it, the distal margin below deeper concave, the apex of the forewing somewhat stunted. The slender antennal club is simply bent, the terminal joint of the palpi longer.

S. eros Hbn. (= westermannii Latr.) (176 e). Dark brown, in the ♀ densely powdered with eros bluish grey; the forewing exhibits 4 white subapical dots in a straight line, in the ♀ some more hyaline spots between the median and radial veins and 3 undulate, darker macular bands. Beneath marked the same, but the ground-colour in the ♀ is red, in the ♀ yellowish-brown. Mexico to Paraguay.
S. funebris Flbr. (176 e) is somewhat similar, more blackish-brown with 2 distinct, coherent transverse bands which are particularly on the hindwing acutely prominent; the distal one is here towards the margin bordered by a light grey stripe. Beneath lighter, red-brown, towards the margin on the forewing more yellowish-brown; in the distal transverse stripe of the forewing there are here, more distinct than above, some small hyaline spots proximally sharply bordered by dark. Mexico.

S. corosa Mob. (= sericus Plötz) (176 e) is above blackish-brown with a violet reflection; one antemedian and one postmedian jet-black transverse line; in the distal one being very much curved there are 3 white subapical hyaline spots and farther below two more; it is thickened into spots on the hindwing at the costal margin, the proximal one on the forewing projects in the middle angularly towards the base, in the cell of the hindwing angularly towards the margin. Beneath red-brown, marked as above. Mexico to Guiana.

S. liborius Plötz (176 e) is above not dissimilar; between the two transverse lines a third is inserted on the forewing. The small median hyaline spots are absent in the δ, whilst in the more greyish-brown δ they are present. At the costa of the forewing there is another small hyaline spot at the proximal band; body and base of wing show a greenish reflection. The under surface is more blackish-brown, in the anal half of the hindwing whitish. Bahia, Chapada.

S. incisa Mob. (= aserea Plötz) (176 e) is likewise similar, much smaller, darker, the 2 transverse bands broader, more faded, the proximal one on the hindwing reduced to a cell-spot. The forewing shows 2 white, subapical hyaline spots. Brazil.

S. pulverulenta Flbr. (= taeniatus Plötz, zampa Edoc.) (176 e) is brownish-grey with a white-hyaline, narrow median band distally projectig pointedly with 2 teeth on the median veins, whilst towards the costal margin it is distally, towards the proximal margin proximally bordered with a ferruginous yellow; marginal area especially towards the apex darkened. Hindwing in the disc and marginal area more extensively mixed with a ferruginous yellow, with a lighter bluish-grey transverse line in the distal area. Beneath the hindwing is almost white. From Arizona to Guatemala.

S. emorsa Flbr. (176 e) is a very variable species from Mexico, light greyish-brown, on both wings towards the proximal margin dusted bluish-white, with two whitish, partly hyaline macular bands and a very large, roundish spot behind the cell. Beneath almost white, only towards the margin light yellowish-brown, at the anal angle with a black spot. — At the same place and time there fly specimens with a very broad, purely white discal area on both wings and a more darkened base and marginal area: albimedia form. nov. (176 f), without showing any real transitions, for which reason it may be a species of its own.

38. Genus: Staphylus G. & S.

It forms together with Bolla Mob. one of the most difficult Hesperid genera. Many species are externally scarcely separable, at most by slight differences in the length of the last palpal joint, the palpal covering or other minute details, above all by the shape of the male genitalia. The antennal club is somewhat obtusely pointed, the thickening unilateral, so that the other side is concave. Costal fold present. The upper median vein rises a little before the cell-angle. The distal margin of the hindwing is somewhat indented below the subcostal vein. The 3rd palpal joint is rather long, straightly prorect, the two first joints long-haired. The posterior tibiae show 2 pair of spurs, no hair-pencil, but they are long-haired. We combine Bolla Mob. with it, the palpi are here somewhat shorter, the hindwings more rounded.

S. mazans Resk. (= ascalaphus Stgr., oeta Plötz, vincula Plötz) (176 f) is blackish-brown as all the following are, in some places particularly the δ scantily strewn with somewhat lighter, yellowish scales, with 2 very indistinct, broad, faded transverse bands and 2 small white subapical dots on the forewing, which may also disappear. The hindwing is in the cell and band-shaped behind it somewhat lighter spotted. Mexico to Colombia and Venezuela, also in Trinidad, everywhere very common.

S. hayhursti Edoc. is very closely allied to mazans; the colour of the wings is decidedly lighter with a prominent dark marking, and below purely white palpi which in mazans are intermixed with grey hair. It may be the northern representative of mazans from the southern United States, occurring, however, also in Mexico.

S. scoramus Schs. has the same shape of wings. Yellowish scales are interspersed into the ground-colour, the dark markings are almost entirely extinct; the scales form an antennal row of small, indistinct, greenish yellow spots, the same in the disc and near the base; 2 small subapical dots are present. Beneath of a duller colouring, the small subterminal spots a little more distinct, particularly on the hindwings. Palpi dark grey. Expanse of wings: 26 mm. Peru.

S. anginus Schs. (176 f) does not differ above from mazans. Beneath dark brown, the hindwing in the anal half thickly strewn with grey and with a white striiform spot at the cell-end. Expanse of wings: 21 mm. Novo Friburgo (Southern Brazil).
St. minor, Schs. has likewise the same shape as mazzans. The colour is a duller brown, scantily strewn minor, with 3 indistinct darker grey transverse lines near the base, in the disc and before the margin, which are parted into spots by the veins; the small subapical dots are absent. Beneath lighter brown, especially at the costal margin and apex of the forewing, at the base, proximal margin and anal angle of the hindwing strewn yellowish. Expanse of wings; 19 mm. Peru.

St. tadus Schs. has a more uniformly undulated distal margin of the hindwing than mazzans; the tadus, subapical hyaline dots are absent. Wings dark brown, scantily strewn light yellow; in the middle and before the margin minute, very indistinct, grey spots. Beneath of a duller brown with a grey cell-end streak of the hindwing, the small grey spots more distinct than above. Expanse of wings; 26 mm. Novo Friburgo.

St. aztecut Schd. (176 f) is also like mazzans, but the hindwings entirely margined, rounded, not undulate, and below the apex not excised. The colour is lighter than in bavahursti; the forewing exhibits 3 subapical dots. Mexico.

St. brennus G. & S. (176 f) is above almost uni-coloured blackish-brown, scantily strewn with brennus, ochreous, with a but lighter submarginal band; subapical dots absent. Palpi below clad with long, black and yellow scales. Panama.

St. gisella Mob. (= cussbius Plüz) (176 f) entirely resembles brennus, but it has 3 subapical dots.

St. gisela St. (Bogotá). — f. subgisela Strd. has besides 1 or 2 small discal dots.

St. epipe G. & S. (176 f) approaches giselas, but the palpi are beneath of a purer white; the epipe, 2 subapical dots are more or less extinct, the first being often entirely absent, whilst in the 2 they are better visible. Mexico to Guatemala.

St. orsinae G. & S. (176 g) is similar, much larger, more monotonously black without subapical dots; palpi longer procured, below whisht, the apex of the forewing is sharper, the distal margin straighter, the genitils are very different. Mexico.

St. terrens Schs. is above dark greyish-brown with dark brown bands at the base, in the middle between the median and the proximal margin with a cell-spot above it, and in the distal area with a fine ante-marginal line and at the distal margin large spots flown together towards the apex. Beneath dark brown with a light grey antemarginal band; anal half of hindwing grey, traversed by a brown band, at the end with a grey streak. Expanse of wings; 29 mm. Venezuela.

St. holophages Dyar (176 g) is above black with a slight bronze reflection, without any markings holophages, at all; beneath brownish-black. Palpi beneath grey intermixed with white scales; ventrum whish-grey with a black discal line. Expanse of wings; 22 mm. Mexico (Misanlta), taken in July.

St. litus (176 g) is likewise black with a slight bronze tint, unmarked; head and collar scantily inter-mixed with coppery scales. Beneath black with a greenish shine; palpi below, chest and a double line on the ventrum white; in the fringes of the apex of the forewing some white scales. Costal fold yellow. Expanse of wings; 25 mm. West Mexico (Sierra de Guerrero), taken in June.

St. alicus Schs. Dark brownish-grey with black transverse bands in the middle and behind it, similar alicus, basaI area and marginal spots; on the hindwing the dark basal area is flown together with the discal band. Forewing beneath dark brown, at the proximal margin lighter, the distal margin tinted violet; hindwing violetish-brown with the darker brown markings of the upper surface. Expanse of wings; 24 mm. South East Brazil.

St. subapicatus Schs. Head and palpi brown intermixed with yellow hairs. Forewing dark brown subapicatus, with a darker, oblique discal shade and a distal one being slightly bent towards the costal margin and composed of oblong spots; similar antemarginal spots; hindwing with a cell-spot and narrower discal and distal bands flown together at the costal margin; marginal spots irregular. Beneath the forewing is dark brown, at the costal margin, distal margin in the lower half and before the apex grey, the apex itself dark brown, hindwing somewhat lighter than above. Expanse of wings; 36 mm. Songolola (Mexico).

St. cylindus G. & S. (176 g) is likewise a larger species resembling somewhat Achlyodes simplex cylindus, (175 h, i) and cyclops, distinguished by the darker distal margin of the forewing beneath, which is ochreous-yellow in cyclops. Mexico to Costa Rica and Colombia.

St. imbras G. & S. (176 h). The ♀ is without the subapical dots, whilst the ♂ has 3 of them. Palpi imbras, longer than in brennus (176 f) which the species resembles very much. Mexico.

St. melagon Mob. is allied to imbras, but it has a grey base of the wings, and in the disc of melagon, the hindwing 2 grey transverse bands. Patina unknown.

St. saletas G. & S. differs by the wings being decidedly tinted ferruginous-brown, the dark transverse saletas, bands being more distinctly pronounced. Palpi below white, not yellow. The forewing shows 2 subapical dots, the ♂ besides 3 hyaline dots in the disc. Guatemala.
Staphylus: By Dr. M. Druadut.

St. evemerus. G. & S. (176 g) is blackish-brown with 3 indistinct, darker transverse bands than the other species, the 3 without, the 2 with 3 subapical dots. Palpi below ochreous-yellow intermixed with black hairs. Genital organs very different. Costa Rica.

St. unifascia. Mab. (176 g) has more blackish-grey wings, the 3 with one, the 2 with 2 subapical dots, with a darkened basal area. Palpi below white. Mexico, Honduras, Panama.

St. cupreiceps. Mab. (176 g). Blackish-brown with a bronze tint, at the base darker; forewing with a faded, reddish postdiscal band; hindwing with a black postmedian macular band, the margin darkened more in the shape of a band. Beneath with a more yellowish tone and more distinct bands. Palpi, head and collar orange-coppery. Mexico to Bolivia and East Brazil.

St. aurocapilla. Segr. (= vulgata Mabhr.) (176 h) is most similar, smaller, palpi below dull yellowish-white, the genital apparatus quite different. The 3 without, the 2 with 3 subapical dots. From Mexico to Argentina.

St. flavipalpis. Mab. (176 h) has somewhat longer extended forewings of a dark blackish-brown colour with the usual, faded, broad, dark transverse bands and 3 subapical dots, the middle dot being removed somewhat proximally. Beneath somewhat lighter brown. Face and palpi below ochreous-yellow. Copiapo (Chile).

St. ceus. Edw. differs from aurocapilla by the longer palpi being below purely white. Forewing of the 3 with 2, of the 2 with 3 subapical hyaline dots. Arizona, Mexico.

St. ascalon. Segr. is closely allied to mazza (176 f), but larger. Particularly different by the hindwing beneath being dark only in the costal-marginal part, but in the proximal area light whitish-grey, especially at the anal angle. At the costa of the forewing 3 very minute dots below each other, a larger hyaline spot at the cell-end and behind it another fine one recognizable with the lens. Described according to 3 from Novo Friburgo in South Brazil.

St. epicaste. Mab. is above blackish-brown; on the forewing extend 2 almost straight transverse bands, one in the disc, the second postdiscal, touching neither the costal margin nor proximal margin; in the median band there are 2 hyaline dots at the costal margin; margin narrowly darkened; on the hindwing both bands are angled. Beneath more reddish-brown with extinct bands. Palpi below white. Expans of wings: 22 mm. Brazil.

St. cupreus. Mab. Wings black, above indistinctly undulate, with 3 very small white apical dots, thorax and vertex with a coppery lustre. Beneath the wings are black, at the costal margin paler, hindwings blacker. Brazil.

St. phylo. Mab. Blackish-brown; forewing with a light, ochreous antemarginal band and a quadrangular cell-spot; 3 minute subapical hyaline dots. The hindwing exhibits a similar, undulate band parallel to the distal margin and 2 in the disc. Beneath the distal margin is broadly lighter. Palpi below white. Apex blackish-brown. Expans of wings: 27 mm. Brazil.

St. hilarina. Mab. is the size of Zopyrium satyrina Edw. (177 h). Reddish blackish-brown, margin somewhat convex. On the forewing before the distal margin a narrow, spotted, lighter, reddish band, on the hindwing it is broader though more extinct. Beneath the same, at the distal margin lighter; hindwing in the anal half whitish. Described from Paraná.

St. tyro. Mab. is as large as mazza (176 f); above black with traces of a reddish antemarginal line, in the disc of the hindwing straw redish. The under surface is lighter, at the distal margin of the forewing somewhat lighter; the hindwing shows a reddish-grey antemarginal line and two similar cell-dots. Palpi yellowish, at the apex black. Brazil, Venezuela.

St. tetra. Mab. entirely resembles the following pullata, but it is more of a slate-colour, with 3 subapical dots and a narrower marginal band. Fringes broader black. Forewing at the apex more pointed. From Cayenne.

St. pullata. Mab. The broad wings are brownish-black, hindwing quadriangularly rounded. On all the wings there is an indistinct marginal band tinted ochreous, parallel to the distal margin, the hindwing with a similar cell-dot; on the forewing 2 quite minute subapical hyaline dots. Beneath coloured the same, the marginal band fused with the lighter distal margin, the light cell-dot of the hindwing more distinct. Brazil.

St. zorilia. Plötz (176 h) is unknown to me in nature; it is said to be very closely allied to gisela (176 f), but it has 2 distantly separated subapical hyaline dots; it is much smaller with a whitish costal fold of the 2. Panama.

St. cordovanus. Plötz (= tucumanus Plötz ex errore) (176 h) is a very small species with a very minute hyaline dot far away from the apex. Hindwing towards the proximal margin somewhat lighter brown. From Cordova (Argentina).

St. chlorocephalus. Plötz (176 h) is a small species: blackish-brown with 2 black macular bands, a golden green head and collar, and easily recognizable by the hindwing being beneath in the anal half of a bluish whitish-grey colour, traversed by 2 undulate brown transverse lines. Brazil.

Very closely allied to *Systasea* (p. 903) and distinguished by the longer and more porrect 3rd palpal joint. Costal fold absent. Posterior tibiae with 2 pair of spurs and a hair-pencil. On the hindwing the upper median vein rises much nearer at the cell-end.

*D. lacaena* Hew. (176 i) is a small, pretty species easily recognizable and in no way mistakable *lacaena* by the white discal area, the red-brown basal area and the blackish-brown apical area with black dentate lines. Mexico to Costa Rica and Panama, and reported as doubtful from Brazil. — *f. lacaenina* Mob. (*Stgr. i. l.*) (176 h) *lacaenina* from Colombia (Rio Negro) is somewhat larger and darker.

*D. variata* Plötz (176 i) is similarly marked, but much darker, monotonously greyish-brown with an olive tint in the ground-colour, without the red-brown apical spot. Beneath the colour is more whitish. From Brazil (Rio de Janeiro).

40. Genus: *Onenses* G. u. S.

Well distinguished by the forewing being long-dentate on the median veins; the anal angle extended like a lobe. Cell of forewing long and broad, costal fold absent. Hindwing likewise with 2 teeth on the upper median and upper radial. Antennal club long turned round. Palpi long porrect, the horizontal terminal joint hidden. Posterior tibiae with 2 pair of spurs and a hair-pencil. Only one species:

*O. hyalophora* Plötz. (176 i) is unmistakable for its large, vitreous areas. From Mexico to Panama, *hyalophora* reported also from Texas.

41. Genus: *Timochares* G. u. S.

Separated from the preceding genus by the entirely margined wings with a somewhat stunted apex of the forewing, with a very long costal fold. The horizontal palpal terminal joint is longer porrect.

*T. trifasciatus* Hew. (= hemula *H.-Schäff.*) (177 a) is pale brownish, the hindwing lighter yellowish *trifasciatus*, with 3 oblique, undulate and dentate transverse lines. The ground-colour is variable, and dark (= *obscurior* _obscurior_. form. nov.) (176 i) and light forms fly together at the same places. From Mexico through the whole of South America to Argentina.

*T. rupifasciatus* Plötz (177 a) is similar, but the transverse lines are broken up into macular bands. *rupifasciatus*.

Mexico.

42. Genus: *Ebrietas* G. u. S.

In the veins corresponding with the preceding genus, but the shape of the wings is much broader, the proximal margin is somewhat concave; the costal-marginal vein terminates before the cell-end, in *Timochares* a little behind it. The 3rd palpal joint is somewhat longer.

*E. osiris* _Stgr._ (177 a) is a well-known species, easily recognizable by the orange-yellow anal part of the hindwing which is traversed by brown undulate lines; the apex of the forewing is likewise somewhat orange beneath. Above deep blackish-brown with black macular bands and cell-spots. Mexico to the Amazon.

*E. undulatus* _H.-Schäff._ (= anacron _Stgr._, tortricinus _Plötz_ (177 b)) is smaller than the preceding, with an intense violet tint, the macular bands deep velvety black, also beneath much darker, more blackish violetish-brown. Mexico to South Brazil. — In Guiana and Bolivia flies a very characteristic form: *evanidus* _Mob._ (177 b). *evanidus*.

The blackish base is distally bordered by a straight ashy-grey band; the black median band is complete and forms in its centre a more or less angular spot, whereas the two distal bands are almost or entirely absent, the distal one being mostly indicated only by spots at the proximal margin, the proximal one at the costal margin.

*E. livius* _Mob._ (Stgr. i. l.) agrees with *undulatus* (177 b) in the size and colour; the marginal band *livius* is narrow, spotted, the inner-marginal spot small; the postmedian band is double at the apex, thin, united with the 3rd in the cell. In the submedian area there is a straight band near the base; separated from the black base only by a scarcely lighter band. Hindwing with 3 rather broad black bands, the marginal one more spotted.
than the others. Forewing beneath blackish, marginal area lighter, ferruginous-reddish, especially at the proximal margin. Hindwing in the posterior half light ferruginous-brown, the black bands hardly visible. Bolivia.

E. lachesis Sch. looks like osyris (177 a) and is above separated by a small hyaline spot in the upper angle of the black cell-spot and a subapical hyaline spot. Beneath the yellow of the hindwing extends in 2 antennomarginal rows of spots to the costal margin, and the proximal angle of the forewing also shows 2 yellow spots. Mexico (Tabasco).

E. elliptica Bllr. (177 b) is extremely similar to the preceding, the proximal half of the forewing is much more monotonous in the colouring, darker, without the violettish-grey dusting. The posterior tibiae are without the hair-pencil which is present in the two preceding. Mexico to the Amazon.

E. claudia Pltz. (176 a) is above very similar to undulatus, easily discernible by the hindwing beneath being coloured bluish-grey in the larger anal half. Venezuela. — triseriata Pltz. (176 b) is presumably only a form of it with a still more extensive and more violettish whitish anal part of the hindwing beneath, so that there are 3 transverse bands in it; the forewing is also somewhat whitish at the apex and proximal angle. Venezuela.

E. chacona Pltz. (177 b) from Panama is very closely allied to claudia, but much smaller. The upper surface shows much more faded band-marking, the hindwing beneath is in the anal half of the distal margin only narrowly bluish-grey, so that only one transverse band is in it.

E. eremita Pltz. (177 b) is larger, above dusted lavender-grey, with distinct, coherent macular bands, in the cell there is only one shortened spot. The hindwing beneath is almost quite whitish bluish-grey, only the costal-marginal part is narrowly greyish-brown. South America.

E. impressa Mob. (177 c) is blackish, without any violet tints. Forewing at the base and apex lighter, in the discal area darker. Hindwing almost uni-coloured with 2 indistinct darker transverse bands. Beneath lighter brown. Palpi below grey. From Panama to Bolivia.

43. Genus: Camptopleura Mob.

The palpal apex is obtuser than in the preceding genus. The forewing shows a costal fold in the end of which the costal margin forms an obtuse angle; the broad hindwing is regularly rounded, otherwise all agrees with Ebrietus.

C. theramenes Mob. (= auxo Machltr.) (177 c) is dark brown, with deep violettish-black bands and watered in the same colour. The under surface is lighter with 2 dentate darker bands near the distal margin. The proximal margin is somewhat lighter. Mexico to South Brazil.

C. ebenus Mob. in its size and colouring resembles Brachycorine areca (Drury), but it is still blacker, forewing scarcely strewn with small grey scales behind and below the cell. Beneath unmarked, only at the margin somewhat lighter. By the angled costal margin it belongs here. From Bolivia.

C. iphricrates Mob. has very broad wings; blackish-brown, strewn with a greyish blue, the undulate lines reddish black. Hindwing more reddish ochraceous-brown, broadly margined dark, with 2 blackish-brown marginal bands. On the under surface all the lines are light reddish-brown, in the disc almost whitish, unmarked, with a darkened apex of the forewing; hindwing reddish-brown with a narrowly darkened distal margin. Very closely allied to thrasybalus, but constantly differing. From Cayenne and Brazil.

C. termo Hprfr. (= strigulosa Stgr. i. 1.) is likewise very closely allied to thrasybalus (177 c), but differing by the marking and colouring. Above more ochreous-grey, the costal and distal margins reddish-brown with 3 red-brown, spotted undulate lines, at the border greyish-blue with a sagittally spotted marginal band —strewn with blue. Hindwing still lighter greyish-ochreous, distal margin and 2 undulate bands dark brown. Beneath the forewing is whitish-ochreous, the costal margin of the forewing, 2 confluent marginal bands, hindwing with 2 costal-marginal spots and apex darker. Length of forewings: 19 mm. Peru (Chanehamayo).

C. tisias C. & S. (177 c) looks very much like C. thrasybalus; the markings are more regularly linear, not so faded, the ground-colour is of a more uniform tint. Costa Rica, Panama to the Amazon.

C. cataphanes Mob. is smaller than theramenes (177 c) and most closely allied to termo; the violettish bluish-black markings are finer, more distinct, towards the base they disappear more under the lavender-grey dusting which covers the costal-marginal part and basal part as well as the body. Beneath blackish, the proximal angle of the forewing whitish in the & at the costal margin there is a very distinct, black macular band; hindwing in the & in the anal half light red-brown, in the & as far as the middle of the cell whitish with 2 black bands and 2 cell-spots. Fringes black. Sa. Catharina.

44. Genus: Cyclogypha Hbg.

Very closely allied to the preceding genus and distinguished by a stronger antennal club, longer terminal joint of the palpus, and a more pointed apex of the forewing. The costal margin of the hindwing is strongly angled behind the proximal third, and shows a long hair-pencil at the rise of the costal.
C. thrasybulus F. (177 e) is above violetish-black with velvety-black dentate lines, beneath more thrasybulus, reddish-brown with dullyr markings, and in the marginata, with a lighter, lilac-grey apex and a lighter proximal margin of the forewing. Very common from Mexico to Southern Brazil.

C. caeruleonigra Mab. is very similar, somewhat smaller, the dentate lines more coherent. Beneath black, at the costal margin and apex reddish-brown, the base of the costal margin and the proximal half of the cell as far as the proximal margin of a pure bluish-white; distal margin of hindwing reddish-brown, more or less dusted light blue. Guiana.

45. Genus: Haemaetis Mab.

Antennae short, slender with a small, bent club; terminal joint of palpus almost as long as the second, bent forward. Forewing elongate, produced on the lower radial vein, below the apex concave, like the hindwing. The bare posterior tibiae exhibit only one pair of spurs. Only one species:

H. sanguinalis Dbl. & Hew. (177 d) is a small, black and red species resembling certain Erycinidae sanguinalis, and not to be mistaken for any other species. Ecuador and Bolivia.

46. Genus: Diphorida G. u. S.

Allied to the preceding genera. Terminal joint of palpus still longer, the margin of the forewing more convex, below the apex and above the proximal margin somewhat concave, costal margin before the apex likewise slightly concave. Costal fold absent. Posterior tibiae with 2 pairs of spurs and a hair-pencil.

D. phalaenoides Hbn. (177 e) is a common, small species with similar characters of the marking as in Cyclopyhla, but the transverse lines are finer, more numerous and particularly prominent as a bend antemedian transverse line and towards the distal margin near the proximal angle; apical half of the costal margin on the hindwing much darker. Beneath of a duller brown, more monotonous, in the anal half of the hindwing occasionally somewhat lighter lilac-grey. Mexico to Paraguay.

D. palpalis Latr. (= aura Plötz, dichrous Mab.) (177 d) is very similar, somewhat larger, hindwing palpalis, more brownish, beneath in the anal half whitish. Panama to Brazil.

47. Genus: Gorgythion G. u. S.

Very similar to the preceding genera, the palpi not quite so long, the shape of the wings broader, at the distal margin less concave, the apex somewhat stunted. Otherwise the same as in Diphorida.

G. pyralina Mech. (177 d) is light violetish-brown with black macular bands particularly prominent pyralina, in the anal half of the forewing in the shape of spots, above them in a row of spots 3 or 4 spots are strewn with bluish-white; 2 minute subapical hyaline dots. Beneath duller greyish-brown. Common from Mexico to Southern Brazil. — f. marginata Schs. (177 d) presumably belongs hereto; it differs by the broad blackish-brown margin of the hindwing. Described according to 2 Peruvian specimens.

G. begga Prüve. (= alcaandra Mab.) (177 d) is above scarcely separable from the preceding, but begga, the hindwing above is blacker towards the apex; the chief mark, however, is the hindwing beneath being whitish in the anal half. Mostly common from Panama to Paraguay.

G. beggina Mab. (177 d) is above much lighter, light yellowish-violet, whereby the macular bands beggina, are much more conspicuous than in the other species; the markings are otherwise almost the same. The hindwing is beneath in the anal half still purer and more extensively white with more feebly prominent markings. Bolivia.

G. beggoides Schs. is another very closely allied species. Above greyish-brown, with similar macular beggoides markings as the others, but more confluent; the postcellular row of spots consists of large, elongate spots between the veins; the marginal spots are confluent towards the apex; subapical spots entirely absent; on the light brown hindwing the dark markings are nearly all broadly flown together. Beneath also the forewing shows whitish at the apex and proximal angle, the hindwing a broad white proximal margin and anal angle, white spots in the cell and at the cell-end, and whitish diffuse patches before and on the margin. Expanse of wings: 15 mm. An insular form from Trinidad.


Distinguished by very long, beak-shaped palpi; antennal club strongly curved bow-like and finely pointed. Costal margin of forewing strongly convex, the apex appearing somewhat stunted. Costal fold absent. Border of hindwing regularly rounded. Posterior tibiae with 2 pair of spurs.

A. polysticta Mab. (= lemur Mech.) (177 d, e). Above brownish-black, with an oblique row of polysticta, 6 very small white hyaline spots from the middle of the costal margin to the proximal angle, 3 small apical spots and 2 or 3 below them. Beneath somewhat lighter brown, in the distal part of the forewing still lighter, in the apex somewhat reddish. Hindwing lilac-grey, watered blackish, with 3 faded brownish transverse bands and ferruginous spots below the costal margin. Common from Mexico to Guiana and Peru. Southern specimens are mostly much darker, the small discal hyaline spots almost disappearing, beneath on the hindwing appear larger chestnut spots.
A. pedaliolina **Blr.** Upper surface jet-black, the forewing towards the apex and margin lighter with an irregular antemarginal stripe; near the apex 5 hyaline spots, in the disc 2. The body is also jet-black. Beneath the wings are lighter, with irregular grey bands and dark brown shades. Forewing with an auricular apical spot. Hindwing with 2 large auricular costal spots and an auricular central dot. Length of wings: 1.9 inch; in the colouring it resembles a *Pedaliotes* (t. 39). The exact patri is not known.

**A. sublimbata Mob.** has only 3 subapical hyaline dots and a light antemarginal band of both wings, which may be divided into spots. Beneath the hindwing is olive at the base and margin. Colombia.

**A. minorella Mob.** resembles the preceding and varies in the size. Above blackish or greyish-brown with 3 subapical dots from which a darker stripe runs down, marked by lighter dots, which are occasionally transparent; at the cell-end 3 small hyaline spots. On the hindwing a dark brown postmedian transverse band on both sides bordered with a somewhat lighter yellowish. The dirty grey fringes are speckled black. Forewing beneath greyish-black, in the marginal area lighter yellowish, at the cell-end a black streak, the apical dots pronounced by black angular streaks. The hindwing shows in the disc a large blackish spot appearing to be strangled in the middle; its anterior half is square with a black appendage towards the proximal margin, which is bordered with white. Marginal area light grey, towards the costal margin light ochreous. Bolivia.

**A. bibiana Plötz** (177 e) is above light greyish-brown with 3 small subapical spots and a fourth above the upper median vein; at the cell-end 2 small light spots; disc of hindwing traversed by a darker arcuate stripe. Beneath lighter yellowish-brown, watered somewhat darker, marked as above. Hindwing still lighter and more yellowish, at the base a darker spot; from the costal margin as far as into the cell a large, brown, triangular spot, on the apex of which there are 2 black dots below the cell. In the marginal area 2 darker brown stripes. Fringes speckled black. This species described from Colombia is probably identical with one of the allied species.

**A. superior Mob.** is a larger species, above black with lighter margins, 3 apical dots and a lighter grey marginal stripe, towards the proximal angle on both sides bordered by triangular black dots. Beneath a two-pointed white spot is distally attached to the middle subapical dot; in the middle of the marginal area there is a lighter moon-spot. Hindwing ashy-grey, watered black, at the costal angle with a triangular brown spot which may also be bipartite; it occupies the whole cell and is situate with the apex towards the base; at the lower radial vein and towards the proximal margin it is bordered with white. Bolivia.

**A. subpicta Sch.** is described as dark brown with a darker distal margin and lighter subterminal spots towards the apex; 3 hyaline subapical dots. Beneath the forewing is dark brown with a light brownish area at the apex and proximal angle, in the former dark grey spots; in the middle of the distal margin is tinted olive. Hindwing isabel-coloured mixed with olive and watered dark; a light discal line terminates in the cell with a silvery spot, below it a black spot. Expanse of wings: 33 mm. Castro, Paraná.

**A. oligosticta Mob.** is larger than *polygista* and of a deeper black, the forewing towards the margin more auburn with 3 white subapical dots; postdiscal only 3 small punctiform spots, the two upper ones double. Hindwing unmarked with reddish fringes. Beneath at the proximal angle more auburn, the hindwing with a large, purple costal-marginal spot, at the distal margin and proximal margin grey, darker reticulate in the shape of bands. Expanse of wings: 41 mm. Colombia.

**A. albida Mob.** (177 e) above almost resembles a *Theagenes*. Forewing very thinly scaled in the disc, ochreous-brownish, towards the margin darkened with 2 or 3 minute subapical punctiform spots. Hindwing in the disc whitish, at the margins blackish-brown. Beneath coloured and marked the same, though of a much duller colour. As its patri only South America is mentioned.

49. **Genus: Theagenes** G. u. S.

Chiefly distinguished from the preceding genus by a still more convex costal margin of the forewing exhibiting a slight concavity before the apex. The **s** has a costal fold. Hindwing in some species rather strongly dentate, in *diurna* even extended into long points. More than half a dozen species distributed over Central and South America.

**Th. aegides** **H.-Schäff.** (177 e) is above greyish-brownish, in some places mixed with bluish-grey, with numerous darker transverse lines and 2 apical dots. Disc of hindwing white. Beneath the forewing is for the greatest part yellowish-or orange-brown, the white hindwing especially towards the margin brownish and watered bluish. From Mexico through the whole of Central America to Columbia.

**Th. albipлага** **Fldr.** (177 e) is somewhat larger, stronger, more densely scaled, more profusely mixed with bluish-grey, with but one subapical dot; the white spot of the hindwing is smaller, rounder, the base and proximal margin broader, darker. Beneath the hindwing is more intensely and more irregularly strewn, especially the costal margin is darker, too. Central America to Venezuela.
Th. lactifera Btr. & Dr. (= bipuncta Plötz) (177 f). This well-known, common species is distinguished by greyish-brown forewings with a darkened base, two darker dentate transverse lines and 2 or 3 small white subapical spots; hindwing in the disc white, more or less smoky. Beneath on the forewing towards the margin yellowish lighter parts are predominant, on the hindwing more reddish-brown tints. Mexico to Colombia, rather variable. — f. noctua Fldr. (177 f) is lighter, the forewing in the disc spotted light, the white area of the hindwing much more extensive. As noctua is the older form, it ought to be the name of the species.

Th. stator G. & S. (177 f) is much darker than the preceding species, marked more irregularly, with very dark hindwings. Beneath on the lighter brown ground on the hindwing towards the costal margin intermixed with small red spots. Mexico to Colombia.

Th. haematospila Fldr. (177 f) is very similar, more intensely marked and easily discernible by much more prominent scarlet spots beneath also at the apex of the forewing. Venezuela, Colombia, Bolivia.

Th. diurna Btr. (177 f). Unmistakable by the hindwing being extended on the median veins into diurna. 2 long pointed dents. The total tint is more brownish, above otherwise marked similarly as stator. Beneath the anal half of the hindwing is whitish, the costal part brown and spotted orange-yellow. Brazil.

50. Genus: Miltoigues Mab.

This genus established for the only species is distinguished by long antennae with a long, turned down point; palpi long porrect. On the forewing the upper radial vein rises below the upper cell-angle, the middle radial vein nearer at the lower. Hindwing rounded, before the anal angle slightly concave. The posterior tibiae are provided with fringes on the outside and exhibit 2 pair of spurs.

M. cinnamomea Fldr. (= haematises Mab., depuncta Plötz) (178 b) looks above like a Cobalus and is uni-coloured deep blackish-brown. The under surface is yellowish-red, strewed with cinnamon-brown, in the interior of the forewing darker brown, towards the proximal angle light grey, towards the apex more yellowish with distinct dark veins. Hindwing with a broad, dentate, dark brown transverse band and dark anal stripe. Colombia and Brazil.

51. Genus: Scantilla G. u. S.

This genus likewise based on but one species is very closely allied to Staphylus p. 904 to 6, from which it differs by the absent costal fold, a stouter, shorter and more abtuse antennal club and a longer 3rd palpal joint being turned forward and downward.

S. opites G. & S. (177 g) is coloured and marked as the species of Staphylus, dark brown with 2 opites indistinct, faded transverse bands; no subapical dots. The under surface is strewed with dark ochreous, the palpi are below white. From Guatemala.

52. Genus: Paramimus Hbn.

Distinguished by long forewings with a short distal margin without a costal fold. The antennae exhibit a long, uniformly bent club; palpi thickly scaled white, from which the long black terminal joint projects. The posterior tibiae are not thickened and exhibit a hair-tuft and 2 pair of spurs.

P. stigma Fldr. (177 h) has blackish-brown wings with 2 large, white, transparent spots, in an oblique stigma light with a silvery lustre, behind the cell of the forewing, below it a red spot. The hindwing shows a white median band not reaching the costal margin. Beneath paler, the hindwing as far as the base white, at the anal angle spotted white. Panama to Colombia.

P. scurra Hbn. (177 h) is very similar; whereas in stigma the proximal white spot is situate above the scurra. red one, it is longer here, crescentiform and passes the red one outwardly. Beneath the anal angle is not spotted white. Brazil. — In f. leucodesma Er. (177 h) from Guiana the red inner-marginal spot is entirely absent. leucodesma.

P. herberti G. & S. is likewise similar, the lower white hyaline spot of the forewing, however, is herberti very irregular, not square and extends into the cell. Described from Matto Grosso.

P. monostigma G. & S. is likewise allied, the forewing, however, is dark brown, and only the red monostigma spot is present, the two hyaline spots being entirely absent. Santa Martha.

P. empolacius Dbl. & Hev. (177 g) is a somewhat larger species with 2 reddish-yellow spots in the empolacius middle of the costal margin and at the proximal angle of the forewing, and a white spot between them. The hindwing shows a more rounded creamy-white discal spot. From Brazil.
alarius. P. alarius Ploetz (178 a) is likewise larger, without red spots, with three small subapical spots situate in a triangle, an oblong quadrangular spot in the cell, a small one above it and a somewhat larger one below it. From Bahia.

53. Genus: Charidia Mab.

Distinguished from the preceding merely by the thickened posterior tibiae and a shorter palpal terminal joint. Only one sexually dimorphous species.

lucaria. Ch. lucaria Hew. (177 g). This pretty, little species is well characterized by the figure. Guiana, Colombia, Bolivia.

54. Genus: Atarnes G. u. S.

Likewise similar to a Paraminimus. The antennal club is longer with an obtuse apex; the 3rd palpal joint is short. The ζ is without a costal fold. The posterior tibiae show 2 pair of spurs, but no hair-pencil. Only 2 very similar species:

sallei. A. sallei Flbr. (177 g) from Mexico to Costa Rica is a common, unmistakable species, black with a white median band forming on the lower radial vein an almost rectangular angle, and an orange-yellow spot therein at the proximal margin below the cell; in the marginal area the veins and folds are striped white.

servatius. A. servatius Ploetz (177 g) is extremely similar, larger, darker, the veins of the marginal area very much finer, the white median band projects distally on the upper median vein and does not reach the proximal margin on the hindwing. From Pará.

55. Genus: Zopyrion S. u. G.

Very closely allied to the following genus Timochreon and distinguished by its more slender structure, longer though rounder wings. Antennal club is more abruptly flawed, the 3rd palpal joint longer; costal fold present in the ζ.

sandace. Z. sandace G. & S. (177 h). Upper surface monotonously greyish-brown with single small light dots. Fringes light yellowish-white, speckled dark. Beneath almost whitish, hindwing still lighter, watered brownish with 2 more distinctly prominent transverse lines which are more or less interrupted, and with an antennal marginal row of crescents. Mexico to Guatemala.

evenor. Z. evenor G. & S. (178 b) is above very similar, but beneath more ochreous-yellow on the forewing with 2 indistinct, dark, antennal marginal macular bands; hindwing likewise more brownish, the transverse markings much less coherent, the proximal one only consisting of 3 small spots. From Matto Grosso to Argentina (Salta).

salyrina. Z. salyrina Flbr. (177 h) is beneath quite similar to evenor in the colour, but the hindwing shows before the whitish distal marginal high black moon-spots, in front of them the white marginal colour is separated from the brownish ground-colour by a darker shaded lunular line; the centre is crossed by an almost straight line from the costal angle to the proximal angle. Colombia.

56. Genus: Timochreon G. u. S.

Structure of the body rather robust. Antennal club only feebly thickened and gradually bent; 3rd palpal joint rather short. Apex of forewing pointed, costal fold absent. The posterior tibiae with 2 spurs and in the ζ with a long hair-pencil.

satus. T. satyris Flbr. (177 i) is above dark brown with a row of black spots before the distal margin of the hindwing and 2 indistinct lines before it. Beneath entirely resembling an Euptychia: greyish-brownish, distally somewhat more bluish, with 2 brownish postmedian transverse bands bordered darker, and before the black marginal line of the hindwing a series of black eye-spots, of which only the second from above is dull brownish. From Panama to South Brazil (Para, Matto Grosso).

doria. T. doria Flbr (178 b) is another species still more resembling Euptychia: above duller brown, the eye-spots of the hindwing more distinctly light-ringed, the second from above composed of 2 small, narrow spots. Beneath the disc of the forewing is light ferruginous-yellow; the marginal area light reddish-violet, proximal bordered by a whitish line. Eye-spots of hindwings ringed light yellow. From Mexico.

57. Genus: Pholisora Scdd.

Antennal club almost rectangularly flawed with an obtuse apex. Terminal joint of palpus slender projecting. Costal fold present; apex of forewing very round. Posterior tibiae with 2 pair of spurs.

catus. Ph. catus Fl. (177 h) is on both sides black with a faint marginal row and a somewhat more intense submarginal row of white dots; the latter is entirely absent on the hindwing. Beneath the dots are almost extinct.
The green larva with a black head lives on Chenopodium, Amaranthus and Labiatae such as Monarda; it spins a leaf together with few threads in a cymbiform shape and feeds only at night. Common in the whole temperate North America.

**Ph. mejicanus** Reak. (177 h) is similar, the submarginal row of spots, however, is very much curved, and at the cell-end there is a minute white dot. In the 2 the small spots are somewhat larger. Beneath there are mostly only 3 or 4 subapical dots; the colour is particularly on the hindwing lustrous slate-coloured black with darker veins. Palpi beneath white. Distributed from the south-western part of North America to Mexico.

**Ph. smodora** Dyar (177 i) is much larger with broader, rounder wings, with a somewhat browner tint; only the curved, submarginal row of spots and a tiny cellular dot are present. Beneath more brown, without markings, only on the hindwing there are towards the anal angle some small white scale-spots. The whole body is beneath white. West Mexico (Guerrero).

**Ph. clytius** G. & S. is smaller than *mejicanus*, the wings without any spots, the hindwing in the middle of the distal margin more produced. The different genitalia proves the insect to be a separate species. From Mexico.

**Ph. alpheus** Edw. (177 i). Wings above blackish-brown, mixed with a somewhat lighter color; on the forewing there are 3 subapical dots, a discal dot and between the median veins a whitish submarginal streak. Hindwings darker. The under surface is deep dark brown, on the hindwing scantly strown with white, irregularly marked. Palpi beneath whitish. From New Mexico and Arizona to Mexico.

**Ph. libya** Sedl. (177 i) is easily discernible from the other species by white fringes, and towards the apex especially in the 2 a lighter, grey apex of the forewing. Hindwing beneath light grey mixed with a darker shade, with white discal spots and minute white marginal spots. Nevada to Arizona and California.

**58. Genus: Chiomara G. & S.**

Palpal terminal joint more or somewhat pendent; antennal club comparatively obtuse. Distal margin of forewing convex. Posterior tibiae with a rather dense fur, a hair-pencil and 2 pairs of spurs.

**Ch. mithrax** Mschl. (= noctula Plötz) (177 i). This well-known species is of a deep blackish-brown with a slaty-black, broad discal area, proximally bordered by a row of velvety black dots; a similar row of spots is situated farther distally. Beneath lighter brown, with a darkened basal part on all the wings. Mexico, Guatemala, Colombia to Brazil, Cuba.

**Ch. punctum** Mab. (= basigutta Plötz, marthona Schks.) (177 i) is very similar, mostly somewhat smaller, distinguished by a lighter bluish-grey, prominent postdiscal band and a very prominent black spot in the proximal third of the proximal margin. Widely distributed in South America.

**Ch. silvia** Mab. Size and exterior of *punctum*. Forewing blackish mixed with ashy-grey; near the base a broad, lilac-grey band with a thick, black dot in the submedian space; the following black band is pointedly broken in the cell, then follows a broad greyish-lilac band traversed by 2 black stripes; the black marginal area is crossed by a greyish-red dentate line. The red hindwing shows 3 darker undulate lines. Beneath the forewing is proximally black, in the marginal third light red-brown with a lilac apical spot. Hindwing black, distal margin red-brown, with a black cellular spot and 2 black median bands, the proximal one of which is bordered with yellowish at the anal angle. Described from Bolivia.

**Ch. gesta** H.-Schäff. (= bland a Plötz, invisus Btlr. & Decr.) (177 a) is a smaller, variable, dark species, *gesta*. blackish-brown with indistinct darker transverse bands and a dull bluish-grey postdiscal band. Occasionally there are on the hindwing beneath whitish diffuse spots towards the anal part. From Mexico to South Brazil, in Cuba and Jamaica, — i. *gorgona* Plötz (178 a) is a lighter brown form from Guatemala with reduced black spots and bands. — i. bigutta Prit. (177 i, 178 a) with a somewhat different band-marking, distinctly speckled fringes of the hindwing, and beneath towards the anal angle with lighter whitish hindwings; it may be better regarded as a distinct species; described from Colombia.

**Ch. asychis** Or. (= dilucida Plötz) (178 a) is a very different, extremely common species and very variable. Above greyish-brown, towards the base bluish-grey with a broad hyaline band through both wings; the uppermost spot of the band on the hindwing is bipartite; here there is in the cell another narrow, crescentiform spot, and there are lighter antemarginal macular bands. Widely distributed from Mexico to Argentina, and in the Antilles; specimens from St. Vincent are darker with more distinct spots on the wings beneath.

**Ch. onorbo** Möschr. (178 a) very much recalls *asychis* which it also resembles a great deal in its size and shape of the wings. But beneath *onorbo* shows the basal area of the hindwing bluish-grey and sharply defined against the white discal band from which it is separated by a dark line, just like the dark marginal area. Above particularly the speckled marking of the distal half of the forewing deviates from *asychis*. Described from Surinam.
59. Genus: *Gindanes* G. u. S.

In the structure and exterior similar to the species of *Pythonides* of the *lugubris*-group and chiefly only distinguished by the peculiar shape of the wings. The apex of the forewing is cut off and the distal margin straightly extends down to the end of the lower median vein, where it is deeply indented and runs obliquely to the proximal angle; hindwing below the apex almost laciniformly produced. The posterior tibiae exhibit a hair-pencil 2 pair of spurs. Antennal apex somewhat longer and palpal terminal joint shorter.

*G. brebisson* Latr. (= brebissonii Kuy., phagasia Hew.) (178 c) is above light brown with a deep brown velvety spot in the middle of the forewing and smaller ones behind it, at the proximal angle of the forewing and at the apex of the hindwing the distal margin of which, being situate below it, is dusted bluish-white. The forewing exhibits besides at the exterior edge of the discal spot one large and several small hyaline spots. Beneath the hindwing is light blue, at the costal margin and apex spotted somewhat blackish-brown. From Colombia and Brazil.

*G. panaetius* G. & S. (178 c) is probably only the northern form of the preceding and merely distinguished by the ochreous-yellow, not blue under-surface of the hindwing, only the anal part being somewhat dusted bluish-white. From Nicaragua and Panama.

*G. brontinus* G. & S. (178 c) is of a much darker brownish-grey, the hyaline spots are much more reduced, and the dark discal spot is narrowed into a streak; instead of them there is a broad, dark antemarginal band. Under surface dark brownish-grey. Apparently only in Nicaragua.

*G. extensa* Mab. It is doubtful to me, whether this species being described as *Pterygospeidae* belongs hereto. The wings are described to be yellowish-grey, forewing at the proximal angle deeply excised. Margin brown, proximally dentate. 3 subapical hyaline dots in a brown band, between the upper median vein and the middle radial vein a bipartite hyaline spot and below it a similar one in the submedian space; at the lower cell-angle there is another hyaline dot in a brown spot. Hindwing below the apex very much gnawed out, at the middle radial vein with a long berth with 3 faint, brown, small bands. Wings beneath light blue, the darkest at the base of the hindwing with a black border as far as the tooth. Expanse of wings: 27 mm. Hunyabamba.

60. Genus: *Helioptetes* Billb.

It contains a number of rather homogeneous insects offering great difficulties as to the synonymy. All of them are above more or less purely white, mostly with a black apex of the forewing. The medium-strong antennal club is bent, the palpi are porrect, the 2nd joint covered with hairy scales, the terminal joint rather slender, conical. Costal fold present; posterior tibiae beside two pair of spurs with a hair-pencil.

*H. domicella* Erieks. (= willi Plötz, annoyta Plötz, adepta Plötz) (178 c) is the darkest species with a broadly blackened basal and distal part of the wings, so that only a broad white discal band is prominent and the species almost looks like a *Hesperia*. Beneath similar, but duller, more olive-grey, particularly the basal part of the hindwing is light and only defined towards the white discal band by an olive-grey band pointedly bending inward in the cell towards the base. From Arizona and Mexico through almost the whole of South America (Colombia, Guiana, Brazil to Argentina).

*H. arsalte* L. (178 c, d) is almost entirely white, only towards the apex along the ends of the veins on the forewing there appear black rays; fringes speckled dark; in the ? the apex of the wing is somewhat more extensively smoked blackish, with a white, oblique subapical band. Beneath the veins are finely darker, on the hindwing the lower median vein is somewhat darker. Widely distributed from Mexico to Paraguay and in Jamaica, everywhere very common.

*H. petrus* Hbn. (= niveus Hbn., lagina Hew., bianca Plötz, janice Ehrn.) (178 d) differs by a much broader and blacker apex of the forewing with a smoked subapical band in it; the margin of the hindwing is likewise broader black. From the following *alana* it differs by the absence of the dark spots in the middle of the hindwing beneath. From Nicaragua through Colombia, Guiana to the Amazon.

*H. alana* Reak. (= adusta Plötz) (178 d) resembles *petrus* above. Beneath on the ochreous-brown hindwing behind the cell and before the margin between the median and subcostal veins more or less distinct brownish spots. From Mexico to Brazil and Paraguay, everywhere common. — As f. *ligania* (178 e) Plötz figures a large, strong form with a very broadly blackened apex of the forewing without a light subapical band and beneath one spot between the median veins of the hindwing, no patella being stated. — f. *marginalis* Plötz (178 d) from Peru is probably a form of it with a broadly blackened margin of the hindwing.

*H. nivella* Mab. (= nivea Soldd, nec niveus Hbn., orbignera Mab., eulalia Plötz) (178 d) has above a narrowly blackened distal margin growing wider in the apex of the wing with traces of subapical spots, one
of which projects above the upper radial vein to the margin; on the hindwing there are before the fine black marginal line small dark spots on the ends of the veins. Beneath the hindwing shows a rather broad black marginal band which is interrupted by white below the upper radial vein; near the base there are yet some dark diffuse spots. Mexico to Colombia and Brazil. — mainon Pl. (178 e) is probably a small, above entirely white form of it from Guiana.

H. macaira Renk. (= oceannus Edw., locutia Hew.) (178 e) is smaller, above the same, beneath the hindwing is smoked brownish except the anal part, the marginal band is not interrupted and distally extending in a coppery brown, the basal spots are larger. Arizona to Panama. — f. jason Ehra is a pale, thinly scaled form from Venezuela with beneath extinct basal markings, of a slender structure.

H. enemus G. & S. (178 e) is above much more intensely marked with broad blackish-brown marginal bands; in the broad apex of the forewing there are 4 or 5 small, narrow, white subapical spots. Beneath almost like nitelta, but the apical part of the forewing is more broadly marked black, whereas the marginal band of the hindwing is feebler. Only from Mexico.

H. laviana Hew. (= leca Bfr.) (178 e) is mostly rather large with a faintly stunted, broadly blackened apex of the wing, with subapical, apical and marginal white spots. Beneath in the apex of the forewing 2 larger, olive-brown spots. Hindwing of a purer white with a broad olive-grey marginal part; a dark apical spot and a darker marginal band below the lower radial vein; the broad, proximal olive-grey band extends from the costal margin to the lower median vein. Expans of wings: 33 mm. Described from Mexico (Orizaba).

H. purgia Schs. must be likewise similar to laviana (178 e); above marked just like it, but below the lower radial vein there appears a larger, white marginal spot. Fringes dark grey. On the hindwing the veins are partly black, beside a black marginal line and black marginal lunae there is a subterminal line interrupted between the radial veins; base, and proximal margin of the hindwing dusted black. Fringes of hindwings white speckled with black. Beneath marked light reddish-grey, forewing with a black cell-end streak; hindwing yellowish-white with black veins, a broader and darker subterminal band; the proximal band as in laviana, the inner-marginal area remains broadly white, unmarked. Expans of wings: 30 mm. Castro (Paraná).

H. pastor Fbr. ( = omrina Bfr.) (178 f). I consider to be a distinct species; smaller than laviana, without traces of a stunted apex of the wing; owing to the more distinctly marked veins the dark marginal area looks striped. Marginal part of the hindwing more intensely marked. Beneath of a purer white, markings in the marginal part likewise more radiately arranged and with a decidedly yellowish-green tint; basal band feebler, in the middle interrupted. Guiana to Brazil. — In Bolivia there occurs a still much more intensely marked form which I denominate intensa form. nov. (178 f). Above particularly on the hindwing in the costal half there appears a postdiscal band angularly projecting distally and being also present beneath; the subbasal band is deep olive-brown and complete. — f. pamphina Pl. (178 f) from Buenos Ayres, in contrast with it, is much lighter, above much more extensively white, and beneath on the hindwing only the basal band is rudimentarily noticed.

H. leucola Hew. (178 f). I dare not decide whether this is a distinct species or only an intensely marked form of petrus (178 d) from which it is not discernible above, whilst beneath the hindwing is of a more intense yellow colour with prominently black veins and intercervical stripes, without any dark antemarginal spots. From Minas Gerais.

H. concinata Mob. seems to be allied to laviana (178 e); distal margin of wings more intensely marked black with small, white submarginal and very small marginal spots which are absent between the median veins. On the hindwing beneath the upper part of the basal band is absent. Described from Rio Grande do Sul.

H. figara Bfr. Wings above white, forewing at the base, costal margin, apex and distal margin brown; an apical, white oblique line is parted into 5 dots by the veins crossing it. Hindwing at the proximal and distal margins brown, veins (except the base of the costa) black, fringes white speckled with brown. Body brown, head and prothorax spotted white. Wings beneath white, veins in the distal half black; apex between the veins white. Otherwise as above, but lighter. Body white. 1.6 inch. Exact patria not stated.


Rather closely allied to the preceding genus; the basal palpal joints are clad with long hair, the conical terminal joint is bent forward. Costal fold very strongly developed. Hindwing in the basal quarter of its costal
margin somewhat angular, the fringed posterior tibiae exhibit 2 pair of spurs. Numerous species of a very dark colouring in contrast with the preceding genus, the principal range of which is situate in North America.

**brizo.**

Th. brizo Bstd. & Lcc. (178 f). Above lilac-grey with darker macular bands, the postdiscal band very regularly formed of small ring-spots, appearing also beneath as minute light yellow spots. Hindwing with a row of yellowish submarginal dots being more distinct beneath. Atlantic States, Colorado, Arizona. The larva lives on oaks, Galactia and Baptisia.

**icelus.**

Th. icelus Lintn. (178 g) is much smaller, the postdiscal area much lighter than the rest of the wing; the yellowish dots above and beneath do not form any regular rows, but are more dispersed. The range is the same. The larva lives on foliage-trees.

**sonnus.**

Th. sonnus Lintn. (178 g) is somewhat larger than icelus and a very dark species so that only the submarginal row of light dots is more distinct. From Florida.

**lucilus.**

Th. lucilus Lintn. (178 g) is a smaller, very common species, blackish-brown with darker macular bands and minute light submarginal spots; discernible from the very closely allied *paeonius* (178 h) by its lighter, dark-marked hindwing with a submarginal band of light spots, in which near the apex 2 spots are far removed towards the base. The likewise very closely allied *zarucco* has much more intense purple-grey dusting on the wings and more regular macular bands on the forewing. Atlantic States. — f. *lilus Dryar.* is very similar, larger, as large as *zarucco,* more mixed with brown, particularly a brown spot at the cell-end very prominent, being interrupted by the straight, dark cell-end line. The markings are more blurred and not so much contrasting as in *zarucco.* A geographical race from British Columbia, Washington, California. Flies in May, June, and again in August.

**persius.**

Th. persius Scddl. (178 g) is much more monotonous and mostly darker than lucilus, but very variable in this respect. Apex of forewing a little more pointed than usually with 3 distinctly prominent, small subapical spots. The hindwing scarcely shows traces of the light submarginal dots. Atlantic States and Rocky Mountains. Larva on willows.

**ausonius.**

Th. ausonius Lintn. is the smallest of all the *Thanaos*-species; by the absence of the white subapical spots it approximates brizo, otherwise it is more closely allied to *zarucco.* The submarginal band composed of small, oblong, black spots is twice very much bent. The transverse vein is conspicuously marked brown. Instead of the discal band being coherent in the other species there are here 3 small, oblong, blackish-brown diffuse spots. The species was established according to a single ♀ from Center (Colorado) that was taken on May 12th 1871.

**afranius.**

Th. afranius Lintn. (178 g) is a very small species with a blackish-brown, grey-marbled forewing showing 4 small, oblique subapical dots and one behind the cell. Hindwing dark blackish-brown with a double row of small subapical spots being above very indistinct, beneath more prominent. Colorado, Arizona.

**zarucco.**

Th. zarucco Lcc. (= martialis Scddl.) (178 g) very much resembles lucilus, but it is much more dusted with a purple or lilac-grey, and thereby lighter, and the macular bands are more regularly arranged. The submarginal spots on the hindwing are more irregular and more blurred. Atlantic States, Colorado, also in Cuba. The larva lives on Indigofera and Amananthus.

**juvenalis.**

Th. juvenalis F. (= juvenis Hbn., costalis Bstd. & Hcc., connius Scddl., concolor H.-Schöff.) (178 g). A much larger species, light brown, marbled by black macular bands and with a complete, postdiscal row of small hyaline spots bordered by small black sagittiform spots; also at the cell-end there are two. Atlantic States and Rocky Mountains as far as Missouri and New Mexico. The larva lives very polyphagous on oaks and Papilionaceae.

**petronius.**

Th. petronius Lintn. (178 g) is similar, especially in the basal half darker, more contrasting; the band of hyaline spots does not extend so far to the proximal margin. The hindwings are also much darker. Florida.

**horatius.**

Th. horatius Scddl. (= virgilius Scddl.) (178 h). Marked as *juvenalis* and with the same band of hyaline spots, but only half its size, and of a very much lighter ground-colour. From the southern Atlantic States.

**terentius.**

Th. terentius Scddl. (= ovidius Scddl.). Of this species we find in the literature accessible to us only a very detailed description of the ♀ genital armature, and for this reason we cannot make any particular statements as to its exterior. It originates from Florida.

**propertius.**

Th. propertius Lintn. (178 h) is likewise somewhat smaller than juvenalis, very much like it, darker, greyer, more monotonous, the small postdiscal hyaline spots very small. Owing to the distal margin running somewhat more obliquely, the course of the band is more oblique, too. Hindwings darker. Pacific States.
Th. naevius Lint. (178 h) is smaller, with narrower and more pointed wings than petronius which the species approximates; the postdiscal hyaline band is likewise shortened and also contains only 2 discal spots below the subapical band. Behind the middle of the costal margin lighter spots. Only known from Florida.

Th. pacuvius Lint. (178 h) is much smaller, very contrastingly marked on a grey ground, the small hyaline spots of the postdiscal band, being formed as in the preceding species, are very small. Hindwing almost entirely black, its fringes in the anal half purey white. Colorado, Arizona and Mexico.

Th. tatius Edw. is established according to a single ♂. It is discernible from the other species with white fringes of the hindwings by the purely brown colour of the marginal area of the forewing without whitish-grey scaling; the usual, oblong, black marginal spots exhibit distally bluish-white bordering, so that a very conspicuous, white-dentate line is produced. From Arizona.

Th. parkeri Weeks is said to be most closely allied to tatius. Above dark brown, slightly dusted with grey, with a postdiscal band irregularly strewn with grey, extending from the costal margin to the lower median vein; 4 small, white, hyaline subapical dots. Hindwings dark brown with traces of lighter submarginal diffuse spots. Beneath dull brown, the submarginal diffuse spots of the hindwing more distinct. From Venezuela (Suapure).

Th. citus Edw. (178 h) is much larger and darker than pacuvius, often behind the middle of the costal margin with a brighter spot. Hindwing almost monotonously black with broad white fringes as far as the apex. Arizona and New Mexico.

Th. funeralis Soldr. (= australis Mab.) (178 h). This species being widely distributed as far as South America is extraordinarily similar to citus, on an average smaller, greyer, darker, with somewhat narrower forewings. The following species are neither easily discernible, chiefly by the difference of the genitals. In funeralis the tegumen exhibits against the under surface 2 short, downwards posteriorly curved hooks; the valves are very asymmetrical, the right one has undulate edges and exhibits on its dorsal edge 2 upturned, obtuse appendages. From California, Texas and Arizona through Mexico to Guatemala; Colombia.

Th. tristis Bsk. is externally scarcely discernible from funeralis, mostly somewhat larger. The forewings are somewhat less pointed. On the under surface of the tegumen are 2 long hooks being downwards anteriorly curved, the right valve shows at its distal edge a very bristly, boss-shaped appendage. California to Mexico.

Th. maestus G. & S. from Arizona and Mexico (Puebla) is only separable by the different genitals. The tegumen is similar as in tristis, but the right valve appears as a distally turned, ensiform hook.

Th. albomarginatus G. & S. (178 h) is recognizable by its large size and by the white fringes of the hindwing being particularly broad at the anal angle, beneath also by the white border before the fringes. Common from Mexico to Colombia.

Th. diogenes Plotz (178 i) is the most similar to petronius (178 g), but somewhat smaller, with narrower wings and a more oblique distal margin, of a somewhat darker colouring, the postdiscal hyaline spots are minute, below the subapical ones there is only one small hyaline dot. Described from Cuba.

Th. heteropterus Plotz (178 i) is not dissimilar to brizo, but of a purer bluish-grey, and it has 3 conspicuous, white, subapical hyaline dots. Hindwing darker brown without the yellowish submarginal dots, instead of them with a darker submarginal band. From Brazil (Chapada).

Th. austerus Schs. is unknown to me. Above dark brown, strewn with dark grey, little prominent scales, a discal band, a spot at the cell-end, bent round it the postdiscal band; distal margin brown dark grey, in it a dark subterminal line; marginal line brown, base of fringes grey; the grey markings are partly bordered by darker brown fine lines. The dark brown hindwing is lighter at the distal margin. Expanse of wings: 36 mm. Peru.

Th. mülleri sp. nov. (178 i) is most similar to brizo, also in the shape of the wings and the size. The blackish-brown ground-colour is very much strewn with lighter or darker whitish-grey or bluish-grey scales; in and behind the middle there are 3 fine, black, lunar transverse lines and in the middle of the cell a spot; before the brownish-grey fringes there is a blackish marginal line. Hyaline dots entirely absent. Hindwing monotonously blackish-brown with snow-white fringes being blackened at the apex. Beneath on the hindwing fine, white anteterminal and thicker white terminal dots. According to 1 ♂ from Mexico (Esperanza) in the Coll. Draudt.

Th. lacustra Wright (178 i) is apparently allied to mülleri, but of a much more monotonous brownish-grey, not dusted so blue, and it has quite brownish-grey, not white fringes on the hindwings. Also beneath the submarginal and marginal dots on the hindwing are extinct and yellowish-grey. From California. — peruigra Wright, likewise from California, seems to be almost the same, but it is reported to have 3 small white subapical dots and to be smaller.


Antennal club shorter and more pointed than in Thaumus, terminal joint of the palp more slender. Distal and proximal margins broadly rounded. Posterior tibiae almost bare with 2 pair of long spurs. Costal fold present. 3 large forms from the West Indies.
M. brunnea H.-Schäf. is extremely allied to the following, it is smaller with smaller hyaline spots.

**jamaicensis**. Described from Cuba. — f. jamaicensis Mschl. (178 i) is probably only a local form from Jamaica. Large, monotonously blackish-brown above and beneath with 3 minute subapical dots and 2 more near the margin below them.

M. zephyodes Hbn. (178 i) has nothing to do with *Ephyriades atreus* C.r. as was erroneously considered hitherto. Very similar to the preceding, somewhat smaller, and with narrower wings, blackish-brown with 5 minute, white subapical dots and 2 more proximally placed dots below them, and another one in the upper cell-angle. Beneath somewhat lighter with traces of darker transverse bands across the hindwing. The $\frac{3}{2}$ has much larger hyaline spots and 2 faded dark transverse bands before and in the middle, between which the ground is partly dusted bluish-grey. Cuba, Bahamas.

63. Genus: **Brachycoryne** Mab.

Antennal club with an obtuser end, shaft short, not curled. Costal fold very strongly fringed with long hair-scales, inside bare. The middle and posterior tibiae exhibit long slender hair-pencils, the posterior tibiae 2 pair of short spurs, the anterior tibiae with end-spurs. Only one species:

**arcas**.

B. arcas Drury (= *lyas* C.r., velasquez Lec.) (178 i). Large, monotonously dark blackish-brown, above without any marking. Beneath somewhat lighter, at the proximal margin of the forewing yellowish-grey with traces of a darker postdiscal band. Hindwing with 2 antennal marginal, faded, lighter, dentate bands. Panama (Chiriqui), Hayti, St. Thomas, Cuba.

64. Genus: **Hesperia** F.

This genus being distributed across the whole world except Australia has been dealt with more at large in the palearctic part. Briefly worded, the antennal club is rather obtuse, the palpi are erect, the second joint clad with hair-scales, the terminal joint slender, obliquely upturned. Forewing with or without a costal fold, posterior tibiae with 2 pair of spurs with or without hair-pencils. The homogeneousness of the American species is still very uncertain; there are probably half a dozen species at most.

a) With a costal fold and hair-pencil (*Scelothrix* Rmb.).

**syrictus**.

H. syrictus F. (= *orceus* C.r., *oilus* Wrc., *tartarus* Hbn.) (178 k) is extremely variable as most of the other species. Above brownish-grey verging into black, particularly towards the base very much haired whitish-grey with white macular bands covering more or less the whole surface of the wings. Beneath the hindwing is white with 2 irregular light grey or brownish dentate bands which are finely bordered with black, and with high marginal bows. Most widely distributed from Mexico to Paraguay, everywhere common.

**centaureae**.

H. centaureae Rmb. (= *wyandot* Edw., *ruralis* Bsl.). This species figured in the palearctic part (Vol. I t. 86 a) occurs also in the northern Atlantic States. The white spots are much smaller than in *syrictus*, the white hairing more scanty, beneath on the hindwing the bands are darker, more coherent.

**philetos**.

H. philetas Edw. resembles *montivaga* (178 k) above, but it has smaller spots. The hindwing beneath is quite different white with a yellowish tint, basal and discal areas more whitish, without a discal band, scantily streaked brown; 3 small streaks-at the costal margin are more distinct; behind the middle are 3 rows of most minute spots, the most proximal row only composed of small brown dots; in the smoky brownish marginal area minute, white moon-spots; Described according to a specimen from West Texas.

**scriptura**.

H. scriptura Bsl. (178 k) is smaller than *centaureae*, the hindwing quite un-potted except a double white discal spot; fringes more purely white. On the forewing the submarginal macular band seems to be more pointedly broken below the apex. California, Arizona, Montana.

**bocchoris**.

H. bocchoris Hew. The description of this Bolivian species was not accessible to us.

**fulvovittatus**.

H. fulvovittatus Bitr. resembles above *americanus* (179 b) except the more strongly smoked discal band of the hindwing. Beneath the hindwing is white with 4 orange transverse bands, an indistinct one at the base, a very irregular, oblique one behind the basal third, a curved, dentate one through the middle, being here and there bordered with brown and being separated from a narrow marginal band only by a row of small, white moon-spots; proximal margin broad white. From Chile.
b) With a costal fold, but without a hair-pencil (*Pyrgus Hbn.)*.

*H. montivaga* Reak. (= tessellata Schldr., communis Grt., adjunctrix Plätz, albescens Plätz, varus Plätz) (178 k) differs from the very similar *syrichtus* by a darker, less grey-haired base of the wings, and the marginal row of spots almost disappears. Distributed from Arizona and Florida to Nicaragua, everywhere common. — *f. crisia* H.-Schäff. (178 k) is probably to be taken as a smaller insular form from Cuba with smaller spots, which are less coherent. — *f. occidentalis* from Arizona and Texas is reported to be smaller and whiter. It was asserted of late that *montivaga* is synonymous to *syrichtus*, in which case the species would have to be denominated *tessellata*.

*H. caespitalis* Bes. (= ricara Edw., petreius Edw.) (178 k) looks very much like *centaurea*, on the hindwing the postdiscal band of white spots is broader and more coherent. Beneath the hindwing has a decidedly ferruginous-brownish tint with large white spots. California, Oregon, and Nevada.

*H. xanthus* Edw. (179 a) is extremely similar to *caespitalis*, the white macular bands still broader, especially on the hindwing. Under surface much paler, almost as in *montivaga*. Hitherto only known from Colorado.

*H. americana* Böhl. (179 b) is a larger, stronger species from Chile; the white discal band of the hindwing is especially broad, fringes scarcely speckled. Beneath the hindwing is very differently marked, the bands are very narrow, very dentate, the proximal one defined on the lower median vein, the costal-marginal part almost straight and not dentate. — In *f. bellatrix* Plätz (178 b) from Argentina the bands of the hindwing beneath are broader, more coherent.

c) Without a costal fold and without a hair-pencil (*Battus Scop.*).

*H. notata* Böhl. (= insolatrix Plätz, lycargus Plätz) (179 a) is extremely similar to *syrichtus* and *notata*, but the band of the hindwing is generally narrower, less curved. Very common from Mexico to Argentina. — *f. valdivianus* Phil. (179 b) is probably also a form of it from Chile with a faded, smoky brownish band of the hindwing without the white discal spot. Beneath the surface is of a more yellowish tint, the transverse bands show a reddish-brown colour. — *f. veturius* Plätz (179 a) is presumably a form with much smaller white spots.

*H. trisignatus* Mob. (= valdiviana Reel) (179 a) is presumably no form of *notata*, but a distinct species. Above very dark owing to the great reduction of the white spots; on the hindwing a large, rounded, white discal spot is very conspicuous, besides there is only an antennomarginal row of spots. Beneath very much dusted brownish, in the 2 much more intensely transversely watered dark, with two interrupted, greyish-black nebulose bands in and behind the middle. Argentina and Chile.

*H. emma* Stgr. (179 a, b) is a rather large, broad-winged species, above black with 2 rows of white spots in the middle and anterterminally; on the hindwing there is a large, square postmedian spot and a faded row of whitish dots before the distal margin. Fringes above and beneath white speckled with black. Beneath the forewing is blackish, at the costal margin and in the apical part light yellowish-white. Hindwing beneath pale yellow with 2 rows of larger black markings in the middle and in the distal part, and a number of small black strigiform spots at the costal margin and some small, dispersed dots. From Coacapa (La Paz in Bolivia).

*H. cuzonae* sp. nov. (179 a) may be a smaller form of *emma*. Shape of wings much narrower; above *cuzonae*, the white spots are a little more prominent, the wings towards the base more intensely haired whitish-grey, the fringes very broadly speckled white and black, the spot of the hindwing oblong quadrangular. Beneath almost purely white, forewing in the disc faintly dusted blackish; the transverse bands on the hindwing very narrow, composed of irregular, small, jet-black spots with single brownish grains of dust between them; fringes of hindwings beneath purely white, unspotted with thick black dots before them on the ends of the veins. From Peru (Cuzco).

*H. archia* Dyar is allied to *emma* (179 a, b). Above brown with yellowish-white fringes speckled with dark brown, base and marginal area sealed yellowish; forewing with a quadrangular cell-spot and some more spots, like in *emma*. Hindwing with a yellowish strigiform spot at the cell-end and light dusting behind it and an antennomarginal row of minute light spots. Forewing beneath as in *cuzonae*, hindwing light ochreous, strewn dark, with 2 rows of blackish, rounded quadrangular spots, as in *emma*. Peru.

65. Genus: *Celotes* G. n. S

Resembles the preceding genus, the antennal club is more slender. Costal fold present; the terminal joint of the palp is porrect, almost somewhat pendent. The posterior tibiae beside 2 pair of spurs exhibit a strong hair-pencil. Only one species:

*C. nessus* Edw. (= notabilis Streck., radiatus Plätz) (179 a) is distinguished from all the American *nessus*, species by the alternately light and dark radiary rays, and an unmistakable species. Texas to Mexico.
Subfamily: Pamphilinae Ws.

Group A.

Antennae with a bent, gradually tapering club. Terminal joint of the palp moderately long, porrect. ♀ forewing in the American species without a stigma.

66. Genus: **Butleria** Ky.

This genus which was formerly combined with the following by the name of *Butleria* now only contains yet some species from South Chile of a characteristic exterior. Antennal club rather obtuse, palpi shorter, beneath hairy. Forewing at the base convex with an obtuse apex. Posterior tibiae with one or two pair of spurs.

**biscygallata.**

B. *biscygallata* Phil. (179 c) is above blackish-brown with 6 minute orange spots which are in the ♀ partly larger and increased by two; the ♀ besides exhibits behind the cell of the hindwing a larger, roundish orange spot. Beneath the forewing is blackish, at the costal margin and apex red-brown as the hindwing, the latter with a broader, blackish discal shade and an undulate marginal band. It flies in dense forests in South Chile.

**aperta.**

B. *aperta* Plötz (179 c) is allied to the preceding. Above dark blackish-brown with 3 small yellow discal spots arranged in a triangle, and 3 small subapical dots. Hindwing unmarked. Beneath the costal half of the forewing, the costal margin and the distal-marginal third of the hindwing are red-brown, on the hindwing 2 undulate, dark submarginal lines. Patria not stated.

**valdivianus.**

B. *valdivianus* Phil. (= *cornutus* Plotz) (179 c) is above much more intensely spotted yellow, especially in the submedian space, and the hindwing shows a submarginal row of yellow dots; fringes yellow. Beneath the forewing is yellow, spotted black, the hindwing more brownish-red with 3 transverse rows of silvery white spots partly bordered with black. Chile.

**flavomaculata.**

B. *flavomaculata* Blch. (= *vicina* Reed., ? *panisoides* Reed.) is a not quite certain species, it seems to be smaller than the preceding, but otherwise very much like it, easily discernible by yellow instead of silvery white spots beneath. Probably also *panisoides* Blch. belongs hereto, the description of which is too insufficient as to allow its identification. Chile.

**facetus.**

B. *facetus* Plötz (179 b) is allied to *flavomaculata*. Above black with numerous small yellow punctiform spots and a larger one at the cell-end. Hindwing with a light discal diffuse spot; fringes yellow speckled with black. Beneath the black, yellow-spotted forewing exhibits a reddish-yellow costal margin and distal margin. Hindwing reddish yellowish-brown with a large trisected, Isabel-coloured spot in the inner-marginal area, 2 small ones in the basal area and one at the costal margin above them. From Argentina and Chile.

**polyspisus.**

B. *polyspisus* Plotz (179 b, c) is again difficult to identify. It is somewhat larger, blacker, the discal spot of the hindwing larger, fringes of a purer yellow. Hindwing beneath lighter reddish-yellow, without any black markings, so that the white spots are situate directly on the reddish ground. This species, according to Elwes, flies more on open grass-plots in Argentina and Chile.

**panisoides.**

B. *panisoides* Blch. (= *cauquenensis* Reed.) is a doubtful species which, as was mentioned above, probably is synonymous with *flavomaculata*, or perhaps also belongs to *facetus*, both of which exhibit yellow instead of silvery white spots on the hindwing beneath. Stated from Chile.

**fraticolens.**

B. *fraticolens* Bltr. (= *tripunctatus* Mab.) (179 c) is a somewhat larger, most variable species. Above black, on the forewing with 4 to 9, on the hindwing with 2 to 4 small orange spots. Beneath the forewing is blackish, at the costal margin and apex reddish-yellow with the spots of the upper surface; hindwing orange, in the disc lighter yellow, at the proximal margin blackish, between the two colours a whitish ray. The forms denominated by Butler: *tractipes*, *quadrimaculatus* and *pulcher* only differ by the number of the small yellow spots. Chile, rising up to 4000 ft., and varying according to Elwes more in the maritime districts than in the mountains.

**philippii.**

B. *philippii* Bltr. is very closely allied to *fraticolens*, differing only by a silvery stripe on the hindwing beneath. Apparently rare and hitherto only found in the Province of Valdivia.

**vitus.**

B. *vitus* Plötz (179 c) is likewise closely allied, considerably larger with much larger yellow spots and two silvery stripes on the hindwing beneath with 3 silvery spots between. Hindwing much darker, only at the costal margin slightly yellow. From Chile.

**sotoi.**

B. *sotoi* Reed, is likewise a very rare species very closely allied to the preceding. It differs by the bases of all the wings being strewn with yellowish, and a silvery white spot on the hindwing beneath. From South Chile, flying in dense forests.

67. Genus: **Dalla** Mab.

Antennal club with a longer point than in the preceding genera, palpi somewhat longer, especially the terminal joint slender. Forewing at the base not so convex. Posterior tibiae fringed with 2 pair of spurs. Numerous species mostly marked black and reddish-yellow.
D. cyphelus Flbr. (179 c, d) is above blackish-brown with 4 yellowish-white discal spots on the forewing and 3 small subapical dots; of the former a small one is in the cell-end, 2 larger, separated ones below it and the 4th outside of them somewhat below the apical dots. Hindwing with an oval, somewhat reniform, orange discal spot, and towards the anal angle with orange fringes. Beneath more chestnut-coloured, the submedian spots of the forewing broadly united, towards the proximal margin of a deeper yellow; at the anal angle of the hindwing only a minute yellow diffuse spot. Colombia.

D. frater Mob. (= mesoxantha Pltöz) (179 d) is very similar, mostly larger, the uppermost submedian spot broadly flown together with the cellular spot which is larger here; beneath at the anal angle of the hindwing a larger orange spot. Venezuela, Colombia.

D. virius Mob. is larger than cyphelus (179 c, d), the spots on the forewing are of a deeper yellow, the cellular spot is larger, touching the quadrangular spot below it. The orange spot of the hindwing is somewhat indented at the proximal margin, the fringes are dark brown. Beneath the discal spots of the forewing form an angled band as far as the costal margin. Zamora (Ecuador).

D. gelus Mob. (vicina Mob. i. l) (179 d) is somewhat smaller than cyphelus and virius. The spots on the forewing are the same; but the larger and whiter, the two lower discal spots almost touch each other, the cellular spot is much smaller, placed near to the costal margin. The spot on the hindwing is likewise lighter yellow, larger, rounder. The hindwing beneath exhibits at the costal margin 2 additional yellow spots near the base and behind the discal spot, a third is situate at the anal angle. From Bolivia.

D. genes Mob. is larger than cyphelus (179 c, d). Forewing jet-black with 3 subapical dots, the median one being minute, and 3 discal spots; that in the cell small, more remote from the others, light yellow; the spot in the submedian space is entirely absent. The spot on the hindwing is large, oval, orange, on the veins prolonged; fringes ferruginous. Beneath ferruginous, at the proximal margin of the forewing blackish. Hindwing reddish-brown, the discal spot blurred, only little lighter than the ground, bordered by 2 broken lines of a dull brown; proximal margin blackish; at the ends of the veins one black dot each. Zamora (Ecuador).

D. ticidas Mob. (179 d) is allied to the following species, but on the hindwing it resembles more cyphelus by the oval spot. Discal spots in an oblique line, the two lower ones united, above them a streak in the cell, which may also be absent. Hindwing with an orange discal spot. Forewing beneath at the apex and at the costal margin red-brown, otherwise blackish; the discal spots are flown together into a very large one; hindwing reddish-brown, the spot not distinctly defined, traversed by 2 or 3 red-brown lines. Bolivia.

D. caenides Hew. (179 d) is very similar, the spot of the hindwing longer, the fringes more red-brown, beneath the discal spot of the hindwing more sharply defined, not traversed by lines. Venezuela, Colombia.

D. connexa sp. nov. (179 e) is allied to caenides; on the forewing the triangular cell-spot forms a large quadrangle with the triangular spot below it, being diagonally parted by the median; at the distal upper angle another small triangular spot is connected with the apex, subapically there are 3 minute spots, all of them orange like the very large, oval, towards the base pointed spot on the hindwing; fringes at the anal angle orange. Beneath the apex of the forewing is reddish-grey, the discal spot very large, extended to the costal margin and proximal margin. Hindwing reddish brownish-grey, at the proximal margin blackish, in the disc strewn with yellow. Bogotá.

D. monospila Mob. Forewing blackish-brown, 3 united subapical dots, the 3 orange discal spots combined to one inclusive of a cellular streak, only separated by the veins, the distal one somewhat lighter. Hindwing black with a large ferruginous orange discal spot, equally broad and long, distally dentate. Fringes red-brown. Beneath like the preceding, the discal spot clear, the proximal margin blackish. Bolivia, Colombia.

D. cypria Mob. (179 d) is larger, forewing scarcely different; the spot of the hindwing very long, removed near to the costal margin. Fringes of hindwings whitish and thereby easily discernible. Hindwing beneath monotonously red-brown, discal spot little prominent, at the anal angle a small, yellow spot. Bolivia.

D. cupavia Mob. is very closely allied to the following evages (scylla), ground-colour above blacker, spots whiter, the cell-spot absent; on the hindwing the discal spot is smaller, quite round, the fringes dark ferruginous, at the proximal angle lighter; the hindwing beneath is more monotonous. Bolivia.

D. evages Hew. (= scylla Mob.) (179 e) is above blackish-brown with 3 subapical dots, the middle one being the smallest; in the discal area 3 yellowish hyaline spots arranged in a line, above them in the cell another small one. The spot of the hindwing is distally somewhat dentate, as in cupavia, too, towards the proximal margin extended into a point. Fringes of hindwings yellowish-white. The forewing beneath is black, at the apex and costal margin reddish; the lower 2 discal spots are broadly flown together white; hindwing reddish-yellow, at the proximal margin light yellow, also at the costal and distal margins some dull, lighter patches. Bolivia.

D. charybdis sp. n. (179 e) looks above almost like scylla, the spots are whiter, the fringes of the hindwings dark. Beneath all the red-brown and yellow tints are absent, the ground-colour is also on the forewings blackish-brown, the spots creamy-white, as above, but in addition there is one anal and one costal spot each near the base on the hindwing. Bolivia.
D. geon Mab. is allied to the two preceding, but well discernible by the hindwing beneath. Above chocolate with similar spots, but the cellular spot is triangular, united with the middle discal spot. Hindwing blackish-brown with a large, oval spot being produced somewhat proximally, fringes orange. Forewing beneath yellow, tinted blackish between the discal and apical spots as far as the proximal angle; hindwing yellow, towards the margin tinted reddish, the discal spot semicircularly surrounded by 6 ferruginous spots, that at the proximal margin being the largest. Ecuador (Loja).

D. oxaites Hew. (= syrisca Mab.) (179 e, f) is somewhat smaller, the cell-spot is flown together with the discal spot below it to a large triangular spot, distally there is another one, the 3rd is absent; the black fringes are distally whitish. On the brown under surface of the forewing the spots are larger, the discal spots form a band; hindwing dark reddish-brown, beside the large white discal spot there is an oblong one at the base of the costal margin, a large one at the costal angle, at the base of the cell a small one which may also be absent, and along the distal margin 6 whitish spots of which that at the anal angle is the largest. Proximal margin bluish-grey. Bolivia.

D. octomaculara G. & S. (179 e) also belongs into this group. Above similar to eryonas, somewhat larger and with broader wings, with larger yellowish-white spots. Beneath the hindwing is without the costal-marginal and costal-angular spots, beside the discal spot there are only 2 at the anal angle. From Costa Rica.

eryonas.

D. eryonas Hew. (= dolabella Plötz. troschii Stgr. heteropterus Plötz, fimbriola Stgr. i. l.) (179 e) is very much like oxaites, but it only has 2 subapical dots, the 2 discal spots are better separated, on the hindwing the discal spot is more yellow, more oblong, extending further to the proximal and costal margins. Beneath on the hindwing the fringes are much more extensive. From Panama through Colombia to Brazil.

hesperioiodes.

D. hesperioiodes Plbr. (179 f) is a much larger species, on the body and at the bases of the wings orange or ochreous-yellow with similar spots on the forewings as in oxaites. The orange spot on the hindwings extends to the base and to the proximal margin; fringes broadly orange. Beneath reddish-yellow, behind the middle of the forewing black except the orange apex. Hindwing reddish-brown with torn yellow spots which are partly finely bordered with black. Colombia.

dolydata.

D. polycrates Plbr. (179 f) is of the same size, above without any reddish-yellow, body and bases of wings somewhat haired olive-greenish. Spots of forewings white hyaline, the 2 middle ones not triangularly flown together, but only separated by the median. Hindwing with a small, round, orange discal spot. Beneath the hindwing is almost entirely yellowish-brown with traces of a darker discal band. Colombia, Peru.

superior.

D. superior sp. nov. (179 f) is still a little larger than polycrates. On the forewing the two discal spots are broadly flown together, the lower one triangular, all slightly yellowish. On the hindwing there is beside the bipartite orange postdiscal spot another basal one. Beneath the forewing shows a broad, yellow discal band, the hindwing is dark red-brown with 3 slightly darker transverse bands which are on both sides bordered by undulate, fine, dark lines, one being situate basally, one in the middle with a long dentiform projection below the costal margin, the third being antemarginal, the margin itself being narrowly darkened. Colombia: Monte Tolima: (Fassl).

cacus.

D. cacus Hew. (179 f) looks above almost like a large eryonas, but above the middle of the proximal margin of the forewing it has one more white discal spot; the spot of the hindwing is white, large, rounded. Beneath the hindwing is yellow, veined with the large, quadripartite discal spot and one more white spot bordered with brown each at the costal angle and anal angle. Venezuela.

inca.

D. inca sp. nov. (179 g) is very closely allied to cacus and above scarcely different, but the white spot of the hindwing is not so round, but the cellular part more oblong; fringes of hindwings distinctly speckled light and dark. Beneath all the yellow and brown tints are absent. The apex of the forewing is lighter, grey, the hindwing white, scantly dusted with grey, otherwise marked as cacus except the longer light cell-spot. On the whole larger. From South Peru (Madre de Dios), taken by Fassl.

ligilla.

D. ligilla Plötz (179 g) is similar; above the 4 discal spots are fused into a single one, the spot of the hindwing is decidedly yellow, also the fringes which are speckled a little darker. Beneath on the hindwing the brown colour is more predominant; at the base of the cell there is another long, light yellowish wedge-shaped spot. Patira not stated.

dimidiata.

D. dimidiata Plbr. (179 g). Forewing spotted as in oxaites. hindwing with a large, white discal spot extending to the costal margin, the proximal margin very much hairied bluish-grey. Beneath unmistakable, owing to the hindwing being white in the basal half and distally deep red-brown with blackish spots. Venezuela, Colombia, Bolivia. In f. xantuleuca Plötz (179 g) from Venezuela the basal part of the hindwing beneath is purely yellow.

xantoleuca.

D. jelski Ersh. (179 h) is very different. Above almost as oxaites (179 e, f). Beneath the hindwing is yellowish with dark brown veins except the transverse vein, so that in the middle a long stripe of the ground-colour extends from the base to the margin. From Peru and Bolivia.

latage.

D. latage G. & S. (179 h). Above blackish-brown with a large discal spot and a subapical spot of orange colour, the spot of the hindwing large, orange, like the fringes. Beneath almost entirely light yellow, only the forewing exhibits a blackish antemarginal band being forked towards the costal margin. From Mexico.
D. lethaca Schs. is above coloured and marked almost as *lastage* (179 h). Beneath the wings are deeper yellow, the cell of the forewing is black almost to the end, towards the base also below the cell; beyond it there is a broad black band not reaching the costal margin, being distally bent above the upper radial vein and reaching the proximal angle beneath. The base of the proximal margin of the hindwing is scaled black. Costa Rica (Poas).

D. *lysis* Schs. resembles somewhat the following *faua* (179 h); the forewing exhibits in the cell a yellow triangular spot, below it the middle between the median veins a small spot and above it farther distally yet a dot; distally below the costal margin a short oblique streak. The hindwing shows the large discal spot of *faua*. Beneath the forewing is blackish-brown with a yellowish-brown costal margin, the distal margin narrowly, the apex somewhat more broadly yellow, the yellow discal spot enlarged. Hindwing yellowish-white, veined brown except the transverse vein and base of the middle radial vein remaining coloured like the ground. Fringes brown. Costa Rica (Turrialba).

D. *faua* G. & S. (179 h) is very much like *lastage*, the spots somewhat lighter yellow, the discal spot somewhat differently shaped; the hindwing shows a long, narrow discal stripe which is part at the lower margin by the median. Beneath likewise light yellow, the blackish marking somewhat more extended the hindwing dusted with brownish-grey except the cell. From Mexico.

D. *arpia* Schs. (179 h) likewise belongs here since, but the subapical spots are entirely absent and the discal spot extends from the subcostal vein to the submedian fold. Beneath almost as *lastage*, but the base of the forewing is black and above the cell connected with the distal-marginal band not being forked. Hindwing quite light yellow. Described from Rio de Janeiro, but it also occurs in Bolivia and is thus certainly widely distributed.

D. *pruna* Pltz. (179 h) from S. Domingo is perhaps only an insular form of the preceding with smaller spots above. Beneath the colour is more yellowish-grey; on the forewing only the apex is yellowish, the distal margin is from the middle downwards dark brown like the proximal two thirds of the costal margin and the whole basal half.

D. *seirocastnia* sp. nov. (179 r) is above deep blackish-brown with an orange, bipartite discal spot and 3 subapical dots of the forewing. Hindwing in the disc deep orange, broadly bordered with blackish-brown with orange fringes. Beneath on the hindwing the costal margin, apex and narrowly the distal margin are strewed with red-brown. The hindwing is densely dusted with red-brown, but in the disc the yellow ground-colour is scarcely visible; proximal margin black, strewed with yellow. From Colombia (Monte Tolima).

D. *privata* sp. nov. (179 h) resembles the preceding on the forewing above, but the discal spots are smaller; the hindwing is entirely blackish-brown without an orange discal area. Fringes red-brown, only at the anal angle of the hindwing somewhat more orange, parted by a dark discal line. Beneath the hindwing is quite red-brown, but very scantily strewed with yellow. Bolivia (Cuesta of Cillutincara). Type in the Coll. Fassl.

D. *agathocles* Flbr. (179 h). Here begins a small group of species with several yellow spots of the hindwing. *agathocles* is above blackish, the small spots of the forewing are yellowish-white, insignificant. The hindwing exhibits a large basal spot and behind it 3 distal-marginal spots, the two upper ones of which are situated close together. Beneath the forewing is reddish-yellow in the basal and inner-marginal half, apically blackish. The hindwing is reddish-grey with 2 slightly conspicuous yellowish transverse bands. Colombia.

D. *pulchra* G. & S. (179 i) is similar, somewhat smaller; on the more chocolate ground the forewing exhibits one more light yellow spot in the submedian space, which is situated farther towards the base. The hindwing only shows 3 deep orange spots, 1 towards the base, 2 distally; the fringes of the hindwing are also deep orange. From Costa Rica.

D. *saleca* Mab. (179 i) is likewise very much like *agathocles*. The spots of the forewing are more reddish-yellow, the cellular spot very much nearer to the spot below it. The fringes of the hindwing are dark red-brown. Beneath the whole basal half, the costa and apex are blackish red-brown, the only discal macular band is reddish-yellow. The hindwings are likewise red-brown, the bands not very conspicuous. Colombia, Peru.

— From the Cuesta of Cillutincara (Fassl) a form is before us: *albescens* sp. nov. (179 k) with larger, entirely white spots.

D. *bobobon* Dyar. Above bronze-black, spotted yellow: 1 obliquely quadrangular spot in the cell, 2 faded ones below it, 2 more between and above the median veins, the lower one larger, below it another small, dark yellow spot; hindwing with a yellow discal spot and 4 behind it, fringes speckled light. Beneath the spots are larger, more numerous, particularly on the hindwing, where also 3 round spots are situated at the costal margin. Expanse of wings: 36 mm. Mexico (Guerrero).

D. *grovius* Mab. is larger than *bobobon*, the forewing with 3 subapical dots, a cellular spot and behind it and below it with 4, not 3 more spots. The spot of the hindwing is prolonged, of a brighter yellow than on the forewing, from the costal margin a pointed tooth of the ground-colour penetrates into it; at the distal margin there is only between the median veins a yellow spot. Fringes of hindwings orange. Beneath as *saleca*, but on the red-brown hindwing there are 3 distinct light yellow bands, a broad basal band, another one being connected with it extends to the costal angle, the third being extinct and situate near the fringes; on the ends of the veins there are black dots. Ecuador (Loja).

D. *epiphaneus* Flbr. (179 k) is still larger, at the bases of the wings dusted with ferruginous-brown, with large band-shaped, reddish-yellow spots as far as the proximal margin. The hindwing exhibits a basal
spot and a large quadrangular one between the radial veins, sometimes another smaller one below it. Beneath the hindwing is red-brown with deeper red-brown, torn macular bands. Venezuela.

D. gaujoni Mab. is allied to epiphanes. Above black with 2 confluent subapical dots and 3 separate discal spots, the lowest punctiform, the third touching the cellular spot. Hindwing with 3 large, reddish-yellow spots, one of which is at the base of the cell. Fringes at the ends red-brown. Beneath the hindwing is red-brown with the spots as above, bordered by 4 black transverse lines, the basal spot being double owing to another one being situate above it. Ecuador (Zamora).

D. ochrolimbata sp. nov. (179 k). Above blackish-brown with a coppery reflection and ochreous-brown fringes. In the cell-end and below it there are 2 insignificant, small, ochreous-yellow spots and subapically 3 minute dots. Beneath the apex of the forewing, and the hindwing are chestnut, the spots of the forewing are expanded and lighter towards the proximal margin. According to 1 3/4 from Peru (Pozuzo) from the Coll. Seitz.

D. quadrir stigma Mab. (179 k) initiates a group of smaller species being above unmarked blackish-brown. The fringes are somewhat lighter, the forewing is scantily strewed with yellowish scales. Beneath the forewing is jet-black in the basal two thirds, at the apex and the costal margin red-brown; at the margin there is a triangular, reddish-white spot, tripartite by the veins, beginning near the proximal angle. Hindwing red-brown with 4 rows of small black strigiform spots, forming dissimilar transverse lines; costal margin and submedian space blackish. Expanse of wings: 28 mm. Described from Merida (Venezuela).

D. boliviensis Mab. is very much like quadrir stigma: above brown with a lighter reflection and a yellowish middle of the distal margin and black veins; fringes dark grey. Forewing beneath blackish, at the costa and apex greyish-white, in the submedian space a large, white triangular spot with 2 small ones above it; proximal margin ash-grey. Hindwing dark grey, at the costal margin almost black and with 3 small brown bands in the middle of the wing, the 2 distal ones close together, near the costal angle rectangularly broken, at the costal margin united; the 3rd at the cell-end is more blackish. Bolivia.

D. merula Mab. (179 k) is above monotonously brownish-black, between the veins with a somewhat reddish reflex and with dirty grey fringes. Beneath the proximal margin of the forewing, the distal half of the submedian space and a spot above it are purely white; the blackish hindwing is powdered with yellow or yellowish-grey atoms, at the proximal margin more densely so, and traversed by 3 blackish, undulate lines, 2 near each other at the margin, a broader, somewhat blurred one in the middle. Bolivia (Chaco). It is perhaps synonymous with sutorones (p. 925).

D. morva Mab. is brown with a light ferruginous reflection, veins and marginal line black, fringes red-brown. Beneath the forewing is yellowish-grey, dusted with a light grey, the middle of the margin blackish, the proximal margin in a triangular shape dirty white. Hindwing dark yellowish-grey, strewed with yellow with 3 fine blackish transverse lines which are somewhat blurred. Bolivia.

D. riza Mab. is ferruginous-brown with a red reflection; the forewing exhibits 2 subapical dots, the upper quadrangular one being larger, a third reddish white spot is situate in the disc between the lower radial veins. The margin is narrowly blackish. Hindwing similar, between the upper radial veins and below the costal margin with 2 small lighter red-brown spots, just like the inner-marginal fold covered with long yellow hair. Forewing beneath light ferruginous, the inner-marginal part yellow, below the discal spot a yellow dot; on the ends of the veins there are black dots. Hindwing in the disc light violet, ferrugino-brown at the base, between the veins with two brownish-black strigiform lines. Expanse of wings: 22 mm. Colombia.

D. granites Mab. is allied to riza. Forewing with 3 subapical dots and 2 white spots in an oblique line between the median veins, the lower large, quadrangular, almost fused with a similar cell-spot; hindwing black with red-brown fringes. Forewing beneath black, at the costa and apex red-brown, the spots form a band being below light yellow, above reddish-yellow. Hindwing light red-brown with 2 small undulate stripes beginning at the blackish proximal margin and disappearing in the middle. Ecuador (Loja).

D. polydesma Mab. Above brown with 3 light yellow subapical dots, a spot in the middle of the cell and 2 more behind it and below it. Hindwing with a dot in the middle of the cell and 4 greyish-yellow ones behind it in the shape of a small discal band. Forewing beneath very light reddish-yellow, distally blackish, at the apex reddish-brown. Hindwing light reddish-brown with blackish lines, composed of bent streaks, bordering on an irregular oval, beneath bordered by a dentate line; a cell-end streak. Expanse of wings: 28 mm. Venezuela (Merida).

D. ibhara Blr. (= criithote How., planceus Hyfr.) (179 k) is above blackish-brown with a slight olive tint and somewhat lighter spots on the forewing: one in the cell, two behind it and below it, by two far distally removed spots connected with the 2 subapical ones to a curved row; in the submedian space, separated by the fold, 2 more oblong nebulous spots. Beneath light brownish-grey, in the disc blackish, the spots whiter, near the proximal margin united into a large triangular spot. Hindwing strewed with yellowish-grey scales, traversed by 4 fine, undulate transverse lines. Ecuador, Peru, Bolivia, also in Brazil (Pará).

D. gryans Plätz (= anomala Mab.) (180 a). Above similar, but the spots only punctiform, and instead of the 2 submedian spots there is only 1 dot removed far proximally. The hindwings are unpotted or exhibit
2 or 3 insignificant discal dots. Beneath densely strewn with grey, proximal margin of forewing lighter, hindwing with dull, darker, small postmedian dots. Mexico.

**D. microsticta** G. & S. (180 a) is smaller, the number of the dots on the forewing is variable (4 to 6), hindwing without spots; beneath strewn lighter, otherwise as above, proximal margin of forewing broad whitish. The 2 exhibits also above on the hindwing 4 or 5 dots. Mexico.

**D. ceracates** Hew. (180 a) is larger, stronger than *gyrans*, the white spots larger; the hindwing exhibits above a basal spot and 3 postdiscal ones, one of which is generally isolated at the proximal margin. Beneath loam-coloured, forewing in the inner-marginal area blackish, hindwing very much strewn with greyish-yellow, the spots rather inconspicuous. Mexico.

**D. cyclosticta** Dyar (180 a) is somewhat larger than *ceracates*, above the forewings are marked the same, *cyclosticta*, but the white spots are much smaller, punctiform; hindwing entirely unmarked, fringes not whitish as there, but reddish-brown. Beneath the forewing is much lighter, yellowish-brown, at the proximal margin marked still lighter than above; hindwings darker than forewings, of a reddish brown, strewn somewhat lighter. Mexico (City) in August.

**D. aca** Dyar (180 a) is much smaller, black with small white punctiform spots as in the preceding, *aca*, subapically only 2 and below the cell-dot a somewhat longish spot, hindwing with 2 or 3 minute discal dots. Beneath with a slight brass lustre, the white spots more distinct, on the hindwing increased, behind the cellspot there are 2 rows of dots, that next to the anal angle being removed towards the base. Mexico (Guerrero, Oaxaca).

**D. penae** Dyar (180 a) is extremely similar, above with a bronze tint, the small spots light yellowish; on the hindwing there are behind a cell-spot 3 spots in a bent row. Beneath densely strewn with yellow, the spots more numerous and whiter, on the hindwing behind the cell-spot at first a row of 5 spots, nearer to the distal margin another row of 7 spots, the latter being small and irregular. Described from Mexico (Sierra de Guerrerro).

**D. poligii** Barnes (180 a) has been placed into the genus *Hesperia*, but according to its characters it undoubtedly belongs hereto and it also fits very well into the affinities of the preceding species. On the forewing marked exactly as *ceracates*, often besides with a small submedian spot towards the anal angle. Hindwing with a group of 2 or 3 insignificant, a little lighter, small postcellular spots. Beneath olive-brownish, on the hindwing with a reddish tint; inner-marginal area of the forewing broad whitish. Hindwing well distinguished by 3 or 4 larger, rounded, yellowish-white postdiscal spots. Arizona to Mexico.

**D. diras** Hew. Above dark brown, on both wings with a yellow discal spot. Beneath the forewings are dark brown, base, a discal band, apex and distal margin light yellow. Hindwing light yellow. Expanse of wings: 1.1 inch. From Rio de Janeiro. This species may be synonymous with *arpia* (179 h)?

**D. ebrones** Hew. is above uni-coloured unmarked dark blackish-brown. Beneath dark brown, strewn with whitish, forewing with a large, tripartite, white inner-angular spot and towards the apex above it 3 indistinct lighter spots. Expanse of wings: 1.05 inch. Bolivia.

**D. hilina** Blr. has remained unknown to me, it is said to be allied to *cypselus* (179 c, d) and *dimidiata* hilina, (179 g). Above olive-brown, forewing with 7 yellow hyaline spots as in *cypselus*, hindwing with a large, yellow discal spot with a silky lustre, distal margin black; fringes orange, body greenish. Beneath brown, towards the margin ochreous, the spots larger than above; hindwing ochreous-yellow, the large yellow spot surrounded by 7 brown spots. Expanse of wings: 1.4 inch. From Venezuela.

**D. brunnea** Stblr. is above blackish-brown, only the forewing with 2 minute dots. Beneath the same, *brunnea*, the proximal margin of the forewing lighter: behind the cell two more dots, one between the median veins and one near the apex. From Guatemala.

### 68. Genus: *Eumesia* Blr.

The short antennae do not reach to the middle of the costal margin; the porrect palpi have a slender, stunted terminal joint. Distal margin of forewing much longer than the proximal margin; the upper median vein of the forewing with a bent course rises far before the cell-end. The strongly spined posterior tibiae exhibit 2 pair of spurs. Beside the typical species of *Felder* another one has been described as *Eumesia*, but it is doubtful whether it belongs hereto.

**E. semiargenta** Blr. (191 h) is at once recognizable by the contrast of the uni-coloured dark brown forewing with the silvery lustrous greyish-white hindwing. On the under surface the forewing is pale ochreous, the hindwing dirty white with a darker costal margin and proximal margin. Colombia.

**E. potomoni** Weeks, described according to a *S*, is above bronze-brown, at the base and margins *potomoni*, darker, with a black dot at the cell-end and 2 subapical hyaline dots, from which a bent, dark line proceeds extending to the submedian space; hindwing the same with 2 dark discal streaks. Beneath lighter brown, marked the same as above. Expanse of wings: 1 3/4 inch. Venezuela (Suapure).

Discernible from the preceding by the posterior tibiae being only singly spurred, the abdomen being longer. The 2nd and 3rd palpal joints intensely scaled, porrect; in the veins no essential difference. Several species from South America.

*A. aureipennis* Blech. (= flavimargo Plattz, tripunctatus Mab.) (191 h) is very conspicuous by the purely golden under surface, only in the 2 the disc of the forewing is dark brown, with the 2 golden discal spots, the 3rd disappearing in the golden apex. The upper surface is dark brown with 3 large yellow spots on the forewing and yellow fringes of the hindwing. Chile.

*A. dividuum* (180 b) is above blackish-brown with a hyaline discal band, parted by the median and its lower branch, a small punctiform spot towards the margin and 3 small subapical spots; hindwing with a dark yellow posterior band composed of one large quadrangular spot and 3 narrow small spots below it; the yellow fringes are speckled somewhat darker. Beneath the forewing is as above, the discal band vanishing in the whitish proximal margin, hindwing brown with numerous yellow spots. Mexico.

*A. xicca* Dyar would perhaps be better placed to *Dela* into the quadristriga-group. Above uni-coloured black, inner-marginal part of hindwing with long greenish hair. Beneath dull black, base of costal margin and apex greyish-brown; hindwing greyish-brown with a black stripe on the submedian fold, expanded at the proximal angle to a spot. Peru, Vilcabamba, at an altitude of 10,000 ft. in August.

*A. puemae* Calvert (191 g) is a magnificent species allied to *aureipennis* from which it differs by the hindwing being quite golden also above. The blackish-brown forewing exhibits a large tripartite discal spot and a subapical band. Beneath golden, only the 2 has a dark cell-end spot and a slightly smoked margin of the forewing. In January in North Chile.

*A. metius* Mab. It is doubtful whether this species and the next one having been described as *Cyclopis* belong hereto. Above blackish-brown with yellowish hyaline spots: 3 small subapical ones, 3 small ones at the cell-end, an oblique row of 3 quadrangular ones between the lower median and middle radial vein. Fringes yellowish-white. Beneath the costal margin of the forewing is reddish-brown, the apex lilac, the hindwing reddish-lilac with a violetish-brown costal margin, in it an oval yellowish spot, another one below it extending from the upper radial vein to the proximal margin. Fringes speckled dark. Expanse of wings: 21 mm. Porto Cabello.

*A. celeus* Mab. is described as yellowish-brown, at the base of the forewing striped yellow with 3 yellow sagittiform spots in the cell and 7 reddish-yellow postdiscal spots, the 3 upper ones as apical streaks, the 4 others below them as far as the proximal margin. Hindwing margined with 3 longish, reddish-yellow spots, the middle spot being double. Fringes yellowish-white. Beneath light brown, tinted yellow, with yellow veins and the spots as above. Hindwing with light yellow veins, also the folds with yellow striiform spots between the upper median vein and the costal margin. Expanse of wings: 25 mm. Villa Bella.

70. Genus: *Pamphila* F.

This species being chiefly distributed in Europe and Asia sends a European representative to North America. It has been dealt with in the palearctic part (Vol. I. p. 344). Posterior tibiae only with end-spurs, the short antennae do not reach to the middle of the costal margin.

*P. palagon* Pall. (= pauciceps Fr., brontes Schiff., mandan Edw., mesapana Skoda., skada Edw.) (Vol. I. t. 57 c) is figured in the palearctic part and occurs in the whole northern United States in a very much orange-spotted form which we may call: f. *mandan* (180 b).

*P. floridac.* Mab. Above olive-grey with small yellowish-white spots on the forewing, 3 subapical ones. 2 in the cell and 2 behind it in an oblique line; fringes ashy-grey. The 2 has only one cellular spot; beneath more purely ashy-grey. Disk and proximal margin of forewing blackish. Proximal margin of hindwing lead-coloured grey, the spots less distinct. Florida.

*P. adarasis* G. & S. (180 b) is above blackish-brown, in the middle of the wing with a large, bipartite, white spot, a dot behind it and 2 subapical dots. Hindwing with 2 small spots. Beneath browner with much more numerous spots being somewhat yellowish on the hindwing. Inner-marginal part of forewing broadly white. Mexico.

*P. daridacus* G. & S. has more spots on the forewing. The hindwing is beneath greyer, the white spots less prominent, in the disc strwn with single, small, black spots. Described from Brazil.

*P. calao* Hein. may belong hereto. Upper surface reddish-brown, forewing with yellow hyaline spots; one in the cell, 2 between the median veins, a double spot near the proximal margin and 3 small subapical spots. Hindwing with a spot near the proximal margin and 3 small subapical spots. Hindwing with a spot near the costal margin, a longish cell-spot and a short macular band behind it; fringes reddish. Beneath similar, but the base and the apex of the forewing are reddish-yellow: hindwing red-brown, the spots whitish, bordered with black; at the costal margin there are 2 spots and near the distal margin a light yellow band. Expanse of wings: 13 1/4 inch. From Ecuador.
P. quinuquemaculata Skinner is above blackish-brown with 3 white subapical dots and 2 postdiscal spots. Beneath as above, hindwing with 2 large, white spots near the costal margin and 8 small white postdiscal dots. Expanse of wings: 21 mm. New Mexico.

G r o u p B.

The antennae of this group are of a very different shape, but never flared; the club is either not curved or only slightly. Palpal terminal joint either long and slender, bent across the vertex, or very short. The cell of the forewing is always shorter than \( \frac{1}{2} \) of the costal margin; the middle radial ribs nearer at the lower than at the upper, and at its base it is mostly bent somewhat downward. Hindwing at the anal angle often somewhat prolonged, but never extended like a tooth or even into a tail. The \( \delta \) never shows a costal fold, but very often a scent-scale stripe or several mostly below the median. The doubly spurred posterior tibiae do not bear a hair-tuft. Characteristic is the way the wings are kept; while at rest and in the sun the forewings are upwardly tucked over, the hindwings expanded horizontally, the latter also upwardly tucked over only when entirely at rest. This group comprises the lepidoptera being by far the most difficult to determine, often exhibiting a most remarkable homogeneity in their exterior.


Antennae very short with a moderately strong, straight club, palpal terminal joint long and slender. Distinguished by the very long, slender abdomen projecting far beyond the hindwing. No scent-scales.

A. menes Cc. (180 b). Blackish-brown with 3 yellowish subapical dots and a narrow yellow base of the costal margin. Beneath the same, though lighter, at the apex of the forewing veined yellow, also the hindwing. Abdomen beneath whitish. Panama to Colombia, Guiana, Amazon, Brazil.


The antennae have only the length of \( \frac{1}{3} \) of the costal margin, but the obtuse club itself is very long. The 2nd palpal joint is long-haired, the 3rd long and slender. Forewing at the apex a little stunted; abdomen also here very long.

O. poweshiek Pack. (180 b) is lustrous darkish-yellow-brown, fringes and costal margin of hindwing dark brown. Forewing beneath reddish-yellow, at the proximal margin blackish-brown, hindwing greyish-yellow, proximal margin broadly yellow, fringes at the anal angle white. North America to Mexico. — Specimens from these southern habitats exhibit the hindwing in the distal-marginal half more or less reddish-yellow: f. isidorus Plötz (180 b).

O. garita Reak. (= hylyx Edu.) (180 c) is smaller, with shorter wings of a darker colour. Colorado, Mexico.

O. edwardsii Barnes. The description of this species was unfortunately not accessible to us.

73. Genus: Adopaeoides G. u. S.

Distinguished from the preceding genera by the shorter antennal club.

A. simplex G. & S. (180 c) is above reddish-yellow with a blackish margin, a blackish margin of the hindwing and a darkened base and proximal margin. Beneath plainly yellow with a black proximal margin of the forewing. Mexico.

A. bistriata G. & S. (180 c) resembles O. poweshiek, but beneath on the hindwing it shows 2 white longitudinal stripes, the fringes are not white. Above the forewing exhibits a dark cell-end streak. Described from Mexico.

A. boeta Hew. (= bilineata Dogn.). We were unfortunately not able to find the description of this species.

74. Genus: Ancyloxypha Fldr.

Antennae as in Oarisma. Palpi long, the 2nd joint loosely haired, the 3rd slender, somewhat upturned. The slender abdomen projects somewhat beyond the anal angle.

A. numitor F. (= puer Hbn., marginatus Harr.) (180 c). The \( \delta \) is above on the forewings dark brown, on the hindwings being bordered with black it is reddish-yellow; in the \( \gamma \) also the forewing is reddish-yellow with a broad black distal margin. Beneath yellow with a black disc and proximal margin. Atlantic States.

A. longleyi French is more strongly built than numitor, the costal margin of the forewing is straighter, the apex more pointed, the terminal joint of the palp somewhat longer. Above monotonously dark brown with a slight blue reflection; hindwing yellow, margined with brown. Beneath almost as numitor, but a little darker, hindwings uni-coloured yellow. From Chicago.
Aren. — A. arenæ Edw. (= tucumanus Plötz., leporina Plötz) (180 e) is above plainly reddish-yellow with a blackish distal margin at apex of the forewing as well as costal margin of the hindwing, and a thin black cell-end streak. Beneath plainly yellow, proximal margin of forewing black. Arizona, Mexico to Venezuela and Peru. — f. euphrasia Plötz (180 d) is marked by the ♀ forewing being suffused with dark brown; from Mexico.

nanus. — A. nanus Plötz (180 d) is a smaller species from Cuba, closely allied to the preceding. Above the forewing is dusted with brown except the cell remaining yellow; beneath with somewhat darker veins.

xanthina. — A. xanthina Mob. Forewing black with a yellow apical spot and 2 similar longitudinal bands, one along the costal margin to the cell-end, the other widening distally and divided into 4 spots. Hindwing black with a yellow, longish, triangular spot occupying the whole margin, fringes reddish-yellow. Forewing beneath yellow with a black band disappearing at the proximal margin. Hindwing yellow, between the veins shaded brownish, whereby they are more prominent. Expanse of wings: 20 mm. Valera.

melanonera. — A. melanoneura Edw. (180 d) is easily recognizable by the black veins above. Beneath the hindwing is brownish with 2 white longitudinal stripes. Colombia.

75. Genus: Copaeodes Speyer.

Antennae short as in the preceding with a straight, strong club with stunted apex. Palpi as in Adopaea (Vol. I, p. 349). The distal margin of the forewing is a little excised in the lower half. The abdomen projects beyond the anal angle. The ♀ exhibits a fine scent-scale stripe extending from the base of the median along the median to the upper median vein, below which it extends to its first third.

singularis. — C. singularis H.-Schäff. (= aurantiaca Hew., waco Edw., minima Edw., candida Wright, macra Plötz) (180 d) is above and beneath uni-coloured light reddish-yellow; the scent-stripe fine black. Beneath the hindwings are scarcely noticeably veined darker. Texas, Arizona, California and from Mexico to Panama, also in Cuba.

wrightii. — C. wrightii Edw. (180 d) is extremely similar, somewhat larger, more robust, with broader wings, at once discernible by the smoked fringes; the scent-stripe is a little steeper. California.

myrits. — C. myris Edw. (180 d) in contrast with it is smaller, with narrower wings, towards the distal margins smoky, more broadly at the apex. Costal margin of hindwing broad dark, distal margin narrowly bordered with dark. Beneath the base of the forewing is black. Arizona.

eunus. — C. eunus Edw. (180 e) is as large as wrightii, with a narrow black marginal line; the veins towards the latter somewhat darkened, the margin very feebly and narrowly smoked. On the hindwing beneath the ground between the broadly lighter veins is brownish with a greenish grey. California.

76. Genus: Chaerephon G. u. S.

Antennae as long as half the costal margin, club short, at the apex pointed somewhat like a hook. The terminal joint of the palp is shorter than in the preceding and half erect. Apex of forewing pointed, in the ♀ more obtuse. Middle and posterior tibial spiny, the latter with double spurs. In the ♀ of citrus a narrow scent scale stripe which is absent in rhesus extends from the rise of the upper median vein obliquely to the inner-marginal vein.

citrus. — Ch. citrus Mob. (180 e). Dull greyish-brown, reddish-yellow, with greenish scales at an oblique exposure to the costal margin and in the basal half of the forewing, with some blunted, reddish-yellow, subapical and postdiscal small spots, also on the hindwing. Fringes greyish-white. Beneath greyish-yellow, streaked with blackish, except a postdiscal band of spots, and with small, black internerval spots. Scent-stripe black. The ♀ is duller in its colour with more distinct yellow spots above. Mexico, Honduras, Guatemala.

rhesus. — Ch. rhesus Edw. (= subreticulata Plötz, axius Plötz) (180 c) is much larger, blackish-brown, of a more greenish tint with larger and more distinct spots. Also beneath more blackish-brown with an olive tint and white spots: the forewing exhibits a large, white inner-marginal spot, the hindwing one more basal band of spots being broken in an acute angle. Colorado, Arizona to Mexico.

77. Genus: Hylephila Bill.

Scarcely distinguished from the preceding genus; palpi and antennae the same. On the somewhat longer forewing the lower median vein rises much nearer at the base, in the ♀ somewhat farther than at the cell-end. Distal margin of hindwing somewhat concave before the anal angle. The scent-scale stripe extends as in Chaerephon and is distally bordered by a series of erect scales.

phylaeus. — H. phylaeus Drury (= augius Hbn., hala Btlr., ancora Plötz, bucephalus Steph.) (180 c). The ♀ is above reddish-yellow, with black wedge-shaped streaks before the distal margin, a long black spot behind the cell.
of the forewing, a broad black stigma, and dark costal margin of the hindwing. The ♀ is dark brown with a band of yellowish-red spots. The under surface is light yellow, in the ♀ dark olive-grey on the hindwing. Very widely distributed and mostly common in the eastern and southern States of North America, from Mexico to Argentina and in all the West Indian Islands. — The light green pupa with darker green dorsal and lateral stripes lives on herbs and changes into a light green pupa.

**H. andina** Stgr. might be a dark local form of **phyllaenus**. It differs by much broader blackish-brown distal margins of all the wings, not being dentate on the hindwings. The costal-marginal part of the hindwing is also much broader dark, also the veins and the inner-marginal part, so that almost two thirds of the surface of the wings are dark. The under surface is much more intensely spotted dark, especially on the hindwing, which mostly are of an ochreous-brown ground-colour. From Cocapata (Bolivia).

**H. peruana** sp. nov. (180 f) is somewhat smaller than **phyllaenus** and is very closely allied to **fasciolata**, on the ♀ forewing scarcely different, the black longitudinal spot at most behind the upper cell-end being somewhat larger and thicker; the hindwing exhibits below the cell yet 2 small black longitudinal spots. The ♀ is much lighter yellow. The under surface is quite different: dull ochreous-yellowish, in the ♀ almost without any reddish tint, the markings from above repeated in distinct, small, jet-black, wedge-shaped spots which are smaller than above and all well separated by light veins. From Cuzco (Peru).

**H. fasalli** sp. nov. (180 f). There only exists one ♀, for which reason its position is not certain. Thrice as large as **peruana**, above light yellow as the ♀ of **peruana** with an ochreous-reddish tint, marked as there, but the black markings particularly of the distal margins are much broader; especially on the hindwing proximally not dentately, but straightly defined; on the middle radial vein the yellow colour points pointedly towards the margin, whilst from the cell it is followed in an acute angle by a black discal angular spot; fringes ochreous, towards the apex feebly speckled. The under surface is most peculiarly and differently marked. On the forewing as above, but dulfer, the small subapical spots whitish, the anal angle lighter. Hindwing likewise as above, but much lighter, the margins strewn with a violetgreyish tint, the subcostal within the cell distinctly whitish-yellow, below it whitish hairing; behind the inner-marginal fold there is a blackish longitudinal spot, the anal half of the wing more sand-coloured yellow. ♀ from Cuzco (Peru), taken by FasSt.

**H. isonira** Dyar (180 f) is very closely allied to **phyllaenus**; in the ♀ the black margins are broader, almost forming a proximally dentate band. The ♀ is only slightly darker than the ♀, the markings not so much flown together. Beneath light yellowish, hindwings tinted grey with a lighter discal band, bordered by a dark red, sharply broken, the lower segment straighter than in **phyllaenus**, not spotted black. From Peru, rising to altitudes of 14,000 ft., in July and October.

**H. fasciolata** Blch. (= emma Plötz) (180 f) is somewhat smaller and stouter than **phyllaenus**, of a deeper reddish-yellow, above somewhat more intensely marked black; also the ♀ is marked and coloured almost like the ♀, instead of the scent-stripe there are 3 small black spots. The principal difference consists in the very much black-spotted under surface. From Chile.

**H. fulva** Blch. (= grynea Plötz, lujana Plötz, antarctica Mab.) (180 f) is larger, especially the ♀ is much more intensely marked black; beneath the ♀ is much strewn with brownish-grey, with a white postdiscal macular band and cellular spot, the ♀ is light yellow with small black punctiform spots and a black proximal margin of the forewing. Chile.

### 78. Genus: Erynnis Schkr.

The antennae are somewhat longer than in **Hylephila**, but still shorter than half the costal margin; the club is longer, the hook-shaped apex better developed. The scent-scale stripe of the ♀ broaden and extends to the rise of the lower median vein.

**E. commoa** L. (= virgula Retzius) has been dealt with in the palearctic part (p. 348, t. 88 d) and occurs in a number of forms in America. — **f. manitoba** ScHr. (180 f, g) is a slender form above lighter yellowish-brown, with slightly darkened margins above. Beneath on the hindwing the whitish marginal band is quite coherent and sharply angled, the ground-colour dark brown or with a greenish tint. To the north as far as Canada, to the south as far as Colorado and North California. — **f. viridis** Edw. (180 g) is on the hindwing beneath distinctly green, the marginal band being often interrupted. — **f. juba** ScHr. has above somewhat broader darkened margins of the wings; beneath the apex of the forewing is more darkened, the spots of the hindwings are less coherent. — **f. nevada** ScHr. (180 g) is smaller, above the ♀ is of a deeper yellowish-red, the margins are less darkened; beneath the spots of the hindwing are very small on a greyish-green ground. — **f. idaho** Edw. (180 g) is a very light form in which the marginal darkening is reduced almost to a marginal line; the hindwing is beneath light yellowish-grey, the small light spots are little prominent. — **f. colorado** ScHr. (180 g) on the contrary is very much more darkened, also the basal area. Hindwing beneath dark greenish-grey with angular, torn, light spots. — **f. columbia** ScHr. (180 h) is above almost just the same as beneath, but quite light sand-coloured yellow, almost unmarked, slightly lighter than **idaho**. — **f. oregonia** Edw. (180 h) resembles **manitoba** above, but the ♀ is much lighter and more similar to the ♀, beneath light yellowish-grey as **idaho**, with a very
ERYNNIS. By Dr. M. Draudt.

**assinoia.** light apex of the forewing and black basal markings. — *f. assinoia* Lyman, are the eastern specimens from

**laurentina.** Regina with a very light yellowish-green under surface. — *f. laurentina* Lyman, the dark brown form is called, in case the above mentioned name of *f. manitoba* is to refer to the yellowish-green *assinoia*. — *f. manitoboides* Pfl. is smaller than *mani toba*, of a bright tan-colour, with a very broad dark brown margin. Ontario.

**sassacus.** HArr. (180 h) is hardly discernible above from the forms of *manitoba*; the *Ω* is larger, the marginal shading darker and more extensive. Beneath the wings are light yellowish-red, the spots above scarcely lighter, the basal area of the forewing spotted black. From New England to Georgia, to the west as far as Colorado. — The remarkably stout, green larva lives on herbs. — *f. dacota* SKeys. has the dark markings almost extinct, the ground-colour is paler. The *Ω* on the contrary is quite dark with small light spots. South Dakota, Montana.

**parvic.**

**daucar.**

**harpalus.** EEdw. is very closely allied to *sassacus*. Forewing in the disc and at the costal margin reddish-yellow, light brown at the base and distal margin, hindwing the same. Beneath pale reddish-yellow, forewing at the proximal margin yellowish, at the apex ochreous, at the base black. Hindwing ochreous-yellow, in the disc an indistinct, lighter, narrow, bent band and a cellular spot. The *Ω* is lighter, the brown colour confined, with a light submarginal band. Beneath the light band of the hindwing is more distinct. From Nevada.

**pawnee.**

**montana.**

**ottoe.**

**canada.**

**losus.**

**cabelus.**

**edw.**

**amanda.** Kansas and Nebraska. — *f. amanda* Plötz (180 i) is a form with a broad black distal margin from an unknown habitat.

**bog.**

**riddingsii.**

**nasa.**

**meler.**

**nepus.**

**slossonae.**

**attsalus.**

**yuma.**

**carus.**

**licitus.**

**pawnee.**

**Edw.** (180 i) is a very large, very light reddish-yellow species with very narrowly smoked marginals and also in the female scarcely darkened wings. The under surface is quite monotonously light reddish-yellow or Isabel-coloured without any marking, only with a black-marked basal area of the forewing. From Kansas and Nebraska. — *f. amanda* Plötz (180 i) is a form with a broad black distal margin from an unknown habitat.

**Edw.** (180 i). Here also the *Ω* is similarly marked as the *Ω*-forms, of a dull greyish-brown with a reddish-yellow postdiscal band, subapical dots on the forewing and small diffuse spots on the hindwings. The under surface is darker brown than above, the light macular markings ivory-coloured; the hindwing exhibits near the base another bent band of white spots. From the Atlantic States.

**Edw.** (180 k) is a larger species with long wings, the *Ω* reddish-yellow with a long black stigma, smoky margins and an exceptionally broad dark apex of the forewing with 4 whitish spots therein. The *Ω* is particularly large, dark brown with whitish spots being more reddish-yellow towards the proximal margin and on the hindwing. Beneath the hindwing is greenish-grey with bright pearl-coloured spots which are proximally and distally bordered by a darker olive and spotted so. Pennsylvania to Montana and Colorado.

**Edw.** (180 k). Similar as *meler*. but larger, darker, the macular markings more distinct with a long, wedge-shaped, reddish-yellow cellular spot; the *Ω* is larger and darker. Beneath the hindwing is dull brownish-grey, the light spots are lighter grey. From the southern Atlantic States to Florida and Texas.

**Edw.** Above uni-coloured ochreous-yellow, without spots, with a long, narrow, almost straight stigma; only the costal margin of the hindwing is darkened. Beneath still lighter yellow, base of forewing blackish. Described according to 1 *Ω* from Arizona. Expand of wings: 1.3 inch.

**Edw.** very much resembles *Chaereph. rhesus* (180 e) above, but it is easily discernible by the *Ω* stigma, less purely white fringes and a different under surface which is brown with the costal margin of the forewing and the proximal margin of both wings being dusted yellowish-white, as well as a narrow, similar distal margin; of the same colour are the veins; all the spots above are more distinct and larger. From West Texas.

**Edw.** Above blackish-brown with a large, reddish-yellow discal spot, some postdiscal and 3 subapical small spots, hindwing with a large, reddish-yellow, triangular discal spot. Beneath brown, at the costal margin of the forewing and disc of hindwing tinted reddish-yellow, the spots of above being whitish here. Hindwing with a rectangularly bent line of white spots behind the cell, and 2 cellular dots. From Texas.
E. morrisonii Edw. (180 k) is easily recognized by the scent-scale stripe being far prolonged towards the apex by black spots; also in the ♂ this band-shaped, dark marking is very conspicuous. Beneath light reddish-yellow, marked ferruginous-brown with a black base of the forewing. Hindwing of a deep ferruginous-brown with a silvery white cellular stripe and a white, postdiscal macular band. Colorado, Arizona and Mexico.


Like Erynnis, but the terminal joint of the palp obtuse and hidden. Veins as in Hylephila.

A. campestris Bsl. (= huron Edw., kedema Bttr.) (180 k, l) is well distinguished by the very broad stigma and a broad, blackish-brown margin. The dark ♂ shows postdiscal light spots. Beneath much lighter, the spots only feebly traceable. Atlantic States, Arizona, California, Mexico, Guatemala, Costa Rica, Colombia.

A. flavoeola Mab. resembles the preceding, but it is smaller. Light reddish-yellow, on the forewing with a broad blackish-brown distal and costal margin; 3 subapical, small streak-shaped spots, 2 postcellular, small spots separated afar, below them a long, notched out spot and 2 more below it, the three lower ones touching the large, oval, black scent-spot. Hindwing with a broad dark margin, the disc reddish-yellow, darkened by grey, bordering on 3 lighter yellow spots. Beneath yellow, marked as above, hindwing greyish-yellow, at the proximal margin yellow with 5 lighter postdiscal spots. The ♂ is lighter, in the disc more brownish. Expanse of wings: 26 to 27 mm. Porto Cabello.

A. mesogramma Lutr. (= canaxa Hév.) (180 l) is an uncommonly large, deviating species. Above in the ♂ reddish-yellow, in the ♂ more spotted whitish. Easily recognizable by the hindwing beneath being marked with a broad white band and a small cellular spot before it; in the ♂ it is slightly tinted a yellow. Brazil, Cuba.


Likewise very closely allied to the genus Hylephila and not different in the veins. Palpal terminal joint very short, scarcely visible, bent forward. The ♂ scent-scale stripe consists of 2 rows of dull black scales, the distal one being linear, the proximal ones somewhat bent, between them scales of a somewhat leaden lustre.

Th. vibex Hbn. (= praeceps Sodr., lumidia Mschr., golenia Mschr., stigma Skinner, combinata vibex. Plötz, zeneckeii Plötz) (181 a). Above reddish-yellow, towards the margin broadly darkened, with wedge-shaped, black interneral spots on the forewing; the broad stigma rests on a black spot which is towards the apex continued beyond it. Beneath lighter yellow, base of forewing black, hindwing with minute spots. Central America, Mexico, Colombia.

Th. sulfurina Mab. (= catilina Plötz) (181 a) is similar, of a light sulphur-colour, the long, black oblique stripe of the forewing coherently extending in the shape of a band to the apex. Hindwing darker with but few yellow spots. Beneath the hindwing is strown with a greenish-grey. Brazil, Cayenne.

Th. phormio Mab. is as large as vibex. Forewing yellow, at the apex and distal margin black with a black oblique band as far as the inner-marginal vein at the base; costal margin yellow. Hindwing red-brown, in the disc yellow. Forewing beneath as in vibex, but more yellow, distal margin almost quite yellow. Hindwing yellow with a series of 5 black dots and before it 3 or 4. Brazil.

Th. brettus Bsl. & Lecc. (= wingina Sodr., unna Plötz, margarita Plötz) (181 a) is similar to vibex, brettus. but much lighter, the marginal darkening almost absent, only the wedge-shaped spots before the margin being present; hindwing quite reddish-yellow with a black distal margin, very much like H. phyheus. Beneath discernible by darker and larger spots. The ♂ is quite dark brown with very small reddish-yellow spots on the forewing. Atlantic States. Larva on herbs. — f. brettoides Edw. (= clara Plötz) (180 k) is very much lighter with a very narrowly darkened distal margin, especially the ♂ has much larger, yellowish-red spots. Beneath greyer with very small punctiform spots. California.

Th. mystic Sodr. (181 b) above very much resembles E. morrisonii by the long extent of the black oblique spot; also the ♂ is similar. Beneath reddish-yellow at the costa and basal area of the forewing; the rest and the hindwing ferruginous-brown with light spots, inner-marginal part light brown. Atlantic States.

Th. erynnioides Dyar is above yellowish-red, at the base blackish and with a broad black distal margin with 3 small, reddish-yellow subapical dots therein; the stigma is broad, somewhat bent, above bordered with a deep black, beneath spotted black; hindwing reddish-yellow, narrowly bordered with black. Beneath the hindwing is reddish-yellow, at the proximal margin lighter with a straight row of white spots through the middle, one below the cell, one in the cell-end and one above it, the lower and upper spot being proximally bordered with black. In the ♂ the hindwing beneath is more greenish-yellow, only at the proximal margin reddish-yellow, the white spots small, but all around bordered with black. California.
Th. magdalenia H.-Schäff. (181 b) is a smaller species, above bright reddish-yellow, in the inner-marginal area somewhat darkened, with narrow black borders and costal margin. The 2 is darkened at the cell-end. Beneath reddish-yellow, forewing in the submedian space close to the anal angle black; the 2 is more intensely strewed with a yellowish-green. From Cuba.

Th. chusca Edw. Above reddish-yellow, with narrow blackish-brown, proximally dentate distal margins, the teeth on the forewing opposite the transverse vein absent. Scent-stripe velvety black, thick, towards the base convex, here at the lower end with a black spot, distally a small dark spot. Beneath light yellow, unmarked, hindwing more ochreous. From Arizona.

Th. draco Edw. (181 c). Blackish-brown, at the proximal margin broadly haired olive, only in the costal-marginal part and in some postdiscal and subapical small spots reddish-yellow; disc of hindwing irregularly spotted reddish-yellow. Fringes of hindwings yellowish-white. Beneath the hindwings are greyish-brown, the spots light sulphureous. Colorado.

Th. siris Edw. is allied to mystic (181 b). Forewing above reddish-yellow, apex and distal margin as far as the cell and the hindwings dark brown; small, reddish-yellow postdiscal and subapical spots on the forewing; behind the narrow, bent stigma a dark brown spot. The hindwing exhibits in the disc an indistinct, reddish-yellow, narrow band. Beneath darker brown, the spots more distinctly yellow. The 2 is larger, without the reddish-yellow discal colour of the 2, the spots clearly reddish-yellow, especially on the hindwings. Beneath almost cinnamon-coloured. Mount Hood.

Th. mardon Edw. (181 b) is above light greyish-brown, scaled yellow with a more distinctly reddish-yellow costal part of the forewing and traces of such subapical and postdiscal small spots. Beneath light grey, more or less strewed with yellowish, the spots of above repeated whitish, besides a bent macular band in the middle of the hindwing. Oregon, Washington.

Th. athenion Hbn. (181 c) is in the 2 sex above uni-coloured blackish-brown with the broad stigma behind which there may appear very indistinct light spots which are very distinct in the 2. Beneath duller greyish-brown, spotted lighter on the forewing. Hindwing violetish-grey with a dark brown discal band, costal-marginal and distal-marginal spots. Mexico to Brazil.

Th. bahiensis Sch. is dull brown, cell of forewing ferruginous-brown, as well as a stripe at the base of the costa and small stripes above the cell-end, 3 small subapical spots and 2 small spots near the middle of the distal margin, as well as lighter shades behind the stigma; the disc of the hindwing is also ferruginous-brown, parted by the darker veins. Beneath the same, but of a duller colouring. Expanse of wings: 23 mm. Bahia.

Th. dares Plötz (181 c) seems to be very similar, so that both may in certain cases be comprised as dares. According to the figure, only the small spots at the middle of the distal margin are absent and the under surface is lighter, more yellowish-grey, strewed with ferruginous-brownish, with a blackish inner-marginal ray being thickened towards the anal angle. From Brazil and Bolivia.


Antennae and palpi as in Hylephila, also the veins. The 2 stigma consists of a somewhat bent stripe of reverted black scent-scales, below and outside of it with a spot of similar, flatter scales.

P. coras Cr. (= peckins K., wamsutta Harr.) (181 c, d) is a smaller, squat species, blackish-brown, in the basal and larger costal-marginal half with small subapical and postdiscal spots; also on the hindwing there is a broad postdiscal band of spots, the second from above being very long, proximally and distally projecting from the row. The 2 is without the reddish-yellow basal half. Canada to Virginia, Kansas and Iowa.

P. baracoa Lac. (= amadis H.-Schäff., myus French) (181 d) is above reddish-yellow, at the margin olive-brownish with a similar longitudinal spot behind the cell to the margin and from the proximal margin on both sides of the stigma; hindwing unmarked, fringes ochreous-yellow. In the 2 only the costal margin is broadly reddish-yellow and 2 small postdiscal spots. Beneath of a very dull colouring with a somewhat lighter postmedian macular band. Florida and Cuba.

P. sabuleti Bsl. (= genoa Plötz) (181 d) looks above like a small, squat H. phylaenus with more darkened margins, especially the hindwings are bordered darker. Beneath lighter with still lighter spots being proximally and distally bordered by oblong black spots. California.

P. chispa Wright (181 d) is only half as large, above still more broadly bordered with dark, so that the wedge-shaped spots are less prominent. The under surface is purely olive-grey with a distinct, coherent, whitish postdiscal band of the hindwing without the black spots of the preceding. California.

P. ignorans Plötz (181 c) is apparently allied to chispa, the colour is a purer golden yellow, the black margin of the hindwing very broad. Beneath the hindwing is darker, almost blackish-brown, the light postdiscal band similarly shaped as in coras, with a fine light anteterminal line. Venezuela.

P. winslowi Weeks is doubtfully placed here. Above dark brown, towards the base reddish yellowish-brown, in the disc golden brown, stigma black. Hindwing dark brown, in the disc tan-coloured, at the proximal
margin haired golden brown. Beneath tan-coloured, basally black, at the proximal margin drab. Hindwing almost golden orange, towards the proximal margin darker, with a dark brown marginal line. Expanse of wings: 28 mm. Venezuela (Suapure).

P. lina Plötz (181 d) is a very dark species; in the ♂ scarcely lighter spots project on the forewing. The ♀ scent-scale spot consists of 4 parts: an oval velvety spot on the median between and often yet behind the rise of the median veins, on the base of the submedian a small roundish spot, between both there is a broad, grey scale-stripe, and finally another larger spot of modified scales. Middle and posterior scales strongly spinous.

C. druryi Latr. (= pustula Hbn., oth Bdl., eggeremt Scddr., actna Scddr., ursa Worth) (181 e) is very similar to Thymelicus athenion (181 c), blackish-brown with a black stigma; on the forewing the costal margin, sometimes the cell, a discal spot behind the cell, and 3 subapical dots reddish-yellow: also the hindwing often exhibits extinct discal spots. Beneath reddish-yellow, in the proximal half blackish-brown with 2 or 3 postcellular spots; hindwing with a row of light yellow dots near the distal margin. Eastern States, Georgia, Mexico to Brazil. — The green larva with its brown head lives on Sisyrinchium and changes into a green pupa.

C. ophiotes Mob. is larger than druryi. Forewing orange, at the apex and distal margin black with an oblong-quadrangular inner-angular spot as far as the stigma which extends in a black oblique band to the base; from the cell-end a black stripe extends to the margin. Hindwing the same, at the costal margin darkened, as well as at the anal angle. Beneath reddish-yellow, the base of the forewing and spot of the proximal angle are black, the proximal margin itself whitish. The ♀ is similar, more broadly bordered with black, beneath redder. Brazil. Antilles.

C. pudorina Plötz (= minaya Schs.) (181 e) is closely allied. Wings dark brown, fringes grey; forewing with an indistinct, very small, light spot behind the lower cell-angle, reddish-brown scales at the base of the costal margin and an olive-haired proximal margin; the hindwings are haired the same. Beneath the forewing is blackish with a grey proximal margin and a red-brown costal margin and apex; beside the small spot of the upper surface there is below it another one; hindwing reddish-brown with a dark discal shade and a light cellular spot before it; before the distal margin a lighter shade. Expanse of wings: 27 mm. Tijuca.

C. jobrea Dyar (181 e, f) is above bronze-black; two thirds of the costal margin are broadly reddish-yellow, as well as 3 small subapical spots; postcellular spots as in pudorina, but more distinct. Hindwing in the disc lighter, reddish-yellow, with traces of 2 or 3 small spots behind it. Beneath the forewing is reddish-yellow above the blackish proximal margin; spots as above; hindwing yellow, dusted with reddish-yellow, with a faint, light postdisclal band. In the ♀ the reddish-yellow costal margin is absent. Mexico (Guerrero). The species was recently declared to be synonymous with otho = druryi by the author himself!

C. misera Lec. (= mago H.-Schäf.) (181 c) is larger, in the ♀ much darker, the light spots scarcely visible, the costal margin dark; the ♀ with very small yellow postdisclal spots. Beneath likewise unicoloured dark, only the proximal margin of the forewing somewhat lighter, grey, and the costal margin somewhat ferruginous-yellow. From Cuba.


C. vesuria Plötz (181 f) is perhaps a somewhat smaller darker local form of the preceding from Jamaica; the distal margin is broader black, especially the hindwing is so broadly bordered with black that only a triangular, reddish-yellow discal spot remains. Beneath the hindwing is somewhat dusted olive-greenish from which a lighter yellow postdisclal band projects.

83. Genus: Ochlopes Scddr.

Almost like Hylephila: the antennal club is somewhat longer; the ♂ scent-scale spot consists of a linear stigma, on both sides is an area of differentiated scales.

O. nemorum Bdl. (= yrke Edw.) (181 f) is above reddish-yellow with a jet-black stigma and a black distal margin into which the light veins extend somewhat, and a dark postcellular spot. Beneath very much duller and lighter, in the inner-marginal part of the forewing black with a large light spot. Hindwing straw with yellowish-grey, with an indistinct light postdisclal band. California.
LIMOCHORES. By Dr. M. Draudt.

0. sylvanoides Basl. (= sonora Seddr.) (181 f, g) is very similar, of a deeper reddish-yellow, towards the margin more reddish-brown, the black margin more blurred, proximally not forming such wedge-shaped spots. Beneath the hindwing is of a purer olive-grey, the white postdiscal band is more distinct, a roundish cellular spot near the base the same. Pacific States, Colorado, Nebraska. — f. utahensis Skinner is larger and lighter, beneath on the hindwing spotted greenish-white. Utah, Idaho, Colorado.

0. agricola Basl. (= francisca Plötz) (181 g) is smaller, lighter reddish-yellow, the hindwing much more extensively yellow with a narrow blackish margin. Beneath reddish-yellow, forewing at the proximal margin black with a large, whitish spot. Hindwing almost unmarked. California, Nevada, Washington, also reported from Mexico.

0. snowi Edw. (181 g) is a much darker and larger species. Also the $\varphi$ is dark brown above, behind the stigma with a series of bone-coloured spots, 3 subapical dots and 2 punctiform spots at the cell-end; proximal margin haired reddish-yellow; hindwing with 3 or 4 postdiscal spots; in the $\varphi$ all the spots are larger. Beneath reddish-brown, all the spots more distinct, lighter. Widened towards the proximal margin on the forewing. South Colorado to Arizona and Mexico (Puebla).

0. samenta Dyar (181 g). Bronze-black, behind the stigma with 3 yellow spots, the uppermost being quadrangular, partly transparent and with 3 subapical dots. Hindwing with a postdiscal band of 3 reddish-yellow united spots. Beneath the spots of the forewings are enlarged, the lowest wedge-shaped, reddish-yellow, the disc black. Hindwing brown, the band reddish-grey, besides with a small, straight basal band, behind which there is a dark shade. Mexico (Guerrero, Guadalajara).

0. leonardus Harr. (181 g, h). Large, bright yellowish-red species with broad black margins and apex of forewing, in the forewing 2 subapical yellowish-red, small spots, 2 more below them towards the margin. The $\varphi$ is quite blackish-brown without the reddish-yellow basal colour with larger, light yellowish-white spots. Beneath dark brown-coloured, in the proximal part of the forewing black with large, bright yellowish-white spots. Atlantic States.

0. meskei Edw. (= straton Edw.) somewhat resembles Erynnis attalus (1810 i), it is larger, above more brightly and clearly marked. Beneath uni-coloured bright orange, only at the proximal margin and base of the forewing blackish-brown; the spots of the upper surface smaller, but somewhat lighter; at the cell-end there are 2 faint, yellow, horizontal striiform spots. Hindwing uni-coloured except 2 or 3 yellowish dots. From Texas.

0. milo Edw. (181 h) is small, fiery reddish-yellow, distal margin only narrowly darkened, towards the proximal margin in long, pointed wedge-shaped spots; especially the hindwings very narrow. Beneath monotonously dull yellowish-red, almost without any marking. Oregon.

0. pratina Edw. (181 h) is above almost the same, the margin a little broader and darker. Beneath more yellowish-grey with an indistinctly lighter marking, particularly a pointedly broken postdiscal band of the hindwing. California, Washington.

0. verus Edw. is allied to agricola. Above yellowish-red with a blackish-brown distal margin, being broad on the forewing, narrow on the hindwing; the subapical dots indistinct; at the upper end of the stigma there is a blackish-brown spot extending to the dark margin. Beneath bright reddish-yellow, forewing at the base and in the place of the stigma black, the spots of the upper surface hardly visible; hindwings entirely unmarked. The $\varphi$ is lighter, the spots more distinct, semi-diaphanous. Expanse of wings: 1 inch. California (Havilah).

84. Genus: Limochores Seddr.

Antennal club strong and long with a short, reverted apex; palpal terminal joint short, obtuse. The linear scent-organ extends from the rise of the upper median vein to the submedian. Scarcely to be separated from Ochliotes.

bimacula.

L. bimacula Grt. & Rob. (= acaecostus Seddr., illinois Dodge) (181 h) is a large, blackish-brown species; on both sides of the long, narrow scent-scale stripe the ground is lighter reddish-yellow; collar haired ferruginous-brown. Beneath the duller greyish-brown forewing the costal margin and cell are reddish-yellow, behind it there are 2 whitish spots. The dark grey hindwing is strewn with ferruginous-yellowish. From the Atlantic States.

pontiac.

L. pontiac Edw. (= conspiciua Edw., orono Seddr.) (181 h) is smaller, the reddish-yellow ground very much more extensive, occurring also in the disc of the hindwing. The $\varphi$ exhibits on the forewing a bone-coloured, on the hindwing a reddish-yellow macular band. Beneath light reddish-brown, the spots only indistinctly lighter. Atlantic States.

manataqua.

L. manataqua Seddr. (= cerneus Harris) (181 i). Above olive brownish-grey, on both sides of the stigma and at the base of the costa reddish-yellow; the $\varphi$ is blackish-brown with bands of bone-coloured spots. Beneath bright grey with a postdiscal light macular band on the forewing; on the hindwing the spots are more separated, in a slightly bent row. New England and Canada to the west as far as Nebraska. — f. lidia Plötz (181 i) is above darker, without a reddish-yellow costal area, beneath the hindwings are more yellowish-red.

yehl.

L. yehl Skinner (181 i) is bright reddish-yellow, at the distal margin and apex broad and deep black, in the latter with 2 small reddish-yellow subapical dots and a dark subcostal stripe. Beneath lighter, hindwing
monotonously light cinnamon-coloured with 4 round yellowish spots arranged in a semicircle, and a small spot near the base of the cell. From Florida.

L. dion Edw. looks above very much like the following arpa, but it is discernible by the hindwing showing on its dark reddish-yellow ground a light reddish-yellow wedge-shaped streak in the inner-marginal third, whilst in arpa it is equably dark. From Canada to Nebraska.

L. arpa Bosl. & Lec. (181 k) resembles a very large, dark binacula; the bright parts on both sides of the stigma are more olive, not so reddish yellow. Beneath the hindwing is of a purer ferruginous-yellow. Gulf States.

L. palatka Edw. (= florideensis Plötz) (181 k) is very large, yellowish-brown, broadly margined with black, with a comparatively small, narrow stigma and small black strigiform spots behind the upper cell-angle. The blackish-brown □ has smaller, separate postdiscal spots than the following byssus, whereas the whole disc of the hindwing is reddish-yellow. Beneath as above, but duller, the hindwing uni-coloured greenish-brown or reddish-brown. Only in Florida, from the Indian River.

L. byssus Edw. (181 k) is very similar, the scent-scale stripe is much longer; the distal margin of the hindwing is not so sharply defined as in palatka, but gradually passes over into the yellowish-red, greenish reflecting discal colour. The □ has more coherent, larger macular bands, whereas on the contrary the hindwing only shows some minute, diffuse postdiscal spots. Beneath orange-red, base and proximal margin of forewing black. Florida.

L. cernes Bosl. & Lec. (= athaton Harr., taunus Schohr., themistocles Plötz) (181 k) is smaller than manutanqua and stouter, but it is otherwise very much like it. Above reddish-yellow, in the □ mostly only at the costal-marginal part, but the reddish-yellow colour may also extend farther towards the proximal margin. The □ is dark brown with a light yellow postdiscal band and 3 small subapical spots. Beneath the hindwing is light brownish-grey with a hardly visible, lighter macular band behind the cell.

L. aurinia Plötz (181 k) is much darker coloured, the basal part dark yellowish-brown, tinted olive-greenish, the whole distal half of the wing blackish-brown. Disc of the hindwing reddish-yellow. Beneath duller ferruginous-brownish, forewing in the basal part of the proximal margin black. Jamaica.

85. Genus: Euphyes Sodd.

Antennae club thick and long with a short turned down apex. The obtuse palpal terminal joint projects a bit from the hair of the second joint. The shape of the wings is somewhat longer owing to the longer proximal margin of forewing. Stigma similarly placed as in Limoeckores, but thicker, glandular.

E. metacomet Harr. (= rurea Edw.) (182 k) looks above like Th. athenion, uni-coloured blackish-brown with the black stigma, beneath the same, though somewhat lighter. The □ has 2 semi-transparent, small subapical spots and 2 similar ones behind the lower cell-angle. Beneath the hindwing is light brown or purple-brown with traces of small, light postdiscal spots. United States to Canada.

E. vestris Bosl. (= kiovah Reak., osea Linta.) is regarded by Dyar as the typical form of metacomet; it is scarcely different, with a slight reddish reflection towards the base and proximal margin. California.

E. verna Edw. (= pottawatomie Worth., velutina Plötz) (182 a) differs from metacomet by whitish, semi-transparent spots behind the stigma, subapically, and a similar longitudinal streak in the cell. Beneath lighter, more reddish, on the hindwing with a bent row of small light postdiscal spots. Atlantic States.

E. osyka Edw. (182 a) looks above like metacomet, behind the stigma we see traces of a reddish-yellow lighter part. Beneath quite monotonously greyish-brown. Gulf States, Indiana.

E. menopis Schs. Blackish-brown with a black stigma, in the basal half olive-ochreous, at the costal margin yellow, with a yellow spot in the upper cell-end, 3 longish, yellow, small subapical spots and a yellow shade behind the stigma. Hindwing haired olive with some postdiscal, faint, ochreous-yellow patches. Beneath the forewing is black in and below the cell, distally reddish-brown, the spots lighter, at the anal angle a black nebulous spot. Hindwing yellow, at the proximal margin dark grey, basal and marginal areas reddish-brown; an antemarginal, irregular row of dark spots, also basally and in the disc, those below the cell and at the distal margin being violet, the others red-brown. Expanse of wings: 22 mm. Peru.

86. Genus: Oligoria Sodd.

Antennae and palpi as in the preceding. Chiefly separated by the absence of the scent-scale stripe in the □.

O. maculata Edw. (= deleta H.-Schit.) (181 a). Above brownish-black with a very small, hyaline subapical and 2 postdiscal spots which are larger in the □. Beneath just as dark brown, forewing with a whitish
inner-angular spot, hindwing with 3 small discal spots, the uppermost being farther remote, near the costal margin. Southern Atlantic States. Perhaps also grossula H. Schaff, belongs to it as a synonym.

87. Genus: Poanes Sedr.

Antennae shorter, club thicker than in Oliopia. The second palpal joint very much hairily scaled, terminal joint pointed. ♀ also without a stigma.

P. massassoit Sedr. (182 n) looks in the ♀ above almost like Mastor bellus: blackish-brown with yellow fringes. Beneath at the costal margin and distal margin bordered with reddish, with 3 light subapical and 2 or 3 postdiscal small spots, hindwing reddish-yellow bordered with reddish-brown. The ♀ has on the forewing the spots also above, and on the hindwing 3 or 4 postdiscal spots, 2 of them far towards the costal margin. Beneath the hindwings are greyer though very variable. — f. suffusa Laurent is beneath dusted darker grey. Atlantic States, Colorado.

88. Genus: Poanopsis G. & S.

Distinguished from the preceding genus by shorter, broader wings, a shorter and thicker terminal joint of the palp and a scent-scale stripe extending from the rise of the upper median vein to the submedian. Only 1 species:

P. puxillus (= pupillus Plötz?) (181 a). Yellowish-brown, fringes whitish-grey; forewing with 2 subapical dots and 2 white hyaline spots in the disc between the upper median and middle radial vein and one at the cell-end; hindwings not spotted. Beneath more yellow, forewing marked the same as above, hindwing with a faint postdiscal macular stripe. Mexico.

89. Genus: Paratrytone G. & S.

Separated from Atrytone by the costal margin of the hindwing being clad with long hair, and a linear scent-scale stripe from the base of the upper median vein to the submedian.

P. rhexenor G. & S. (182 b). Blackish-brown with a darker stigma; forewing with a lunar spot between the median veins and a small one behind it, one above the submedian vein and 2 minute ones behind the cell-end, as well as 3 subapical dots, all of which are light yellow. The hindwing shows behind the middle in the costal half a similar band. Beneath brownish-red, forewing at the proximal margin blackish, spots as above; hindwing very peculiarly marked with 3 longish spots in the cell, behind it and near the anal angle beside the macular band. Mexico (Guerrero).

P. polyceca G. & S. (182 b) resembles Atrytone melane (182 c), but it has a cellular spot and a very prominent stigma. Beneath the colour is quite different: greyish-black, the forewing in the proximal half darker, the spots as above; hindwing strewn with yellow, the transverse band from above very indistinctly visible. Mexico.

P. aphaactoia Dyce (182 c) is above blackish-brown, in the cell-end there is an oblique quadrangular, yellowish hyaline spot, 3 small ones behind it subapically, and 3 postdiscal ones in an oblique line, the middle one being the largest; the stigma is all round encircled by black. On the hindwing there are in a straight line 4 yellow spots, alternatingly a large one and a small one. Beneath somewhat duller, the lowest spot of the forewing white and enlarged, disc black. Hindwing dusted with a dark red, the spots white, besides them 2 small ones at the costal margin and one in the cell. Mexico (Popocatepetl Park), taken at an altitude of 13,000 ft.

P. howardi Skinner (182 b). Above almost as viator, but with a dark brown diffuse spot behind the cell, almost flowing together with the dark distal margin. Scent-scale stripe present here, but of the same colour as the ground, therefore scarcely visible. Beneath dusky-coloured, with a triangular, darkened base of the forewing; hindwing very light with 4 or 5 faintly darker, small discal spots. Florida.

P. aaroni Skinner (182 b) is only half as large, the dark margins of the wings narrower, the dark spot behind the cell of the forewing absent. Beneath the forewing is black at the base, behind it lighter brown than above, the distal margin bordered with cinnamon-brown. Hindwing light cinnamon-coloured, unmarked. The ♀ is larger, lighter, the markings more blurred. Southern Atlantic States.

P. scudderi Skinner has a much more prominent stigma, the dark borders of the wings are faint, otherwise very much like howardi. From Colorado.

90. Genus: Phycanassa Sedr.

Antennae short, palpi somewhat longer than in Poanes, turned forward. Veins as there. ♀ without a stigma.

P. viator Edw. (182 b) is a large, reddish-yellow species with broad blackish-brown margins, very conspicuous by the absence of the stigma. The blackish-brown ♀ is in the disc and at the proximal margin.
somewhat reddish-yellow, and on the forewing it has postdiscal, subapical bone-coloured spots and 2 smaller ones in the cell-end. Beneath paler, marked as above, on the hindwing besides with a light longitudinal ray from the base to the middle of the distal margin. Atlantic States.

P. psamnis G. & S. (182 c) is allied to the preceding, but the 2 spots between the median veins are strongly angled. The under surface is much darker and more monotonous. Mexico (Jalisco).

P. azin Mab. is likewise very closely allied, but much smaller. Colombia.


The antennae scarcely attain half the length of the costal margin, the club is short and thick with a short hook-shaped apex; terminal joint of the palp very short, quite abruptly ending in a short apex. Body strong, almost squat; middle and posterior tibiae strongly spined. The 2 is without a pronounced scent-scale stripe, but there are in fact their occasional modification and therefore inconspicuous scent-scales of the ground-colour.

A. delaware Edw. (= logan Edw., vitellius Streck. nec F.) (182 c) is above reddish-yellow, towards the margin on the forewing broadly, on the hindwing narrowly darkened with a spot-like darkening behind the cell. The 2 is larger, with a darkened basal half of the forewing. Beneath orange-red, at the base and proximal angle of the forewing blackened. Pennsylvania, Florida, Mexico to Guatemala. For this species the genus Anatrytone was established.

A. zabulon Bed. & Léc. (= erratica Plotz) (182 c). This species and the following have brought about an amazing muddle in the literature pertaining to them. It is above on the whole lighter; more sulphur-coloured, the bordering of the dark distal margin proximally on an average more dentate, more distinct. Beneath the base of the hindwing is less extensively darkened, in the yellow discal area there are particularly towards the proximal margin small brown spots. Southern Atlantic States as far as Mexico.

A. hobomok Harr. (= zabulon Plotz) (182 c, d) is above mostly more reddish-yellow, the black distal margin proximally less irregular, more blurred. Beneath the base of the hindwing is broader and more deeply darkened, dark spots in the median space are nearly always absent. — f. pocalontas Seddr. (= quadaquina Seddr.) (182 d) is a dimorphic 2-form very much darkened above and beneath, above quite blackish-brown with minute bone-coloured spots. Atlantic States.

A. rolla Mab. (= piso Plotz) (182 d). Above almost as hobomok, but the inner-marginal part of the hindwing is much broader black. Easily separable by the quite reddish-yellow hindwing beneath with indistinct ferruginous brownish spots, the inner-marginal area being scarcely darkened, and with a small black cell-end dot. Costa Rica, Panama to Colombia.

A. perjida Mschlr. (182 d) is very closely allied to rolla, it is more slender, with more tapering wings, lighter yellow, the inner-marginal part of the hindwing is not so broadly darkened, the cell-end spot of the forewing is somewhat larger. Beneath the proximal margin of the forewing is broader black, the apical part fiery reddish-yellow; hindwing yellow without any markings at all, dusted somewhat reddish. Colombia.

A. vitellius F. (= insularis Mab., hübneri Plotz) (182 e) is externally quite similar to delaware; the black veins are finely prominent, and the submedian and cellular folds are towards the base striped black. Beneath the blackening is absent at the proximal angle of the forewing, the hindwing is strewn with a greyish yellow. West Indian islands, also from Guatemala and the Amazon.

A. mella G. & S. is very closely allied to perjida, but the margins of the wings are above broader black, besides there is an interrupted, blackish-brown longitudinal stripe along the median. Mexico to Brazil and Bolivia.

A. eulogius Plätz (= mellona G. & S.) (182 e) resembles mella, the reddish-yellow colour of the wings is very much confined by broader margins of the wings projecting dentately or wedge-shaped on the lower median vein and above it between the veins. Beneath the hindwing is reddish-yellow, strewn with cinnamon-colour, with a lighter postdiscal band and cellular spot. Mexico, Panamá, Guiana.

A. gladolis Dyar is allied to mella. Above broadly yellow, veins and distal margin blackish; on the median there is an irregular, black longitudinal band, projecting at the end into the cell and from there on the middle radial vein towards the margin; hindwing in the disc reddish-yellow, veined black. The 2 is more intensely marked black, beneath at the proximal margin of the hindwing with a broad black stripe. Expanse of wings: 32 to 36 mm. British Guiana. The larva lives on sugar-cane.

A. heberia Dyar. Above blackish-brown, costal margin as far as the cell-end reddish-yellow; 3 subapical and 4 postdiscal reddish-yellow spots, the lowest narrow, the spot above it rectangular, the second from above wedge-shaped. Hindwing with a yellow cell-spot and 5 postmedian, wedge-shaped spots. Beneath reddish-yellow, the inner-marginal part shaded with black, and in the disc veined black. Hindwing yellow with a broad black triangular spot before the proximal margin. In the 2 the spots are white, larger and more quadrangular.
the hindwing beneath tinted grey. Expanse of wings: 29 to 33 mm. British Guiana. The larvae were fed on sugar-cane.

**A. myron** G. & S. (182 d) entirely resembles the following *helea*, but the spots are more whitish-yellow, especially in the ♀ bone-coloured, the inner-marginal spot longer, the discal spot larger. Beneath the lowest spot is much larger and dirty white. Mexico to Colombia and Bolivia.

**A. monica** Plötz (182 e) is allied to *eulogius*; above there are more yellow spots, the postdiscal spots thereby almost touch the subapical ones, also at the cell-end there is a large, bipartite, reddish-yellow spot, and the submedial spot is twice as large, distally gnawed out. Beneath at the cell-end of the forewing there is more black marking, on the hindwing the light postdiscal band is dying away towards the proximal margin, the colour is not so reddish-yellow, more olive greyish yellowish. From Brazil (Blumenau).

**A. helva** Mabille. (= *sethos* Mab.) (182 e) is above blackish-brown with 3 yellowish-red, postdiscal and 3 small subapical spots, as well as a lighter longitudinal streak at the cell-end; hindwing with 2 or 3 rather indistinct small spots behind the cell and yellowish fringes. Beneath dull yellowish-red, strewn with grey, the proximal half of the forewing black with the spots as above, but lighter; hindwing with traces of a lighter postdiscal macular band. The base of the costal margin of the hindwing is above densely haired black. Mexico, Nicaragua, Panama, Colombia, Guiana, and Amazon.

**A. melane** Edw. (= *vitellina* H.-Schäff.) (182 e) looks like *helea*, the yellowish-red spots are larger, the disc of the hindwing behind the middle extensively reddish-yellow; in ♀ the spots of the forewing are bone-coloured, the spots of the hindwing reddish-yellow. Beneath the hindwing is in the basal half densely strewn with cinnamon-red, the postdiscal band more distinct and broader. California, Mexico, Guatemala, Costa Rica and Panama. — f. *zachaeus* Plötz is a darker form from Surinam with above quite blackish-brown hindwings.

**Note:** Mabille here mentions a form "marmorosa". The citation added (Korr.-Bl. Zool. Mineral. Ver. Regensburg), refers however to one of the *Eudamus* mentioned on p. 853, perhaps a form of *santiago* (161 a). Mabille has certainly mixed it up.

**A. gala** G. & S. (182 e). Above as *melane*, but with 2 small spots in the cell of the forewing, the band of the hindwing being longer and inwardly curved towards the proximal margin. From Mexico.

**A. monticola** G. & S. (182 f) is easily recognizable by the sharply angled creamy white macular band of the hindwing on a deep cinnamon-red ground; forewing beneath with 2 or 3 roundish, orange postdiscal spots and 3 white subapical dots, which are above yolk-coloured like the discal spots. It differs from the very similar *niveolimbus* by dark fringes being on the hindwing very slightly speckled, and a dark costal margin. Mexico, at an altitude of 8 to 10,000 ft.

**A. niveolimbus** Mab. is easily discernible from *monticola* by the white costal margin and white fringes. The spots are not yolk-coloured, but more whitish hyaline. From Guatemala.

**A. ulphila** Pl. (182 f) is very closely allied to *monticola* and perhaps the same species. The yellow spots of the forewing are much larger and more numerous; beneath the hindwing is lighter, the white band extends with its tooth farther towards the margin and there is a cell-spot, the forewing exhibits near the proximal angle a very large, yellowish spot. Mexico.

**A. lunida** Mabsh. (182 f) is similarly marked. On the dark forewing the 2 central spots are whitish hyaline, the others yolk-coloured; near the apex there are below the 3 subapical spots farther towards the margin 2 more small yellow spots. Hindwing without any markings. Beneath the forewing is as above; the hindwing dark olive-grey with a faded, broad, light postmedian band. Colombia. Figured according to a ♀ of *Plötz*.

**A. augustus** Plötz (182 f) is above not unlike *gala* and has a large, roundish, yellow spot in the cell-end; the postdiscal band of yellowish spots extends in a very oblique direction right towards the apex; the yellow macular band of the hindwing is long, towards the proximal margin inwardly bent, the second spot from above projects towards the margin. Beneath similarly marked as *monticola*, but the white band is darker, the ground not cinnamon-red but greyish-brown. Brazil.

**A. urqua** Schs. is above olive-brown, with a fine black marginal line and grey fringes. The forewing only shows a small, roundish, white spot behind the lower cell-angle. Beneath lighter; here see we on the forewing another small, subapical spot and a grey striiform spot near the proximal angle; on the hindwing postdiscal a hardly lighter, bent band, and a dark grey nebulous stripe along the proximal margin. Expanse of wings: 27 mm. Castro, Paraná.

**A. paranensis** Schs. Above dark brown, lighter at the cell-end and with a light subapical streak. Hindwing with a black cell-end spot. Beneath the forewing is lighter brown, the apex grey, near the proximal angle a yellowish-grey nebulous spot; scarcely visible, small, lighter postdiscal spots in an oblique line. Hindwing light grey with a velvety black cell-spot and a similar spot below the lower median vein. Inner-marginal part broad light brown, before the distal margin a dark line. Expanse of wings: 31 mm. Castro (Paraná).

**A. brasina** Schs. Above dark brown, hindwing haired olive yellow. On the forewing between the median veins a quadrangular, small hyaline spot, a smaller spot above it and 3 subcostal dots. Beneath lighter,
on the forewing the costa and apex are reddish-brown, the proximal angle spotted whitish. Hindwing light brown, strewn with reddish-brown, especially densely at the base and costal margin, with a broad dark discal shade joining a dark inner-marginal streak near the proximal angle. Expanse of wings: 26 mm. Castro (Paraná).

A. inimica Bltr. & Dr. (= lupulina Plötz) (182 f) has above on the dark brown ground scarcely visible, minute lighter spots in the cell, postdiscal and subapically. Beneath the forewing, towards the proximal angle, is broadly yellowish, the hindwing deep cinnamon-red with 2 dentate, dark discal bands and a broad marginal band. Mexico to Panama, Colombia, Venezuela.

A. chingachgook Weeks is above dark brown with 3 or 4 ferruginous small subapical spots and 3 larger whitish postdisical spots. Beneath the same, at the apex and costal margin tinted somewhat ferruginous-brown, the submedian area drab, towards the base black. Hindwing ferruginous-brown; from the costal angle to the middle of the proximal margin extends a light band sealed ferruginous, a similar one nearer to the base. Venezuela (Suapure).

A. argynnis Plötz (182 g) is very doubtfully placed here. Above blackish-brown with 3 subapical dots, 2 postdiscal white, in the ♀ more yellowish spots and an ochreous-yellow submedian patch. Hindwing with an extinct, in the ♀ much clearer postdiscal band of ochreous-yellow spots, the two middle spots of which project far towards the base. Beneath the hindwing is chestnut-brown like the apex of the forewing; in the disc golden yellow with a postdiscal row of silvery white spots; the spot opposite the cell and a large anal-angular spot are removed more towards the base, the former being proximally bordered by a black cell-end spot. Brazil.

A. zela Plötz (182 g) is a very different species. Above yellowish-brown, on the forewing broadly bordered with black; the median black with a spot-like thickening at the lower cell-end, another black spot at the costal margin behind the cell and in the middle of the hindwing. Beneath almost the same, the inner-marginal part of the forewing broader black, the spot on the hindwing almost bipartite. From Montevideo.

A. arogos Bst. (= mutius Plötz, iowa Seidr.) (182 g). Here follow some more species being considered by other authors to belong to the genus Phycmanassa. Above like a small Phyc. viator (182 b), yellowish-brown, with very broad blackish-brown margins and a very fine black cell-end streak of the forewing. Beneath the forewing is more broadly darkened in the inner-marginal area, the greenish-yellow hindwing without the black margin. Golf States, Iowa, Nebraska.

A. carolina Skinner (182 g) for which the genus Epiphes was established, looks above a little like monticola (182 f), with roundish, yolk-coloured spots, and a cellular spot on a dark brown ground. Beneath the forewing is the same, though more indistinctly marked, the costal margin is brownish-yellow; the hindwing is yellow with very small blackish-brown spots. Described from North Carolina and apparently very rare.

A. streckeri Skinn. resembles delacare above, but it is darker in its colour. Beneath very much like pocesheik; expanse 1½ inch. Florida. The ♀ stigma is a long, narrow, black line from the median to the submedian, obliquely cutting through 2 internerval spaces; at the cell-end a distinct, black V-shaped spot.

A. taxiles Éd. (182 g) has above a blackish-brown distal margin only half as broad. Beneath the ♀ forewing is bright yellow, at the base black, the distal margin light brown; hindwing lighter yellow, distally bordered with a light brown, near the base and in the middle traversed by irregular, light brown margins. Colorado to Arizona.

A. uricola Bst. is yet placed here by different authors. But as this uncertain species has a broad black stigma, it will probably not belong here. Stated from California.


Antennal club rather long, the hook-shaped apex slender, but rather short. Posterior tibiae with long fringes and the usual 2 pair of spurs. The linear stigma extends from the rise of the upper median vein to the submedian. The genus is preponderantly palearctic and Asiatic, but it has also some representatives in the New World.

A. libritá Plötz (= hecale G. & S.) (182 f). Above bright reddish-yellow, bordered with black, with the broad black stigma being continued into a large, subapical black spot touching the black apex on the upper radial vein; veins striped black. Beneath the hindwing is especially towards the costal margin strewn with a yellowish grey, with a lighter postdiscal band dying away towards the proximal margin. Mexico, Guatemala.

A. aligulara Sch. is placed here with a proviso, because the scent-scale stripe is parted by the lower median vein. Above as the preceding, the transcellular black spot quadrangular and larger, touching the black margin in two places. Hindwing in the inner-marginal part haired olive. Beneath also like hecale, the transverse vein and both the median veins black; large black spots at the proximal angle, small subapical spots distinctly light yellow. The ♀ is brown, scantily haired yellowish-red, spotted yellow at the cell-end, postdissally and
subapically, and below them near the margin (2 small spots); the hindwing also shows a cellular spot and a postdiscal row of yellow, oblong spots. Beneath darker than the ♀, the spots more distinct. Expanse of wings: 30 mm. Petropolis.

A. heras G. & S. (182 h) is blackish-brown, the stigma inside almost lead-coloured; at the cell-end two small, reddish-yellow spots, behind them a quadrangular spot and 3 below the apex; the costal margin is densely, the basal part scantly strewn with reddish-yellow. Hindwing with a postmedian band of reddish-yellow spots. Beneath red-brown, basal half of the costal margin and submedian area blackish. Hindwing with 2 indistinct, bent bands of ochreous-yellow spots. Mexico (Guerrero).

A. chalcone Schs. has dark brown wings haired ochreous at the base, at the costal margin and in the cell; in the cell-end there is a small, yellow spot, behind it an obtusely broken row of spots along the stigma almost to the apex; hindwing haired olive at the basal half, with a yellow cellular spot and a row of spots behind it. Beneath ochreous olive, forewing in the proximal half black, the spots darker, the lower ones larger; spots on the hindwing indistinct and smaller. In the ♀ the spots are larger and semi-transparent bone-coloured. Expanse of wings: 30 to 35 mm. Petropolis.

A. anita Schs. Above brown, at the costal margin and subapically strewn with dark ochreous, with a small, yellow subapical spot; below the cell and behind the stigma dusted ochreous; proximal margin haired olive. Hindwing with a postdiscal ochreous-yellow band, behind it ochreous dusting. Beneath olive-green, forewing in the proximal-marginal half blackish, in the inner-angular part light ochreous; hindwing with a broad, white postdiscal margin. Expanse of wings: 30 mm. Petropolis.

A. tania Schs. Above as anita, but head and thorax greenish, forewing with a yellow spot at the cell-end, the ochreous dusting behind the cell only very scanty. Beneath likewise as anita, but with a yellow cellular spot. On the olive-green hindwing there is in the lower cell-angle a small white spot, behind it a narrow, indistinct, light postdiscal line with a white dot above the upper median vein and a larger one below the lower median vein. Expanse of wings: 29 mm. Novo Friburgo.


Distinguished from Atrytone by a longer antennal club set with dentate scales. Costa of hindwing long-haired; the ♀ without the scent-scale stripe. Only one species:

B. idothea G. & S. (182 h) is a very conspicuous, easily recognizable species. Above blackish-brown with a large, yellow discal spot from near the costal margin almost to the proximal margin, the costal margin being yellow, too; 3 small subapical spots and below them 1 or 2 more. Fringes ochreous-yellow. Costa Rica.

94. Genus: Atrytonopsis G. & S.

Very closely allied to Atrytone, but with a distinctly prolonged apex of the forewing; hindwing at the anal angle somewhat lobate, ♀ with a narrow scent-scale stripe from the upper median vein to the submedian, extending obliquely and being somewhat sinuous and interrupted.

A. deca Educ. (182 d) is a large, lustrous light blackish-brown species with an equally coloured stigma; 3 small subapical dots and 2 small spots between the median veins are bone-coloured transparent. Beneath as above, the forewing near the proximal angle and at the apex grey. Hindwing dusted grey and with a postcellular band of small brownish-black spots; fringes of hindwings white. The ♀ has larger spots. Arizona, Mexico.

A. pittacus Educ. (182 i) is very similar, smaller, with more numerous spots in the disc and submedian; the hindwing also exhibits a short band. Arizona, Mexico.

A. python Educ. (182 i) is likewise similar, the macular band of the hindwing only composed of 3 dots. The hindwing beneath is more band-like lila-grey, more variegated. Arizona, Mexico.

A. hianna Scdtr. (182 i). The ♀ looks above very much like deca, but it has only one small spot near the lower cell-angle beside the 3 subapical ones, the ♀ exhibiting 2. The under surface is somewhat lighter, distally greyer, on the hindwing with traces of a marginal band, otherwise as above. Atlantic Sates. — In f. graci Plôtz there appears yet a hyaline dot in the upper cell-angle, and the under surface of the hindwing is more monotonous.
941

A. judas Plötz (182 k) perhaps also belongs hereto. Above similar to the preceding, but distally the wings are much lighter grey, and above the 2 hyaline small discal spots there are two more below the subapical spot and farther towards the margin. Hindwing beneath very light grey with indistinct darker spots at the costal margin and below the cell. Novo Friburgo.

95. Genus: Choranthus Seebr.

Very closely allied to the preceding genus and chiefly only distinguished by a somewhat different course of the scent-scale stripe not beginning from the rise of the upper median vein but more distally to it.

Ch. radians Lec. (= magica Plötz) (182 h). Bright reddish-yellow with a black dentate margin, radians, a black strigiform spot at the cell-end and a broad black costal margin of the hindwing. Beneath the hindwing, except the reddish-yellow costal and proximal margins, is olive-green with yellow veins. — f. ammonia Plötz ammonia, is a more intensely darkened form, and f. bellus nov. (= radians Plötz) (182 k) is an entirely uni-coloured dark olive-brown □ form with yellow fringes. Cuba.

Ch. insularis Mob. is closely allied, above the same, but beneath quite different, light orange, at the base of the forewing spotted black. Expanse of wings: 28 mm. St. Thomas.

96. Genus: Lerodea Seebr.

Antennal club strong, short; palpal terminal joint obtuse, bent backward. The forewings are higher, because the distal margin is much longer than the proximal margin. The □ is without the scent-scale stripe.

L. eufala Edw. (= florida Mob., dispersa Plötz) (182 k) is above dark brown with 2 small, transparent discal dots and 3 subapical dots. Beneath the same, but somewhat paler; abdomen beneath white. Widely distributed from the Southern States through Mexico to Paraguay; Antilles.

L. dysaules G. & S. (182 k) differs by but one cellular spot of the forewing, and a bent, black, triangular band from the costal margin of the hindwing beneath the cell-end. Mexico.

L. fusca Reed (= concepcionis Str.?) (182 k) presumably belongs hereto and looks like the preceding. fusca. Above blackish-brown, marked as eufala, beneath greyish-brown, in the larger □ more yellowish-brown. Hindwing without markings; fringes yellowish. Described from Chile.

L. tesera Schs. Above brown, fringes mixed with grey; forewing with the basal half of the costal margin grey; in the cell-end there are 2 very small whitish-hyaline spots above each other, 2 postdiscal ones and 3 subapical ones. Beneath the apex of the forewing is strewn with rile, the proximal margin broad grey. Hindwing densely strewn with lilae, with a brownish spot in the middle of the costal margin, another one below the cell near the base, behind the middle a broad brownish nebulous band parted by the veins, and some indistinct antemarginal spots. Expanse of wings: 28 mm. Rio de Janeiro.

L. gracia Dyar. Blackish-brown with white fringes, base of forewing grey, in the cell-end a strangled spot, 3 subapical ones and 4 postdiscal ones, the two upper ones of which are quadrangular and hyaline, the lower ones smaller and not transparent. Hindwing in the disc dusted with yellow, behind the cell in the shape of a spot. Beneath the forewing is basally black, the apex dusted with grey; hindwing strewn with grey, with a long black stripe-spot through the cell, and postdiscal traces of small white spots. Peru, in October.

L. orope Capr. (182 k) almost resembles a Prenes without a scent-stripe. Above blackish-brown, on the thorax and bases of the wings lustrous greenish, in the cell of the forewing a small, narrow, whitish stripe, behind it 2 small spots, and 2 subapical dots. Beneath light brownish-grey, in the disc of the forewing black, anally whitish, hindwing with a white cellular band and 6 postdiscal dots. Brazil.

L. dedecora Pl. (182 k) resembles fusca, above greyish-brown with 2 subapical dots and one post- discal dot. Beneath duller greyish-brown, in the disc of the forewing black. From Venezuela.


Antennae of 2½ the length of the costal margin; the latter somewhat convex, before the apex slightly conceave, apex sharp. On the forewing the lower median vein rises from the middle of the cell, the upper one near the lower angle which sends forth the lower and middle radial veins, the latter being at the base bent upward. The □ scent-organ consists of a stripe below the median from the upper to below the lower median vein and a small spot above the middle of the submedian. On the hindwing the anal angle is slightly lobate. Only 1 species.

St. lyco Schs. Body and wings above blackish-brown, the scent-stripe deeper black; fringes at the ends ochreous-yellow. Beneath the wings are dark reddish-brown, the proximal margin of the forewing dark brown with a dark brown shade at the cell-end and below it. Costa Rica.

The antennae are shorter than half the length of the costal margin, club thick; palpal terminal joint projecting, erect or also short conical. with a narrow scent-scale stripe extending oblique and interrupted from the base of the upper median vein to below the submedian and in some species containing yet a short, small scent-stripe at the inner-marginal vein.

- **A. vialis** Edw. (183 a) is a small, dark brown species with 3 small, light subapical dots. Beneath the same, towards the margin the colour is lighter. Northern United States to Florida and Texas.

- **A. aenus** Edw. (183 a) is larger, duller, more brownish, the small spots are yellowish and also postdiscal there are 2 small spots; fringes very slightly speckled. Beneath brownish-grey, forewing marked as above, hindwing with a postdiscal zigzag-band of small white spots and one spot each at the cell-end and behind the middle of the costal margin. Texas, Arizona.

- **A. exoteria** H.-Schäffer. (= nanno Edw.) (183 a). Blackish-brown, strewn with reddish-yellow, with a black stigma; beside 3 white subapical dots there are postdiscal below and behind the cell 4 spots in an oblique line, sometimes also one in the cell. Beneath as above, hindwing strewn with white; fringes white, speckled dark. Arizona to Mexico.

- **A. tutolia** Dyar (183 a) resembles the preceding, differing by more numerous, more oblong white spots above; also in the cell 1 or 2 whitish longitudinal patches. Beneath the anal angle of the forewing is occupied by a large whitish-yellowish spot. The hindwing is scantily strewn with yellowish and exhibits above the cellular spot another white dot near the costal margin towards the base. Fringes hardly noticeably speckled. Mexico (Guerreiro).

- **A. cataborina** Dyar (183 a) is likewise similar, somewhat smaller, with larger white spots; between the median veins a transverse, longish spot close behind the stigma and below it another submedian one. Hindwing with a postdiscal curved row of 5 white dots; fringes not speckled, whitish-grey with a dark line before them. Beneath very light, the forewing at the costal margin and in the cell ferriginous-yellowish, the hindwing strewed more olive-yellowish-grey with the spots of the upper surface. Mexico.

- **A. folia** Godm. & Sable. (183 a) is somewhat larger than exoteria with a large white spot at the anal angle of the forewing beneath; hindwing beneath less strewed white. Mexico.

- **A. fluonia** G. & S. (183 a) is allied to aenus, but the spots are less distinct, and the hindwing beneath is without the zigzag line of spots. Mexico.

- **A. elissa** G. & S. (183 a) is smaller than fluonia with distinct white spots on all the wings beneath. Mexico (Guerreiro).

- **A. nyssa** Edw. (= similis Streck). Above lustrous dark brown, forewing with a cellular dot and 3 semi-diaphanous, small subapical spots. Beneath somewhat lighter, the spots as above, the cellular spot larger. Hindwing dusted with black, with small dark spots in the middle and at the costal margin, and a dark band parallel to the distal margin and single accumulations of grey scales. From Texas.

- **A. eos** Edw. Above greyish-brown with 3 white subapical dots; on the forewing the fringes are speckled light, on the hindwing almost white. Beneath brown, at the apex and distal margin of the forewing and on the hindwing dusted chalky; the spots of the forewing somewhat larger than above and increased by one. Hindwing with 3 disal and a row of postdiscal whitish punctiform spots. Texas.

- **A. celia** Skinner. Above dark smoke-coloured brown, almost black, fringes black speckled with ashy-grey. Forewing with the 3 small subapical spots forming a row from the costa. Through the middle of the wing a row of minute yellowish-white spots from the apex to the middle of the proximal margin, their number varying between 4 and 9. Hindwing without spots. Forewing beneath as above, hindwing very finely speckled with small light grey scales, in the middle of the wing a number of very small, indistinct white spots. like the 3, but larger and above with fewer spots. As dark as A. vialis, Stom. textor etc., in the marking the most closely allied to aenus (183 a), but differently coloured. Texas (Blanco, Comal and Nueces Counties).

- **A. mate** Dyar from Mexico (Guerreiro) was only recently described. Above black with a bronze reflection, speckled with few light scales, and light, darker speckled fringes. The under surface is somewhat more intensely speckled with white, otherwise not marked. Expanse of wings: 25 mm.


Only little different from the preceding genus: the middle radial vein of the forewing is at its rise bent downward, the palpal terminal joint is longer, and the stigma is differently shaped; it consists of a scent-scale stripe below the median and parallel with it between the two median veins and another stripe above the lower median vein.
St. textor *Hbn.* (= oncko *Sodd.,* vaccula *Edw.*) (183 b) is easily recognized by its peculiarly marked under surface and not to be mistaken: greyish-brown, with somewhat lighter veins, on the forewing with one yellowish-white macular line, on the hindwing with two, being connected at the costal margin and in the middle Southern Atlantic States.

St. samoset *Sodd. (= hegon Sodd., nemoris Edw., alternata Grt. & Rob.)* (183 b). Above dark brown, the grey fringes speckled somewhat darker; in the cell of the forewing there are 2 small white dots, 3 subapically and postdiscal and at the proximal margin 3 more. Beneath light grey, forewing as above, hindwing with a white macular band, cellular spot and a larger one in the middle of the costal margin. Atlantic States.

St. similus *Edw. (183 b)* is somewhat larger, subapical and postdiscal spots together form a yellowish-red, subapically angular macular band. Hindwing in the disc reddish-yellow. Beneath very light, marked as the preceding, but the macular band of the hindwing is darker, the cellular spot very large, and the base of the hindwing whitish. South California, Arizona.

St. cassus *Edw.* is allied to *exotetia* and *agnus* (183 a); forewing above brown, dusted with reddish-yellow, especially intensely in the inner-marginal area, with 3 small, ferruginous-yellow subapical dots and an oblique discal row of spots. Hindwing except the dark costal margin dark reddish-yellow, not spotted. Fringes whitish, at the veins darkened. Beneath the forewing is reddish-yellow in the discal and apical parts, at the base and proximal marginal black, at the apex dusted whitish. Hindwing brown, dusted white, at the inner-marginal third reddish-yellow, spotted whitish. The ♀ is larger, darker, the spots more yellowish-white. Arizona (Mt. Graham).

St. tolteca *Sodd.* (183 b) resembles *exotetia,* but it has a double white cellular spot of the forewing, the oblique row of spots is more curved, the ♀ stigma different. Mexico.

St. florus *G. & S.* looks very much like *Amblysirtes flumina* (183 a), but different by the stigma, and the under surface is darker and more monotonous. Mexico.

St. comus *Edw.* (= nihus *Edw.*) (183 b). Above lustrous greyish-brown, forewing with 3 small subapical dots, as well as 3 white spots below and behind the cell. Beneath lighter, the spots more distinct; hindwing with 9 dots, 6 in one row parallel to the distal margin, 3 near the base. Texas, Mexico.

St. nereus *Edw. (183 b, c)* is larger than *comus,* the palpal terminal joint longer, the lower row of spots more distinct. From Arizona to Mexico.

St. arabus *Edw.* Above lustrous dark brown, forewing with 3 small, semi-diaphanous subapical dots, a cellular dot and 3 small postdiscal spots; fringes brown. Beneath brown, at the distal margin and apex dusted greyish-brown. Hindwing greyish-brown, in the disc brown as far as the costal margin. Described according to a ♀ taken in South Arizona in October. Span of wings: 1.3 inch.

St. fusca *Grt. & Rob.* is a small species with a somewhat protracted, pointed apex of the forewing and a rather straight distal margin. Above uni-coloured olive-blackish, in an oblique light with a slight golden reflection; fringes somewhat lighter, not spotted. Beneath strewn with golden brown, especially the hindwing strewn with a light golden colour except an olive-blackish ray before the proximal margin. Georgia, Florida.

St. oslari *Skinner* is similar, larger, above monotonously light brownish-black, the stigma a little more blackish. Beneath the forewing exhibits a black basal spot above bordered with reddish-yellow; hindwing on a dark brown ground strewn with white scales. Colorado (Chimney).

St. gallio *Mab.* Above blackish-brown, the spots from beneath merely traceable. Beneath the same, with 3 light yellow subapical dots, below them in an oblique row some more towards the middle of the proximal margin, the lowest being larger and white; costal margin with white striae; one in the middle of the cell and 2 small ones in the apex itself. Hindwing with 7 punctiform spots in a bend line, the uppermost being remote from the others, the third from above prolonged and projecting, the lowest moon-shaped; distal margin strewn with yellow, ends of veins bordered with yellow. Brazil.

St. pupillatus *Mab. (183 c)* is above greyish-brown, spots beneath grey or faintly whitish, fringes reddish. Beneath reddish-brown, with a postdiscal row of prolonged, small, black punctiform spots as in the *Lycaena* proximally bordered with whitish, also on the hindwing representing small eye-spots; the uppermost is the largest, the 3rd double; in the cell a greyish-black spot. Bolivia.

100. Genus: *Halotus* *G. & S.*

Different from *Amblysirtes* by the more depressed middle radial vein of the forewing and the ♀ stigma which is double: a triangular part fills up the angle of the rise of the lower median vein, below it there is a short longitudinal stripe.

H. angellus *Plötz (= saxula *Mab.)* (183 c). Blackish-brown with a darker stigma; the forewing shows 2 minute subapical dots and 2 white spots below and behind the cell. Beneath blackish-brown with the spots as above, the lower crescentiform; at the anal angle there is a dirty yellow stripe-shaped spot. Hindwing with a lighter undulate band; fringes dark yellow, spotted black. Known from Costa Rica and Panama.
101. Genus: **Synapte** Mab.

The only type is without the antennae. Wings broad with an obtuse apex; the characteristic mark is the course of the uppermost subapical vein very close at the costal so that they almost touch each other in the middle. Hindwings rounded; posterior tibiae slender with 2 pair of spurs. Only one species;

*S. salenus* Mab. The only ♀ known looks like *Amblyscirtes fluonia* (183 a). From Colombia.

102. Genus: **Sarega** Mab.

Antennae long, club prolonged with a long apex. Palpi unknown. On the forewing the uppermost subcostal vein is nearing the costal-marginal vein, the middle radial vein is basally bent down; on the hindwing the median veins almost rise from the same place together with the lower radial vein. Posterior tibiae slender, fringed. The large ♀ stigma extending obliquely from the base of the upper median vein to the submedian consists of 2 parts and is set with large black scales.

*S. staurus* Mab. (183 c) likewise resembles *A. fluonia*. Above blackish-brown with 2 above scarcely visible small subapical dots; beneath they are more distinct, the apex between the subcostal veins whitish; the upper half of the distal margin is lilac grey. Hindwing blackish-brown with a reddish-brown nebulous band from the costal angle to the proximal margin and nearer to the distal margin with another one composed of undulate striae. Colombia.

103. Genus: **Psoralis** Mab.

Antennae as in *Sarega*; the 2nd palp joint hairy, the terminal joint thick, conical, porrect. On the forewing the middle radial vein is very much bent down, so that it almost rises at the lower. Veins of hindwings as in the preceding genus; between the upper radial vein and the subcostal and costal veins there are 3 transverse stripes of bossy black scent-scales. The ♀ has a scent-scale stripe extending from the rise of the lower radial vein to the submedian and being pointed at both its ends.

*Ps. sabaeus* Mab. Above blackish-brown, banded somewhat reddish. 3 white subapical dots on the forewing are only visible beneath. Forewing beneath lighter in the proximal part. Hindwing reddish-brown with 2 broad, black bands, one at the distal margin, one in the middle, the latter expanded towards the costal margin and base. Ventrum white. Bolivia.

104. Genus: **Calpodes** Hbn.

Antennae remarkably short; second joint of the palp rising, last joint hidden; on the very long forewing the middle radial vein is situate as in *Psoralis*. Hindwing at the anal angle somewhat lobate, before it concave. The ♀ is without the scent-scale spot.

*C. ethlius* Cr. (= chenmus F., olynthus Bsd. & Lec.) (183 c) is a well known, very common species with oblong forewings. Brown with hyaline spots, a narrow one at the cell-end, 3 large ones behind it and 3 subapical ones. Base of wing ochreous. Hindwing with a row of 3 hyaline spots. Beneath the hindwing is violetish-grey, the spots less distinct. From the south-eastern States of North America through Mexico to Argentina and in the West Indies. — The larva, according to a water-colour painting made by Seitz in Argentina, is green, before the pupation across the dorsum lilac-brown, watered white, the head beneath very broad, above somewhat indented, the os, a triangle above it and two punctiform spots at the sides of the frontal vesicle black. In funnel-shaped leaves of Canna. Pupa green, on the frons a spine-like, curved appendage: the case of the sucker projects beyond the apex of the abdomen by 1/2 to 2 cm; it yields the imago in 10 to 20 days.

105. Genus: **Asbolis** Mab.

Antennae of medium length, club thick, ovoid. Palpi thick, appressed to the frons. On the forewing the upper radial vein rises on a short footstalk with the lowest subcostal vein; the middle radial vein as in the preceding genera very near to the lower ones; the median is strongly angled at the rise of the lower branch; hindwing prolonged with an oblique straight distal margin and somewhat lobate. The ♀ shows a bipartite stigma, one part extending somewhat bent between the two median veins, and from the lower one linearly to the submedian.

*A. sandarac* H.-Schäff. (= palpeca Hec.) (183 d) is above deep blackish-brown, on the body and bases of the wings with a faint green reflection; stigma grey. Fringes of forewings ochreous-yellowish, on the hindwing white with a yellow base. Beneath more reddish, towards the base blackish with a lighter, in the ♀ larger spot near the proximal angle of the forewing. Colombia, Cuba.
A. *gagatina* *Mab.* is more robust, smoky black, forewings short and squat, hindwings rounded, short. *gagatina.* Disc of the forewing with a ferruginous-red reflection, fringes light brown. Beneath ferruginous brownish-black, forewing with a row of faintly greyish spots round the cell from the costal margin to the upper median vein. Hindwing with a broad ferruginous-red patch between the upper median vein and upper radial vein. Thorax with a metallic green reflection. Ventrum brown, antennae short as in *sandarac.* Brazil.

A. *halomelas* *Mab.* has no stigma, and may therefore not belong hereto. Hindwing longer than in *sandarac,* of a deeper black colour, distal half of forewing ferruginous-brown, veins black; 3 minute, yellowish subapical dots are only to be seen with the lens, the two lower ones being transparent. Forewing beneath from the base to the cell black, hindwing with a blacker shade in the middle. Body black, without a metallic lustre, but with a slight bottle-green reflection; the two last abdominal rings are beneath yellow. Antennae 1/4 longer than in *sandarac.* Fringes black. From Pebas.

### 106. Genus: Zariaspes *G.* & *S.*

Antennae shorter than half the costal margin. Palpi thickly scaled. Last joint conical, short, erect. Apex of forewing pointed. Posterior tibiae with only one pair of spurs. The *♀* has no scent-scale stripe on the forewing.

*Z. simplex* *Fbr.* (183 d) is a very small species resembling *Ancylolixia arense* (180 c). Above unicoloured pale reddish-yellow with a very fine black marginal line. Beneath the apex of the forewing is lighter yellow, the proximal margin black almost as far as the anal angle, and the hindwing is strown with a greenish-yellow except the reddish-yellow inner-marginal part. From Mexico.

*Z. mys* *Hbn.* (= dukulum *Blake,* epictetus *Strg.* nec *F.*) (183 d). Above bright yellow bordered with black, with an oblique, black longitudinal stripe being somewhat indented below the cell-end, or entirely interrupted. The *♀* is black with a yellow oblique stripe of the forewing and a dorsal spot of the hindwing. Beneath yellow, forewing at the proximal margin and anal angle black. Mexico to Paraguay.

*Z. mytheor* *G.* & *S.* (183 d) is larger than *mys.* Lustrous ochreous-yellow; costa of forewing towards the apex, distal margin and proximal margin as well as a narrow discocellular line blackish-brown like the costal margin of the hindwing. Beneath ochreous-yellow with a blackish-brown basal spot. The *♀* has also the hindwing bordered with blackish brown, and on the forewing an interrupted longitudinal band from the base through the cell, and a triangular spot behind it blackish-brown. Mexico (Guerrero).

*Z. portensis* *Mab.* is doubtfully placed to this genus. Above reddish-yellow, forewing with a narrow black border, at the proximal angle widened; veins black, at the cell-end widened into a black triangle. Border of hindwing black, at the costal angle very broad, from where a tooth extends to the cell-end, at the distal margin narrow, at the anal angle prolonged into 2 points; the basal part is somewhat brownish. Beneath yellow, base of forewing blackish with a dull blackish border. Expanse of wings: 28 mm. Porto Rico.

### 107. Genus: Aëlla *Mab.*

Antennae as in the preceding genus. Terminal joint of the palp slender, long and obliquely erect. On the forewing the median is inflated in its basal third as well as the first quarter of the lower median vein. Tarsi long and slender, the stout posterior tibiae with but one pair of spurs. Only one species:

A. *dryops* *Mab.* Small; forewing bright yellow with a black border being expanded at the apex, and a black longitudinal band being narrowed in the middle, widening towards the apex in a quadrangular spot with extended angles, touching the costal margin. Hindwing yellow, unmarked, only at the base somewhat blackish. Beneath yellow, strown with whitish. From Brazil and Venezuela.

### 108. Genus: Padraona *Mr.*

Antennal club rather long with a short apex; palpal terminal joint short, slender, erect. On the forewing the middle radial vein is curved at the base, very much nearing the lower radial. Hindwing near the anal angle somewhat indented. Posterior tibiae with 2 pair of spurs. This genus containing mostly Indo-Australian representatives has also some American species.

*P. epictetus* *F.* (= ferrago *Plötz,* endesmia *Plötz*) (183 c) looks somewhat like *Zariaspes mys.* Above hirsute *epictetus,* reddish-yellow, broadly bordered with black with a broad, black longitudinal stripe of the forewing, being mostly somewhat indented behind the cell-end beneath; the costal margin remains yellow. Beneath the forewing is at the costa and apex and the whole hindwing feebly dusted with cinnamon-colour: the hindwing has mostly lighter yellow veins and a black longitudinal stripe along the inner-marginal fold. Widely distributed from Mexico through South America.

*P. tryhana* *Kaye* is very similar; bright golden yellow with a broad black distal margin and longitudinal stripe projecting towards the margin on the lower median vein and between the upper radial veins. Hindwing more extensively yellow, beneath quite uni-coloured yellow. Expanse of wings: 34 mm. Trinidad.
P. lento Mab. (183 c) is somewhat larger than *epictetus* and similarly marked reddish-yellow, but the yellow bands are narrower, the costal margin is yellow only as far as the middle of the cell, the hindwing exhibits a narrow yellow band. Beneath the forewing is red at the costal margin and apex, blackish at the proximal margin and disc, instead of the band there is an oval yellow spot. Hindwing red, with yellow veins, at the proximal margin blackish-brown; below the cell there is a yellow, oblong spot. From Pará.

P. hyboma Plätz (183 c) looks above like the Χ of *Zarinaspes mya*: black with a yellow longitudinal stripe being above indented behind the cell on the forewing, and an oval longitudinal spot of the hindwing; fringes especially towards the anal angle broadly yellow. Beneath the hindwing is peculiarly marked, light yellow with a brown longitudinal stripe parallel to the costal margin and a longitudinal stripe along the inner-marginal fold, and a brown distal-marginal band widening towards the anal part. From Minas Geraes.

P. argus sp. nov. (183 c) somewhat resembles *sartia*. Above almost the same, but the hindwing is without the yellow marginal spots and the black hair-pencil. Beneath the hindwing is very different, in the disc creamy white, base and distal margin brownish, behind the cell are 2 large black spots, between them a very small one, all of them exhibiting outside a white pupile, and behind them another small black spot, between the spots the veins are ferruginous-yellow; inner-marginal fold striped black. According to a Χ from the Coll. FASSL, from the Songo (Bolivia).

P. calcarea Schs. Forewing dark brown with a broad reddish-yellow longitudinal band from the middle of the submedian towards the apex, narrowing near the middle radial and widening above it, then growing narrow again and being crossed by the dark veins; hindwing with an oblique orange spot near the distal margin between the lower median and middle radial vein. Beneath light brown, with light veins; forewing in the cell and near the proximal angle black, the reddish-yellow spots darker. In the Χ instead of the yellow band whitish spots, only the lowest being yellow and double. Expanse of wings: 30, 33 mm. Petropolis.

P. inermis Plätz (183 c) is only doubtfully placed here like the following. Above reddish-yellow with broad black margins, a black, wedge-shaped stripe through the cell and another half as long below it. Beneath yellow, forewing at the base, as well as one spot each behind the cell and at the proximal angle black; the apical part and the whole hindwing black, with very broad reddish-yellow veins. From Brazil.

P. kreos Plätz (183 c) is similar, larger, more robust, much more broadly bordered with black, with only one broad black longitudinal stripe of the forewing, being interrupted by yellow at the cell-end. Beneath the apex and costal-marginal part of the forewing as well as the whole hindwing are chestnut-coloured, with narrow yellow veins. Described from Pará.

P. rivula Mab. Blackish-brown, forewing with a postdiscal band of 8 equally broad, reddish-yellow spots, being angled at the upper radial vein, the 2 lowest hollowed out; in the cell a spot and below the costal margin 2 streak-shaped spots. Hindwing with a round cellular spot and a light reddish-yellow median band. Fringes brown, distally reddish-yellow. Beneath the forewing is black below the cell, at the costal margin streaked with yellow, spotted as above. Hindwing with a broad median band, base-strewn with yellow, the cellular spot surrounded by brown. Expanse of wings: 23 mm. Teffé.

P. levisina Plätz (183 f). Above black with a reddish-yellow subcostal stripe, 2 similar subapical dots, a cellular spot and 2 postdiscal ones as well as a submedian stripe; the 3 discal spots are lighter and semi-transparent. Hindwing with a large reddish-yellow discal macular band. Beneath the apex of the forewing and the hindwing are cinnamon-coloured with yellow veins. From Brazil (Rio de Janeiro).

P. flavocostata Plätz (183 f) is smaller, the reddish-yellow spots flown together to an oblique band, the subcostal space darkened. Hindwing with a reddish-yellow postdiscal spot and a similarly coloured median as far as the base; fringes reddish-yellow. Beneath likewise very much like *levina*, the ground more blackish-brown, not so red, the veins broader yellow. From Rio de Janeiro.

P. vicinus Plätz (183 f) resembles *flavocostata*, but it is larger, of a more intense reddish yellow, on the hindwing with a broad postdiscal band; fringes much broader and brighter reddish-yellow, also on the forewing. Beneath extensively yellowish-reddish, in the disc of the forewing blackish, on the hindwing with some reddish-brown vein-stripes. Colombia.

P. radiata Schs. Above dark brown with a bright yellow stripe in the basal half of the costal margin, another one below the submedian and one above it, ending in a large spot. At the rise of the lower median vein there is a small round scent-spot, behind it a quadrangular one above which there is a small one in the cell, all being pupilled light yellow; another similar spot is between the median veins, another subapical
spot; before it at the costal margin yellow scales. On the hindwings the lower half of the cell and a spot behind it bright reddish-yellow, so that only a small part remains dark brown; between the median veins near the cell there is another brown spot. Beneath the forewing is black, the costal margin, apex and distal margin light brown with darker stripes between the veins which are yellow. Hindwing violet-tush-brown, veins light yellow; a broad, black wedge-shaped stripe is situated near the proximal margin and widens towards the anal part. Fringes black, distally grey. Expans of wings: 30 mm. Petropolis.

P. anyna Mab. is deep brown with a reddish-yellow reflection, in a certain light with a blue reflection; forewing with 3 oblong, yellowish subapical hyaline dots, the uppermost dying away. Between the lower median and upper radial vein there is an oblique row pale reddish-yellow spots only slightly contrasting with the ground; fringes dirty grey. Hindwing not spotted, with ashy-grey fringes. Beneath brown, forewing at the costal margin and apex more reddish, of themacular band only 2 spots are visible. Hindwing with a reddish-brown reflection, a black marginal line and 4 small yellowish postdiscal dots towards the apex. Expans of wings: 26 mm. Described from Porto Cabello.

P. binaria Mab. is deep blackish-brown, in the cell with a ferruginous brown reflection, behind it with 2 whitish dots in an oblique line, costal margin and veins deeper black. Hindwing coloured the same with ferruginous yellow fringes. Beneath dull greyish-black, the spots more distinct, below the middle lighter yellowish-white, at the costal margin and veins ashy-grey. The brown hindwing is densely strewn with greyish-violet. Expans of wings: 32 mm. Venezuela (Merida).

P. sophistes Dyar. Blackish-brown with an orange band along the costal margin to the cell-end, where it turns downwards and is obliquely traversed by the radial veins; another band extends along the proximal margin as far as $\frac{1}{4}$ of its length, and is united here with another band which narrows upwards, is incised at the cell-end and terminates at the lower subcostal veins. Fringes reddish-yellow. Hindwing reddish-yellow in the disc and with a reddish-yellow band at the distal margin. Beneath the forewing is reddish-yellow at the apex, otherwise as above; hindwing entirely reddish-yellow, markings from above only faintly showing through. Expans of wings: 24 mm. Mexico.

P. incula Dyar. Black, fringes at the ends reddish-yellow. Costal margin of forewing dusted reddish-yellow with an oblique postdiscal band, traversed by the veins, bent round the cell-end and broken up into 3 subapical spots; hindwing with a reddish-yellow postdiscal band and yellow dusting at the proximal margin. Beneath dusted yellow, forewing with a large yellow discal spot and yellow costal margin, in the cell a black dot, proximal margin black, towards the base penetrating into the cell. Hindwing yellow with yellow veins and a dark marginal band. Expans of wings: 27 mm. Mexico.

P. dara Koll. (= maceoides Blitr., omaha Edw., uningo Edw., Californica Sobhr.) is an insect widely distributed in Asia and having been dealt with in the palearctic part (comp. Vol. 1, p. 351, t. 89 g). Above yellowish-brown, bordered with black, with an oblique longitudinal band from the proximal margin to the apical third of the costal margin. This species also occurs in the United States. For this American form SCudder established the genus Potanthis.


Antennae as in the preceding with a long apex. Forewing broad triangular, distal margin in the middle convex. Pulpi ascending, broad, flatly appressed, with a slender pointed terminal joint which is very long and erect. The $\phi$ is without a stigma. Only one species:

P. antiqua H.-Schdfl. (= utha Hew.) (183 f. g). $\phi$ above fiery orange-brown, broadly bordered with black, with a large, black postcellular spot; $\theta$ much darker brown with a yellow, above forked macular band behind the middle, a black discal streak on the hindwing and a lighter red-brown spot behind it. Behind the forewing is as above, the hindwing brown with a red-brown postdiscal band. Hayti, Jamaica, Cuba.

110. Genus: Serdis Mab.

Antennae longer than in the preceding genera, but they do not quite reach to the cell-end. On the forewing the median area between the two branches is very long owing to the lower branch rising near the base, the upper near the cell-end. Posterior tibiae with long fringes. The $\phi$ exhibits a thick stigma of a dull black colour extending from the cell-end to the base of the submedian and being divided into 4 parts.

S. flagrans Mab. (183 g) is above bright reddish-yellow, with a black border, which between the veins penetrates into the surface like a wedge; inner-marginal halves of both wings dusted grey; behind the cell, as a continuation of the stigma, a black spot, a similar one being pupilled reddish-yellow in the cell is situated at the costal margin of the hindwing. Beneath the apex of the forewing is reddish-brownish-grey, and the greatest part of the hindwing except the broad yellow proximal margin; a postdiscal, bent, yellow band, before it a brownish-grey band. Ecuador, Bolivia.

S. venezuelae Ww. (= statius Pilz, fulgens Mab.) (183 g) is very much like flagrans; the margin is less broad black, the grey dusting less intense, the postcellular black spot small, hindwing without a costal-marginal spot. The $\theta$ is much darker with 2 large, white, postdiscal spots and 2 small ones at the cell-end. Beneath the $\phi$ is plainly reddish-yellow, the proximal margin of the forewing black, the hindwing dusted green, with somewhat lighter veins; the $\theta$ has a green apex and costal margin of the forewing and green hindwings with 2 very much bent, narrow, light yellowish bands. Venezuela.
S. viridicans Fldr. (183 h) is a large, beautiful species, above deep rufous, very broadly bordered with black, with 3 small white subapical spots and a fourth below them; costal margin olive-green like the hairing of the body; a broad black oblique stripe terminates into the broad black apex; hindwing with a broad costal-marginal spot; fringes of hindwings analwards white, otherwise ochreous-yellow. Beneath the forewing is apically and at the costal margin as well as the whole hindwings bright olive-green, at the distal margin lighter; hindwing with a straight, light, narrow transverse band and a broad black inner-marginal wedge. Colombia.

S. kirschii Weig. (183 g) is only doubtfully regarded as a different species. Above the forewing is without the postdiscal white spot behind the lower cell-end, the base of the hindwing is broader red-brown and connected with the postdiscal macular band which does not extend parallel to the distal margin, but terminates distally concavely pointed into the apex. Beneath the anal angle of the forewing is scarcely dusted black, and the hindwing exhibits 2 parallel, distally slightly concave, light green bands, the distal one of which terminates into the costal angle. Colombia, Venezuela.

S. fractifascia Fldr. (183 g) resembles viridicans above, the black border being narrower; on the hindwing before the distal margin extends a straight or almost proximally convex, fox-coloured band which is flayed in an acute angle on the upper radial vein. Beneath as viridicans, but the distal white band of the hindwing forms below the costal angle a pointed tooth distally, touching the margin, the proximal band terminates distally in the lower cell-angle. Colombia, Venezuela.

111. Genus: Trioedusa Hbst.

Antennal club very long, fusiform; palpi appressed, last joint conical, erect. Middle radial of the forewing as in Psoralis and Calpodes; the median strongly inflated, especially beneath; the submedian is bent and forms an angle at the place where it touches the lower end of the stigma. Posterior tibiae bare, only with terminal spurs. Scent-scale stripe tripalpitate, the uppermost part velvety black near the cell-end on the median, the middle one bordered with grey at the lower median vein, and the lower roundish, hairy on the submedian angle.

T. milvius Hbst. (183 h). Black, costal margin striped ferraruginous yellow, with a narrow, oblique, reddish-yellow band extending from the 3 small subapical spots to the base of the proximal margin and widening before the stigma; hindwing with a broad discal spot, fringes likewise ferruginous-yellow. Beneath the forewing is ferruginous-yellow, the band lighter yellowish, hindwing the same, the discal spot bordered by small reddish spots. Brazil, Paraguay.

T. devergens sp. nov. (183 h) is above and beneath hardly discernible from milvius, somewhat smaller, the wings less stretched and above all different by anatomical differences which will probably necessitate the establishment of a new genus. The median is not inflated nor is the submedian angularly flawed. The scent-organ consists of an angular part on the median in the angle where the lower branch rises, below it a roundish scent-spot and above the submedian a third one. The reddish-yellow band of the hindwing is above somewhat broader and beneath the black colour on the forewing is more intense and more extensive. Otherwise coloured and marked the same. According to 1 ♀ from Muzo (Colombia), taken by Fassl.

112. Genus: PreneS Solsbr.

Antennae mostly rather short, like the last palpal joint. Forewing long, the cell of 2/3 of the length of the costal margin; middle radial as in the preceding; hindwing at the anal angle feebly lobate. The oblique, narrow scent-scale stripe which is interrupted, is in some species absent altogether. Posterior tibiae with double spurs.

P. nero F. (= nyctelius Latr., fusina Hew.) (183 h) is a most extraordinarily variable species, especially in the size and development of the white band on the hindwing beneath. Above blackish-brown with a white, semi-transparent cellular spot, 3 or 4 behind it, the uppermost very small, the lowest more yellowish than the others, and 3 subapical dots. Beneath the same, but on the hindwing mostly with a white band. Head corpecto, and thorax mostly greenish. — In f. corrupta H.-Schäff. (183 h) the spots are small, the hindwing shows instead of the white band above an indistinct reddish one; beneath the latter is broad, somewhat reddish, Cuba. —

P. sylvicola H.-Schäff. (183 i) has the hindwing beneath in the larger costal half and the apex of the forewing suffused with steel-grey or lilac-grey, and instead of the white band of the hindwing only small, indistinct light punctiform spots. From Cuba and Para. — In fusidia Hew. (183 i) the band is narrow, divided into spots. Between all these forms there exist, however, numerous transitions. Often the cellular spot of the forewing is prolonged. From Mexico to Brazil and the West Indies. — f. conformis Plotz (183 i) has beside the broad white band of the hindwing also a cellular spot beneath.

P. evadnes Cr. (= chlorus Plotz) (183 i) is larger than nero. Forewing towards the base and hind-wing strewn with dark yellow, otherwise above very similar. Beneath the apical part of the forewing and the
hindwing are dusted with a deep cerise colour, the silvery white band is broad, proximally somewhat dentate and extends farther towards the black proximal margin. Guatemala to Colombia and Brazil.

P. pauper *Mab.* (183 i, k) is above similar, but the $\frac{1}{2}$ is without the stigma, and the band on the hindwing beneath is white not silvery, at both its ends reduced to spots; the hyaline cellular spot of the forewing is small; the undulate, interrupted band beneath separates it also from *nero* and it is otherwise allied. Mexico, Honduras, Guatemala to Colombia.

P. heterosylla *Mab.* is allied to the preceding. Forewing with a bent band of yellow hyaline spots: *heterosylla.* 3 subapical ones, 2 small ones below them and 2 larger quadrangular ones below them, the lowest being more yellow. Hindwing unspotted. Beneath in the disc black, at the costal margin and apex reddish-brown. The hindwing is yellowish red-brown with 3 white black-margined dots, one being situate at the costal margin more remote from the others; in the cell of the forewing there is near the costal margin a small dark dot. From Peru.

P. luctuosa *H.-Schläfl.* (183 k) is much larger, the cellular spot reduced to a small dot, the other spots *luctuosa.* yellowish, the middle postdiscal spot distally deeply hollowed out. Body and base of wings haired brown. Beneath similar as *evaides,* strewn with a dark red-brown, the white band proximally very convex, near the anal angle the dark ground-colour extends far into it. Brazil.

P. gratte *Drv.* (183 k) is very closely allied to *luctuosa* and also to *pauper.* In the cell-end of the forewing there is a small, oblong spot beside the usual spots. Fringes light brownish-white, base of wings and body ochreous. Beneath somewhat lighter, the spots as above, only the submedian spot larger and more blurred. The hindwing exhibits a small, round, white spot in the cell; and behind it a white, bluish reflecting band, proximally sharply defined and convex, distally blurred; it begins pointed at the costal margin and grows much broader towards the proximal margin. The distal margin is brownish-grey with brown veins. From Peru.

P. philippina *H.-Schläfl.* (183 k) is smaller, above with an intense green reflection on the body and *philippina.* base of the wings; the cellular spot of the forewing is entirely absent, the spots otherwise as in *nero.* Beneath the hindwing is like-grey with a broad brown discal and marginal band and a round costal-marginal spot near the base. Mexico to Brazil and the West Indies.

P. cornelius *Latr.* (= ocola *Edw.*., hecebolus *Schlfr., ortygia *Mschlfr., parilis *Mab.*) (184 a) is still smaller, *cornelius.* more insignificant, without any green, without a cellular spot, all the spots smaller; hindwing beneath with a rather indistinct band of whitish, small punctiform spots. From the South Eastern States through Mexico in almost the whole of South America as far as Peru; also in Trinidad.

P. diduca *Schs.* is a very small species, above dark brown, the ends of the fringes lilac-grey. The *diduca.* forewing exhibits only a minute yellowish subapical spot. Beneath lighter brown, on the forewing the apex is tinted lilac like the whole hindwing, on which there is a very small yellowish spot near the cell-end, behind it a bent row of similar small spots, the lowest being the largest. Expans of wings: 24 mm. Petropolis.

P. panoquin *Schlfr.* (= wimico *Plätz,* ophis *Edw.*) (184 a) very much resembles *cornelius,* from which *panoquin.* it chiefly differs above and beneath by somewhat more olive-greenish scaling, as well as an oblong white wedge-shaped spot on the hindwing beneath between the radial veins; there is often another smaller one below the median veins; the veins are somewhat lighter than the ground. Southern Atlantic States.

P. panoquinoideis *Skinn.* is beneath very much like *panoquin* and resembles it also above, but it is here less and more indistinctly marked. It forms the transition from *panoquin* to *Stomylis fusca* and is smaller and darker than the former, but larger and lighter than *fusca.* From Key West in Florida and Texas.

P. errans *Skinn.* Above exactly the counterpart of *ocola,* beneath very much like *panoquin* and *pano-errans- quinoideis.* Above dark brown, forewing with 2 small, yellow spots. Hindwing beneath with 3 spots, the first in the 3rd subcostal area, the 2nd in the 4th, the 3rd in the 1st median area. Expans 1 1/2 inch. California and Texas. — Larva green, the head marked black, with green feet, on herbs. Found in Sa. Barbara.

P. vela *Mab.* (= actor *Mab., dama *Plätz?*) (184 a). Above blackish-brown with a yellowish reflection: *vela.* forewing with a small apical dot, 2 small postdiscal spots and a very small cellular diffuse spot. Fringes yellowish. Beneath lighter brown, forewing lighter whitish towards the anal angle, hindwing with a short, bent, whitish discal band formed of dispersed scales. Expans of wings: 26 mm. Mexico, Guatemala, Panama (Chi-riqui), Brazil.

P. valo *Mab.* is described according to but one $\frac{1}{2}$ for which reason its position is doubtful. Olive-brown; forewing with 3 hardly visible subapical dots and two whitish spots behind the lower cell-angle; fringes dirty grey. Forewing beneath lustrous grey, at the costal margin ash-grey with an oblong-quadranular, ash-coloured, submedian lighter part. Hindwing more brownish grey with a short, lighter postdiscal band of 3 indistinct spots. Expans of wings: 32 mm. Bogotá.
**P. hemizona** Dyar. Black with a blue reflection, wings very long, forewing produced at the anal angle, here with white fringes; in the cell a quadrangular white spot, a wedge-shaped one below it; behind the cell 5 in a curved row. The hindwing exhibits a white band with rounded, yellowish ends behind the cell. Beneath the same. Expanse of wings: 40 mm. Mexico.

113. Genus: **Cydrus** G. & S.

Antennal club shorter than in *Preses* with a longer hook-shaped apex. Apex of forewing prolonged, costal margin convex, distal margin concave. The 3 shows a broad scent-scale stripe from the rise of the upper median vein to the submedian.

**C. naevus** G. & S. (184 a). Blackish-brown, the stigma dark with large, white hyaline spots arranged as in *P. cornelius* but being much larger, especially the cellular spot which is parted by the fold. Hindwing with a yellowish, indistinct cellular spot 4 or 5 behind it in a curved row. Beneath as above, the forewing tinted purple, the hindwing scantily strewed with yellowish, the spots more distinct; fringes white, on the ends of the veins somewhat speckled. Mexico. Guatemala. Panama to Brazil.

114. Genus: **Aides** Billb.

Antennal club stout and long. Prolonged apex of wings and veins as in the preceding genus. The 3 exhibits an angular stigma in the angle between the rise of the lower median vein and the median, below it a longitudinal stripe and near the proximal margin a third being divided by the submedian.

**A. epilus** Cr. (= argyrina Stgr. i. l.) (184 a, b). Blackish-brown, base of wings and body haired greenish, stigma grey. Spots yellow hyaline a cellular spot distally hollowed out, 3 spots in an oblique row behind it and 3 subapical ones. Hindwing with a yellowish apical spot. Beneath more reddish, in the basal half darker, costal margin above the cellular spot yellow. Hindwing in the disc with a large, triangular silvery spot and 1 or 2 spots towards the distal margin. Panama to Brazil.

**A. dysoni** G. & S. (184 b) is very much like the following *aestria*, but the silvery spots beneath are different: a small one is situated in the cell, 3 large ones behind it more towards the proximal margin, the middle spot being the smallest, and before the distal margin there is another transverse, crescentiform spot. Honduras.

**A. aestria** Hew. (184 b) is blackish-brown with a large, double cellular spot, 3 large postdiscal ones and a very small one above it, as well as 4 subapical ones. On the hindwing there is behind the cell a double, white spot. Beneath the apex of the forewing and the costal half of the forewing are extensively cerise or reddish-brown; on the hindwing there is a very large silvery spot in the disc and 6 irregular, smaller ones behind it, Brazil.

**A. elara** G. & S. (184 b) is like *epilus*, but without subapical spots; the silvery spot of the hindwing terminates towards the costal margin into 2 teeth; body and base of the palp are haired yellow, the stigma is smaller, the part below the submedian is absent. Mexico.

**A. incantator** Drö. is only known in the 2. It is allied to *aestria* and *dysoni*, but beneath distinguished by the other silvery spots. Wings basally densely haired reddish-yellow. Beneath the forewing is coppery-brown, in the proximal part blackish-brown, the proximal margin lighter; in the middle of the dark copper-brown hindwing there is an irregular silvery spot composed of quadrangular confluent spots, with 2 smaller spots, one at the cell-end and a somewhat larger one behind it above the median. Costa Rica.

115. Genus: **Paraides** G. & S.

Separated from the preceding genus only by a different shape of the scent-spot: one spot is situated on the lower median vein near its base, another spot below it and a third on the submedian; the stigma may also be absent.

**P. ocrinus** Plötz (= argyrina Stgr. i. l., calldanas Mab.) (184 b, c) looks above almost like *Aides elara*, but the base of the hindwing is haired green; it is very closely allied to the following *aegita*, but it has a stigma of 3 small parts, whereas *aegita* has none at all. On the hindwing beneath there is a large silvery spot below the cell and 2 smaller ones behind it. From Panama to Colombia, Guiana, Amazon, Brazil.

**P. aegita** Hew. (184 c). Above blackish-brown, towards the base and on the body haired olive-yellowish, with a large white cellular spot and 3 postdiscal ones behind it and below it on the forewing; the hindwing exhibits a round white postcellular spot. Beneath cherry-brown, in the disc of the forewing blackish, at the proximal margin lighter grey. Hindwing with a large trapezoid silvery spot below the cell and two smaller ones behind it, one near the margin. Brazil (Pará).
P. anchora Hec. (184 e) is above coloured and marked entirely the same, but somewhat smaller.

Beneath the red-brown parts are lighter, the large silvery spot of the hindwing is not situate below the cell, but behind it, and near the distal margin there is only a smaller silvery spot. Likewise from Pará; Trinidad.

P. brino Cr. (184 d) resembles anchora above except the more ochreous-yellow hairing on the body and the base of the wings. Beneath on the red-brown hindwing 2 transverse silvery spots, both composed of 3 spots each. From Surinam.

P. argyrocastor Mob. belongs to the same group from which it differs by the absence of the white spot on the hindwing beneath. Above deep brown, at the base ochreous-yellow; forewing with 4 white hyaline spots, a double one in the cell and 3 obliquely behind it, the middle spot being large, the lowest small, oval.

Forewing beneath blackish, at the base, round the spots, at the apex and at the distal margin red-brown, dusted with yellow. Hindwing red-brown, strewn with yellow, with 3 silvery spots. 1 in the cell and 2 below it. Expand of wings: 48 mm. Brazil.


Distinguished from the two preceding genera by the straight distal margin of the forewing. The stigma is almost the same, but some species have one scent-stripe more on the median.

X. orchamus Cr. (= lilia Plat.) (184 d) resembles Aides epius (184 a, b), but the silvery spot is different and forms a band from the middle of the costal margin almost to the anal angle, which is broader here; towards the apex there are 2 to 4 more smaller silvery spots; fringes white, at the forewing towards the costal margin smoky. Panama to Brazil. — f. xanthothrix Plat. (184 e, d) is on the body and the base of the wings much brighter ochreous-yellow, also the hyaline spots are more yellowish, on the hindwing there are only 2; on the hindwing beneath there is only the proximal silvery spot, the distal arm broken up into very small spots. Rio de Janeiro.

X. difficilis sp. n. (184 d) does not differ from orchamus above. Beneath the submedian spot of the forewing is much smaller, more indistinct; the principal mark is the differently shaped silvery band of the hindwing, which is broader, towards the base convex from the costal margin to in front of the proximal margin. Penetrating much farther into the cell than in orchamus, where it is proximally almost rectilinearly defined: below the costal margin it is interrupted so that there is here an isolated spot; another difference is in the dark fringes: in orchamus they are white and also bend yet for some distance upwards at the proximal margin. According to 1 FontAwesome from Coroico (Bolivia) from the Coll. Fassl.

X. laureatus sp. nov. (184 d) is above dark green on the body and base of the wings, the ground-colour being black, not brown; the subapical dots are minute, also the submedian spot is very small, all the hyaline spots purely white; on the hindwing there are 4 postdiscal spots. 2 of which are always situated together. Beneath somewhat duller, more brownish; above the cellular the costal margin is spotted white, the submedian spot is enlarged to half of the submedian area and opaque white. On the hindwing there is near the distal margin a white, smoked band in which the hyaline spots are situate at the proximal margin. Body, palpi below and base of club white like the fringes. According to 1 FontAwesome from the Songo (Bolivia) from the Coll. Fassl.

X. ptera G. & S. (184 e) is very much like the following chalestra, but the hindwing above is without the proximal spot, and the body and base of the wings is more intensely metallic green. Beneath chestnut-red, hindwing with a straight, creamy-white band turning upwards at the anal angle. Panama, Colombia, Venezuela, Trinidad.

X. chalestra Hec. (184 e). Brown, on the forewing with a cellular spot and 3 large postdiscal ones, all of which are whitish-yellow hyaline, the two upper ones distally concave, and with 3 small subapical stripes. Hindwing with a round cellular spot and 3 behind it. Beneath the hindwing is chestnut-brown with a broad, creamy-white band being towards the anal part bent round in an acute angle, and the 3 postdiscal spots from above behind it. Colombia, Brazil. — In f. concors H.-Schäff. the white dots behind the band of the hindwing beneath are absent.

X. ceceopterus nov. sp. (184 e) is somewhat smaller, the hindwing rounder, instead of the scent-spots there are long hair. Above as the preceding, but the spots of the forewings are somewhat differently shaped, the hindwing not spotted. Thoracic hairing greenish bluish-grey. Beneath the forewing is apically tinted red-brown, the cellular spot is towards the costal margin continued in a yolk-coloured spot, the lowest fades away in the lighter anal angle. Hindwing deep blackish-brown with a somewhat reddish tint; the upper half of the distal margin and the costal angle are broadly creamy, ending pointed downwards. 2 FontAwesome from the Coll. Fassl from the Rio Songo (Bolivia).

117. Genus: Telles G. & S.

Very closely allied to the preceding genera. Antennae half as long as the costal margin; forewing less prolonged, but hindwing at the anal angle. The FontAwesome is without the scent-organ; middle tibiae with spurs.

T. arcalus Cr. (184 e). Blackish-brown, base of wings and body metallic green; forewing with 2 cellular spots and 3 below and behind them, the second being very large, triangular, before the apex there are 3 very small spots and 2 smaller ones below them, all yellowish hyaline. The hindwing shows towards the apex...
3 spots in an oblique row and 2 subcostal ones. Under surface more reddish, forewing at the anal angle lighter, the costal margin and apex chestnut-red and marked yellow like the hindwing which is grey in the cell, at its end white; behind the cell-end 4 yellow spots. Panama, Guiana, Amazon.

118. Genus: Thespies G. & S.

Antennae scarcely half as long as the costal margin; forewing at the apex somewhat tapering, the distal margin somewhat concave, the cell as long as two thirds of the costal margin; the middle radial very much bent nearing the base of the lower radial; hindwing as long as the abdomen; body strong; the 5 exhibits a scent-stripe from the rise of the upper median vein obliquely to the middle of the submedian, being mostly interrupted. As to the synonymy there prevails an incredible confusion.

Th. othna Bdr. (= macareus Plätz) (184 f, g). Above blackish-brown, towards the base and on the body hairied ochreous with a cellular spot on the forewing, and 3 postdiscal small spots, the middle of which is the largest, quadrangular, and 3 subapical ones. Hindwing towards the apex with 4 postdiscal spots-situate in one row, all of them slightly yellowish. Beneath lighter, apex of forewing, and the hindwing marked red-brown and yellowish, and particularly behind the hyaline spots there appears a narrow red-brown spot; in the basal area also lilac-grey dusting. Mexico; Brazil. It is not impossible that this is macareus H.-Schäff.; the species macareus in one of the following paragraphs would in that case have to be denominated enmacareus.

Th. argentina sp. nov. (184 g) strikingly resembles othna. The hyaline spots of the forewing above are on an average larger, especially the spot between the median veins; the hyaline band of the hindwing is situate more closely to the distal margin, being broader and shorter and ending towards the apex broadly quadrangular, not in a pointed end as in othna; hairing of the body and of the base of the wings is slightly more olive, not so ochreous-yellow. Beneath the forewing is almost the same, the white stripe parting the apex is just a little more distinct; on the hindwing the different position of the hyaline spot is much more conspicuous than above, it is situate much closer at the distal margin and extends with its lower end towards the anal angle, whereas in othna it is turned more towards the middle of the proximal margin; above its upper end another silvery white hyaline stripe extends towards the middle of the costal margin and is proximally broadly bordered with ferruginous yellow; in othna it is only occasionally traceable at the costal margin in a quite different direction, running obliquely proximad. The median and the upper radial are white. From Argentina (Salta), Bogotá.

Th. bogotana sp. n. (184 f) is another similar form. Above like othna, but the hyaline spot of the hindwing does not end towards the apex in a pointed end, but is quadrangular as in argentina, but it is far remote from the distal margin; in the cell-end there is a yellowish-white punctiform spot. Beneath the hindwing is without any ferruginous tints, the costal margin and the middle of the distal margin are broad whitish, densely strewn with a deep cherry-brown color; the hyaline spot is distally bordered by a narrow blackish-red line parted by the white veins: towards the proximal margin from the hyaline spot there is a dark blackish-brown triangular spot towards the base and distally bordered with white, towards the apex a narrow similar stripe turned towards the base and proximally bordered with white. Colombia (Bogotá).

Th. aspernus sp. nov. (184 f) by the bluish-grey hairing of the body and of the base of the wing forms the transition to macareus. Above otherwise hardly different from the others; the hyaline spot of the hindwing consists of 4 equally large longitudinal spots and extends from the apex almost in front of the middle of the proximal margin. Beneath the apex of the forewing is not parted by white, but above and below equally broad greyish-white, scantily strewn with deep cerise. The same is the hindwing in the whole apical half, from the middle of the costal margin almost to the anal angle, otherwise dark cerise, the darkest in the shape of irregular spots in the disc, the largest of which borders proximally on the hyaline spot; distally only the lowest hyaline spot is bordered with dark.

From Paraguay.

Th. macareus H.-Schäff. (= enmacareus Plätz) (184 f) is marked above exactly like othna, but the spots are whiter, and the hairing of the body and the base of the wing is dull greenish bluish-grey, not ochreous. Beneath also marked almost the same, less yellow with 1 or 2 distinct dark dots at the costal margin of the hindwing. Mexico to Venezuela.

Th. marsa Hbr. from the Rio Grande is likewise similar to othna. Blackish-brown, base of forewing and costal margin as far as the 3 apical spots reddish-yellow; in the cell a double spot, behind it in an oblique line 5, all yellowish-white, the uppermost punctiform, the lowest dark yellow. Hindwing with 2 groups of white hyaline spots: 2 larger ones between the radial veins, 2 smaller ones above them, at the base a reddish-yellow dot. Forewing beneath red-brown, proximal margin blackish; from the apex to the upper median vein extends a ferruginous band. Hindwing purple-brown, spots as above, but silvery white, the first group in a yellow band, distally to it towards the apex a white band; margin ochreous-yellow, basal dots white. Span of wings: 36 mm.

Th. lutetia Hbr. (184 f) (transition to the varippe-group). Above like macareus and just as bluish-green on the body and base of the wings; the spots smaller, 5 postdiscal ones (punctiform); the hyaline band of the hindwing narrow. Beneath purple brown or cerise; apex of forewing parted by a white long stripe which appears distally dentate white on the veins. The hindwing is only at the apex very little strewn with white; the hyaline spot is retort-shaped, its white point terminating into the apex; below it and somewhat
towards the margin there is a white crescentiform spot; costal margin basally white; through the middle of the cell extends a white stripe, the interrupted prolongation of which in a distal direction is formed by the white retort-beak and which sends a white band upward before the cell-end to the middle of the costal margin, in which band an oval spot of the ground-colour is enclosed; the basal lower half of the cell and the space towards the proximal margin is white strewed with cerise. Brazil (Rio de Janeiro).

Th. vividus Mab. is above blackish-brown with a cell-spot, 5 postdiscal dots in an oblique line and 3 subapical dots. Fringes whitish speckled with black. Hindwing in the middle with a light yellow hyaline spot composed of 2 large and 2 smaller ones. Forewing beneath blackish, at the apex reddish with a yellowish-white, small oblique band. Hindwing brown, the 4 spots blurred, situate in a yellowish-white band extending from the costal margin to the proximal margin and being connected below the cell with a parallel basal band; veins striped white, proximal margin blackish. Expanse of wings: 30 mm. Brazil.

Th. xarippe Blr. (185 a) is a large, beautiful species, spotted above as the others, on the forewing beneath the subapical spots 2 more spots farther distally; apex parted by light; hindwing with a quadripartite angular spot. Beneath very characteristic; chestnut-brown, apex of forewing parted by white, hindwing with a narrow subbasal transverse band and an angular postdiscal band one side of which extends to the distal margin, anastomosing at the other end with the basal band. Brazil.

Th. hieroglyphica sp. nov. (184 g) is not dissimilar on the whole, somewhat smaller, above very similar. The cell-spot is very small, the submedian spot more intensely yellowish; on the hindwing no angular band, but a straight one extending pointed to the apex, before it in the middle of the cell a small light spot. Fringes on both wings analwards lighter, on the hindwing also at the costal angle. Beneath very variegated and with peculiar markings, arranged as in xarippe: the light stripe parting the apex of the forewing is much steeper, almost parallel to the distal margin; on the hindwing the proximal transverse band is broken up into 2 almost longitudinal ones, the dark ground of the wing is in the costal half white strewed with cherry-brown, the veins before the middle of the distal margin white, the distal band of the hindwing terminates into the apex. Described according to 1 x from the Rio Songo (Bolivia) in Coll. Fassl.

Th. opigena Hew. (184 g). Above dark brown. Forewing with a transparent cell-spot, 4 spots in an oblique line behind it and 3 subapical ones. Hindwing with a transverse band of 4 spots. Beneath as above, hindwing crossed by 2 broad grey antennal and distal-marginal bands. South America (?).

Th. ovinia Hew. (184 g) resembles the preceding above, but the band of the hindwing is composed of 3 small, separate spots approaching the distal margin and parallel to it. Hindwing beneath browner than in the following, the spots larger and more than coherent narrow bands. Nicaragua.

Th. zaovinia Dyar (= rupilius Scks. ?) (184 h) has a broader and rounder shape of the wings, dark brown, above marked as the preceding; the median of the subapical spots is removed proximally. Fringes on the ends of the veins somewhat speckled. Beneath little lighter, behind the middle of the proximal margin of the forewing a large white spot. Hindwing strewed with lilac-grey, with 4 postdiscal white punctiform spots, 2 at the costal margin and 1 or 2 in the cell. Mexico, Costa Rica.

Th. gayra Dyar is above brownish-black, the spots dark yellowish-hyaline, very large, as numerous and arranged as in zaovinia, the hindwing besides with a faded cell-spot; fringes light yellow. Beneath the same, hindwing tinted purple, with the hyaline spots as above and 2 brown transverse bands in and behind the middle. Expanse of wings: 40 mm. Mexico (Guerrero).

Th. himella Hew. (184 h). Above spotted and coloured as lutetia, but the fringes are more intensely speckled white and black. Beneath easily recognizable by the extensive white basal and discal areas of the hindwing with small black spots; proximal margin irregularly black, distal margin red-brown; also on the forewing a subapical, red-brown spot. Brazil (Rio de Janeiro).

Th. cicus Mab. Deep blackish-brown, base haired ferruginous with 8 yellowish-white hyaline spots, a small one in the cell, 3 subapical ones and 4 postdiscal ones in an oblique line; stigma whitish, in the middle interrupted. Hindwing towards the apex with 3 transparent dots. Forewing beneath purple-brown, at the distal margin lilac. Hindwing purple-brown, at the distal margin and round the 3 discal spots strewed with lilac; proximal margin deep brown, fringes white. Expanse of wings: 46 mm. Brazil.

Th. superior sp. nov. (184 h) is above blackish-brown, marked as cicus, but towards the base and on the body with decidedly ferruginous hair; hindwing with a broad hyaline band of 4 spots. Fringes bright orange-ochreous. Beneath deep red-brown, apex of forewing and upper distal-marginal half strewed with lilac-grey. Hindwing in the basal third and before the middle of the distal margin strewed with lilac-grey, so that the hyaline spots are broadly surrounded by red-brown; also the base itself is red-brown. This large, beautiful species is found in Bolivia.

Th. cacajo Dyar (185 a) is allied to dalmani and macarens. Above bronze-black, towards the base ochreous-black; the spots yellowish-hyaline, arranged as in the said species, the cell-spot quadrangular, in the middle stragulated; only 3 postdiscal spots, that in the middle being the largest, the two upper ones quadrangular; hindwing with 3 postdiscal spots, separated by the veins, growing smaller towards the apex. Beneath as above, forewing behind the apical spots with a ferruginous nebulous stripe, behind it a purple line.
Hindwing in the disc dusted with purple; below the hyaline spots a large, triangular, brown spot narrowly bordered with purple; behind the hyaline spots 3 ferruginous spots separated by the veins. Expanse of wings: 36 to 40 mm. Mexico (Guerrero, Cuernavaca).

**Th. dissilutus** ep. nov. (185 a) is a smaller species, above intensely reddish-yellow, the spots yellowish, the submedian spot quite ochreous-yellow, the cell-spot very small, only 3 postdiscal spots; hindwing with 4 narrow, light ochreous, small spots, the two middle ones transparent and more white. Beneath duller brown without any red or reddish-yellow tints, apex of forewing parted by white, before it with a deep brown triangular spot proximally bordered with white and exhibiting a white dot at the costal margin. Below the base of the costal margin of the hindwing a white stripe and through the middle of the cell above the radial veins as far as the apex a white stripe from the middle of which a branch extends to the middle of the costal margin, in the middle of which a small brown streak-spot is situate. Below the cell 2 large, blackish-brown spots on each side bordered with whitish, the proximal one being smaller; the two postdiscal hyaline spots are likewise distally bordered by dark brown spots; proximal margin dark brown. South Brazil.

**Th. dalmani** Latr. (185 a) is twice as large, otherwise very similar; the hyaline spots are larger, on the forewing without the yellowish tint; bases of wings not so reddish-yellow, more olive-yellowish. Beneath very much like *dissilutus*; the white longitudinal stripe through the cell of the hindwing and its costal-marginal branch are absent, the cell and the apical costal-marginal half are monotonously pinkish-grey or whitish, the blackish-brown spots below and behind the cell are very prominent, the spot situate towards the base below the cell being very small. Fringes at the anal angle ochreous-yellowish. Mexico to Colombia, South Peru.

**guerreronis.** — In f. **guerreronis** Dyar (185 a) from West Mexico the blackish-brown spot of the hindwing beneath is much larger and triangular and reaches beneath to the lower end of the white hyaline spot.

119. Genus: **Vacerra** G. & S.

As Thespia, but on the forewing the lower median vein rises much nearer at the base, and the stigma consists of two narrow, scarcely visible longitudinal stripes, a short one below the lower median vein and a longer one above the base of the submedian.

**bonfisi.**

V. **bonfisi**i Latr. (Mab. Gener. Ins. 17 d, p. 148) has unfortunately remained unknown to us.

**litana.**

V. **litana** Hew. (= caprotina H.-Schaff., soles Pløtz, aeces Pløtz, cabenta Pløtz) (185 b) looks above like *Thespia macarens* (184 f), body and bases of wings with dull ochreous hair, easily discernible by the entirely different, indistinct stigma. Hindwing beneath at the base cerise, distally more lilac-grey with a yellowish-white band and cell-spot. From Mexico to the Amazon.

**egla.**

V. **egla** Hew. (185 b) is similar, the cell-spot on the forewing divided into two, all the spots narrower, the band of the hindwing longer, all the spots in it equally broad. Beneath lighter, hindwing more mixed with cerise, with a bone-coloured white band. Mexico, Nicaragua, Panama.

**lachares.**

V. **lachares** G. & S. (185 b) is very similar, but larger, below the subapical spots of the forewing two more spots, the band of the hindwing is more pointed towards the proximal margin. Beneath much darker than **egla**. From Costa Rica.

**canaola.**

V. **canaola** H.-Schaff. (= canente Blgr.) (185 c). Above as **litana**, beneath the hindwing exhibits a straight white band from the apex to the anal lobe, not so far as the angle. In the **z** the cell-spot is divided into two. Costa Rica.

**dalima.**

V. **dalima** Pløtz (185 d). Blackish-brown, on the forewing with 3 postdiscal spots, 2 subapical ones and one minute cell-spot, on the hindwing with a narrow, white postcellular transverse band of 4 small spots. Beneath as above, but very much duller brown, in the disc of the forewing black. Brazil.

120. Genus: **Tirynthia** G. & S.

Differ from *Vacerra* by a longer antennal club; the costal margin of the forewing is bent convex at the base, the cell is shorter than 2/3 of the costa; the middle tibiae without spines and the **z** is without the scent-scale apparatus.

**conflua.**

T. **conflua** H.-Schaff. (185 c) resembles *Vacerra egla* above, but it has no cell-spot. The hindwing shows a short, ochreous-yellowish postcellular band divided by the veins. The hindwing beneath is light brown with a broad, straight white band from the apex to the darker middle of the proximal margin which it does not reach. Nicaragua to Paraná.

**cinica.**

T. **cincica** Pløtz (185 b, c) differs from **conflua** by smaller white spots increased by a cell-spot; the hindwing only shows a roundish discal spot. Beneath scarcely different from **conflua**, but in the middle of the costal margin is a yellow spot, and the inner-marginal area is broadly greyish-white. From Pará.

**osca.**

T. **osca** Pløtz (185 c) is doubtfully placed here. Above blackish-brown, with a basal green reflection; forewing with a large, quadrangular cell-spot and 2 behind it, as well as 3 subapical dots. Hindwing with 2
white, small punctiform spots behind the cell and yellowish fringes. Beneath lighter brownish-grey, apex of forewing with a whitish-spot, and with a submedian lighter part at the proximal angle; the hindwing besides shows a whitish cell-dot. From Venezuela (Caracas).

**T. xanthonsticta** Plötz (185 d) is very similar; above without the green reflection, instead of which the costal margin is red-brown. Forewing only with a subapical dot, hindwing only with a whitish postcellular spot. Beneath without the white apical spot and anal-angular spot. Pará.

### 121. Genus: Niconiades Hbn.

Antennae with clubs long, slender; palpi erect with a short terminal joint. Distinguished by the prolonged hindwings. ≤ stigma tripartite: a triangular piece in the angle where the lower median vein starts from, a long stripe below it and a shorter one on the submedian.

**N. xanthophes** Hbn. (185 d). Above blackish-brown, bases of wings and body with metallic green hair, stigma grey; spots white hyaline: a bipartite cell-spot, 3 postdiscal dots and 2 or 3 subapical dots. Hindwing with a postcellular double spot. Beneath lighter, in the basal half of the costal margin ochreous-yellow with a narrow, irregular band from the costal margin to the anal angle. Mexico to Brazil.

**N. caeso** Mab. (185 d) is very similar, but immediately discernible by 3 spots of the hindwing. Mexico to Brazil and Trinidad.

**N. merenda** Mab. (185 d, e) is above likewise similar, but smaller, the subapical dots almost extinct. Hindwing beneath without a band, only with a small cellular dot. From Panama, Venezuela to Brazil.

**N. merendula** Schs. resembles the preceding. Head and thorax greenish; wings brown with darker fringes; forewing with 3 small, subapical spots, a large cell-spot being strangulated in the middle, a large, quadrangular spot below it and a smaller one behind the lower cell-angle, all white hyaline, and a yellow submedian patch. Hindwing with a small, round, yellow cell-spot and 4 small, whitish antennomarginal spots. Beneath lighter brown, forewing basally darkened, the submedian spot larger and white. Hindwing as above. Expanse of wings: 31 mm. Castro, Paraná.

**N. viridiceps** Mab. (185 e) resembles *merendula*, but it is larger, the subapical dots are larger. Hindwing above with a short, white band, beneath the cell-dot with 2 small spots near the costal margin and 3 near the anal angle. Panama.

**N. cydia** Hev. is very much like *Oxynthes corusca* (185 e); it is larger, hindwing at the anal angle more prolonged; besides the ≤ has the stigma described above, on the submedian a longitudinal, not transverse scent-stripe. From Brazil. — **f. beskei** Plötz (185 e) has on the hindwing beneath a broader white band. Novo Friburgo.

**N. antus** Mab. is above black; the forewing exhibits a white hyaline quadrangular cell-spot; a longer one below it is connected with it, a smaller one is situated distally above it; below the apex 3 hyaline dots. Hindwing with 2 small postcellular hyaline spots. Beneath red-brown, distally more brightly coloured with the spots of above and a whitish patch at the anal angle of the forewing. Expanse of wings: 42 mm. Brazil (Sa. Catharina).

**N. andricus** Mab. We had no access to a description of this species.

**N. sabaea** Plötz (185 f). Blackish-brown, thorax and bases of wings with a green reflection, on the forewing with a large, strangulated cell-spot, 2 behind it and a small, yellowish submedian patch and 2 subapical dots. Hindwing with 2 or 3 postcellular dots and lighter fringes. Beneath lighter brownish-grey, in the lower half of the forewing black, the discal spots confluent and united with a large, white submedian spot. Brazil, Colombia, from the latter country with smaller hyaline spots.

### 122. Genus: Oxynthes G. & S.

On the forewing the middle radial vein is still nearer at the lower cell-angle than in *Niconiades*, the hindwing is scarcely prolonged at the anal angle and does not project beyond the abdomen. Instead of the lowest longitudinal scent-stripe on the submedian the ≤ exhibits a transverse stripe.

**O. corusca** H. Schäff. (= martius Mab., cisa Plötz) (185 e) very much resembles *Xicon*. *xanthophes* corusca. (185 d), but it is distinguished by the shorter hindwing, the different stigma and unspotted hindwing. Head, body and bases of wings are green; hindwing beneath lighter, with a broad white band as in *Tir. consticta* (185 e). Mexico, Panama to Brazil.

Antennal club thick and long with a short apex; palpal terminal joint short; apex of forewing hardly prolonged, hindwing broad and rounded; posterior tibiae with long fringes. The $\varphi$ shows a straight, narrow scent-stripe from the lower median vein to the submedian.

**Ph. propertius** F. (= memeeca Hew.) (185 e). Above blackish-brown, with a postdiscal band composed of 3 pale yellow spots and 4 or 5 reddish-yellow, small subapical spots; costal margin of forewing in the middle reddish-yellow, hindwing with a reddish-yellow transverse band. Beneath very conspicuous owing to the creamy hindwing with 2 red-brown transverse bands; at the proximal margin a black wedge-shaped spot. Brazil.

**Ph. jamaicensis** Schs. Above bright reddish-yellow, distal margin and a stripe from the cell to the apex blackish-brown; in the basal area a large blackish-brown spot from the subcostal vein to the lower median vein, into which from outside the reddish-yellow colour penetrates in the shape of a stripe. Hindwing with a broad, black costal margin and distal margin widened as far as the cell-end. Beneath the costal margin, apex and distal margin are reddish-brown, with a darker antemarginal shade, at the anal angle black; base black as well as a large spot at the cell-end. Hindwing dark reddish-brown, distally lighter with a yellow discal spot and a black triangle above the anal angle. Expanse of wings: 43 mm. Jamaica.

**Ph. phineus** Cr. (185 e) is a doubtful species. Above similar to *jamaicensis*, but on the forewing only with 2 reddish-yellow subapical spots, and the 2 upper spots of the postdiscal band are likewise reddish-yellow.

Hindwing crossed by a broad creamy transverse band. Described from Surinam.

**Ph. simulius** Drc. (185 f) is a large, strong species with a remarkably strong anterior body and a stout head. Above dark brown, thorax and bases of wings haired green. Forewing with an ochreous-yellowish cell-spot and 3 small postdiscal ones obliquely behind it, as well as 3 subapical dots; hindwing with 3 extinct, small, ochreous-yellowish postcellular spots, fringes lighter whitish. In the $\varphi$ the spots are larger and form on the hindwing a band beginning from the costal margin. Beneath lighter brown, the discal spots of the forewing flown together with a large, yellowish-white submedian spot into a transverse band. Hindwing with a broad silvery white band. Peru and Bolivia.

**Ph. proca** sp. nov. (185 f) resembles *simulius* above, but it is somewhat smaller, the postdiscal row of spots a little more oblique, the cell-spot absent. On the hindwing the spots are situate more behind the lower cell-angle. Body and bases of wings not green, but ochreous-yellow. Beneath light brown, on the hindwing with a round, light cell-spot and a bent row of dots behind it, the largest spot being situate near the proximal margin. Bolivia.

124. Genus: Thoon G. & S.

Antennae somewhat longer than half the costal margin. Apex of forewing prolonged, the middle radial at its rise very much bent down. Hindwing at the anal angle prolonged, projecting beyond the abdomen. Middle tibiae with spines. Scent-scale stripe of the $\varphi$ composed of 2 parts: a triangular part in the angle where the lower median vein proceeds, and a short longitudinal stripe above it.

**Th. modius** Mab. (= stillio Mab.) (185 f) looks above almost like *Tyriaathys conflua* (185 c), but the spots are smaller. Hindwing beneath light brown with an ochreous-yellow cell-dot and 4 in an oblique line behind it. Guatemala, Nicaragua, Costa Rica and Panama.

**Th. taxes** G. & S. (185 g) is similar, though smaller; on the forewing the subapical spots are absent, hindwing without a macular band. Beneath without the cell-spot of the hindwing. The black stigma is very distinctly prominent. From Panama.

**Th. lugens** Schs. Dark brown with lighter fringes. Forewing with a black stigma. Beneath the forewing is reddish-brown, at the proximal margin lighter. Hindwing violetish-brown except the proximal margin; a small cell-spot and some small, similar postdiscal spots as well as the proximal margin are lighter brown. Expanse of wings: 27 mm. Petropolis.

125. Genus: Rinthon G. & S.

Distinguished from the preceding by somewhat less prolonged hindwings and only one longitudinal scent-scale stripe on the submedian.

**R. chiriquensis** Mab. (= cabella Plat.) (185 g). Above blackish-brown with a white-hyaline cell-spot, a very large, quadrangular spot distally below it, and a small one more towards the margin above it; 3 subapical hyaline spots the lowest of which is removed more distally; hindwing with 3 small light ochreous postcellular spots in a straight line. Beneath the same, but duller, the proximal margin of the forewing lighter; hindwing a little strown with whitish, the small spots whitish, besides with a cell-dot. Mexico, Guatemala and Panama.
R. bomax Schs. Dark brown, on the forewing with a narrow, transverse white hyaline spot between the median veins and a very small round spot above it. Beneath dark brown, tinted violet, on the forewing the anal angle and proximal margin are lighter brown. Hindwing with a small, yellow cell-spot and a dot behind the lower cell-angle. Expans of wings: 36 mm. Petropolis. — zaba Str. belongs perhaps as a form to it, it is distinguished by 2 minute subapical dots, only one more small cell-spot, the hindwing being unmarked. Mexico, Argentina.

R. tanaris Schs. is above as the preceding, but without the narrow lower hyaline spot. Beneath the forewing has a broader lighter brown distal margin and apex and is spotted as above, but with a light transverse stripe below it. Hindwing tinted violet above the median and the lower branch. Expans of wings: 36 mm. Brazil (Tijuca in the Organ Mountains).

R. dyma Plötz (185 g) is dark brown with 3 white subapical dots, 2 large white postdiscal spots and a yellow submedian diffuse spot in front of which the lead-coloured scent-stripe is situated on the submedian. Hindwing with a white dot behind the lower cell-angle, and with ochreous fringes. Beneath light reddish-brown, disc of forewing black, being continued towards the margin like a diffuse patch above the lower median vein. Hindwings with darker brown basal and discal bands and small triangular spots on the margin between the veins; besides 2 white postdiscal dots there is a cell-dot. Brazil.

R. advena sp. nov. (185 g) is smaller; the blackish-brown forewing shows 2 small, white, hyaline cell-spots, 2 postdiscal spots the lower of which is much larger than the upper, and 3 subapical dots. Hindwing with a hyaline dot behind the lower cell-angle. Beneath duller, the anal angle of the forewing lighter, hindwing with a white cell-dot and 2 behind the cell. Bolivia; South Brazil.

R. lactatus Schs. is above black, on the head with a slight green reflection. The forewing exhibits 2 small greyish-white spots between the median veins and above them. Beneath duller and lighter, the spots whiter, clearer, near the anal angle a greyish-brown spot; on the hindwing 2 reddish dots behind and below the cell. Mexico, Costa Rica.

R. cynea Hcr. (= eresina Mab., versna Mab., kus. Mab.) (185 h). Forewing with only 3 small white spots, one of which is subapical; hindwing unspotted. Beneath the hindwing shows a cell-dot and 3 behind it, the anal angle of the forewing is broad, white; head and thorax with a green reflection. From Mexico to Colombia and Venezuela.

R. bistrigula H.-Schaff. (= alus Mab., velleius Plötz) (185 h) is above very similar; beneath the forewing does not show a white anal angle, and the hindwing is entirely uni-coloured blackish-brown, like the head and thorax. From Panama to Guiana, the Amazon and Bolivia.

R. melius Hbc. (= irina Mab.) (185 h) is above quite blackish-brown with a long, lighter stigma; forewings towards the proximal margin and hindwing on the anal fold long-haired. Beneath the wings are tinted purple, forewings at the anal angle lighter, at the apex and distal margin grey. Of the same colour are the distal and proximal margins of the hindwings. Mexico to Colombia, Brazil, and in Trinidad.

R. anthracinus Mab. (= capillus G. & S.) (185 h) is much larger than melius, above the same; well discernible on the hindwing beneath by the distal margin being broadly coloured ochreous-yellow analwards. Guatemala to Brit. Guiana.

R. megalopa G. & S. (185 h). Above uni-coloured blackish-brown; beneath hindwing as in cynea, megalopa, but the forewing without a white anal angle; head and eyes remarkably large, frons and prothorax with lustrous green hair. Mexico, Costa Rica and Panama.

126. Genus: Cobalus G. & S.

Antennal club with a long, turned-round apex; palpi erect; hindwing at the costal angle somewhat prolonged, analwards somewhat convex. The 3 nervus is without the scent-scale stripe.

C. fidicula Hcr. (= hesiodes Plötz) (185 i). Forewing with 3, sometimes 4 white spots, 1 or 2 of which are subapical, the lowest spot being the largest. On the hindwing before the middle of the distal margin an oval white spot. Beneath more reddish, otherwise as above, but the proximal margin of the forewing shows a fifth white spot. Honduras, Costa Rica, Panama.

C. virbius G. (= hersilia Plötz) (185 i) is very closely allied to fidicula, with broader and shorter wings, the white spot of the hindwing extending to the distal margin. Brazil (Rio de Janeiro).


C. trimaculata Plötz (185 h) has above close together a double cell-spot and below it a large white spot, a small one being behind it. Beneath the same, little lighter, with a large, yellowish-white submedian spot of the forewing. From Brazil.

C. bryanti Wecks is doubtfully placed here. Above dark brown, basal half of costal margin strewn with golden yellow; forewing with 2 white subapical dots; 3 white postdiscal spots, the lowest being the largest.
Through the middle of the dark brown hindwing extends an indistinct darker line. Beneath both wings are uni-coloured dark brown. Expanse of wings: 28 mm. Venezuela (Suapure).

C. gabinus Plötz (1853) is above uni-coloured blackish-brown, beneath the same, on the hindwing with 3 or 4 white, roundish postdiscal spots situate close together, only separated by the veins, the second from above being the largest and projecting towards the base; occasionally there is another dot in the disc. Brazil (Santos, Rio, Sa. Catharina).

C. herminieri Latr. (186 a) is above blackish-brown, beneath a little lighter brown, on the hindwing more reddish, with 2 grey, small, postdiscal diffuse spots behind the lower cell-end; veins somewhat darker. Venezuela, reported from Carolina.

C. nigrans Schs. Wings blackish-brown, beneath duller. Forewing beneath with 2 small greyish-white spots between and above the median veins, anal angle lighter brownish-grey; hindwing with an orange dot at the cell-end and 2 similar ones behind and above the cell. Costa Rica.

C. laureolus Schs. Above blackish-brown, above on the forewing in the middle the veins darkened, hindwing in the basal half darker. Beneath lighter brown, only in the basal third of the forewing and a subapical triangular spot dark, before the latter with 3 grey dots, anal angle lighter. On the hindwing the base, a postdiscal band and large marginal spots are darker brown. Costa Rica.

C. lateranus Schs. The blackish-brown forewing shows transparent, white spots: a large one at the cell-end, a large one below it between the median veins, and a smaller one above it more distally, a small one below it and 3 small subapical ones. Beneath the forewing is at the apex, costal and distal margins and the hindwing olive-brown, the latter with a white cell-spot and another one below the lower cell-angle. Looks above like gabinus (1853). Costa Rica.

C. pindar Schs. Smaller than the preceeding, the spots brownish, without the cell-spot of the forewing; hindwing with a yellow hyaline dot below the lower cell-angle. Beneath lighter brown, costal margin and cell of hindwings more yellowish-brown, the spots as above, anal angle lighter. Hindwing brown, transverse vein and 5 postdiscal spots darker brown, that below the lower cell-angle pupilled with the hyaline dot. Costa Rica.

C. eteola Plötz (= ulrica Plötz) (186 b). Above blackish-brown, with a small, white cellular and submedian dot, larger postdiscal spots and 2 subapical dots. Beneath lighter violetish-brown, with blackish veins, in the anal part of the forewing lighter, with a red-brown inner-marginal part of the hindwing. From Rio de Janeiro.

C. argus Mecslr. (= yva Plötz) (186 a) resembles the preceding above, but the subapical spots of the forewing are absent. Beneath grey, hindwing with a black cell-spot and 4 behind it in an irregular row, all of them ringed lighter. Panama to Colombia and Argentina.

C. chinoba Weeks is above uni-coloured dark brown, towards the margin somewhat lighter with darker, small, indistinct spots in the internerval spaces near the distal margin, on the hindwing a little more distinct. Beneath brownish-drab, on the hindwing striped somewhat darker; an indistinct, darker transverse band extends from the apex to the middle of the proximal margin, another one along the distal margin; the black marginal spots are much more distinct than above; inner-marginal area light grey. Expanse of wings: 27 mm. Venezuela (Suapure).

C. perciosus G. & S. (186 a) looks above like argus, but the forewing is without the cell-spot, but there are 3 small, subapical spots. Hindwing often with 2 small light postcellular spots. Beneath on the hindwing at the cell-end a yellow dot and 2 near the distal margin. Forewing at the anal angle lighter, yellowish-grey. Mexico, Guatemala and Panama.

C. quadrum Mob. is above smoky black, forewing with a small subapical dot and 2 white postdiscal spots. Beneath lighter, the spots light yellow, the proximal margin of the forewing whitish, in the submedian space more ash-grey. Hindwing black with a large, quadrangular white spot between the upper radial vein, and the inner-marginal fold, touching the distal margin. Pulpi red, laterally black. Expanse of wings: 34 mm. Rio San Juan (Colombia).

C. paculla Mob. is somewhat smaller, above the subapical dot another one being hardly visible; the postdiscal spots are small, quadrangular. Hindwing here also above with a white marginal band-spot from the middle radial vein to the proximal margin; fringes above it spotted white. Beneath similar, the inner-marginal area whitish. Expanse of wings: 32 mm. Villa Bella (Brazil).

C. physcella Hec. (186 a). Above blackish-brown with a greenish reflection, 4 postdiscal white spots in an oblique row and 3 subapical dots; on the hindwing with white fringes there are 3 subapical white dots. Beneath the hindwing exhibits a broad, white distal-marginal part with a series of brownish, small dust-spots in the middle, parallel to the distal margin. Brazil.

C. elegantula H. - Schäff. (186 b) entirely resembles the following quadrangulara, but it has lighter yellowish fringes. On the under surface the basal half of the costal margin and the apex of the forewing are light violet like the hindwing with a rather broad, brown, undulate marginal line. The hindwing shows right
across the middle a broad, brown transverse band distally accompanied by a fine undulate line; basally another brown spot, the inner-marginal part broad and brown. Brazil.

C. lysiteles Mab. is only doubtfully placed here. Jet-black, with white-hyaline spots: 3 subapical ones, 2 long ones in the cell and 4 in an oblique line behind them. Hindwing with a large oval spot with a dentate distal margin in the middle, on the teeth dusted light blue, and with a bluish-white longitudinal ray on the inner-marginal fold. Forewing beneath black with a grey proximal margin; hindwing purple black, the white spot larger, extending from the subcostal to the inner-marginal fold. Expanse of wings: 38 mm. Saragam.

C. zeppa Plötz (186 b) is above deep blackish-brown, with 2 white subapical dots and 2 postdiscal white spots, the lower of which is larger, reniform. Beneath the forewing is at the distal margin and in the anal submedian space light brownish-grey. Hindwing as dark as above, unmarked with light grey fringes. Surinam.

C. aethra Plötz (186 a) is similar, somewhat larger, much lighter brown, the white spots much smaller, subapically only a dot. Beneath as above, scarcely lighter, only the disc of the forewing somewhat darker. Abdomen beneath whitish. Surinam.

C. quadrangula Plötz (= cubana H.-Schäff.) (186 b, c). Blackish-brown with an uncommonly large, quadrangular, white spot below the lower cell-end and a smaller one distally above it, as well as 3 subapical dots. Beneath in the disc of the forewing black, otherwise reddish-brownish or lilac-brownish with a light, whitish cell-dot and a bent postdiscal row of dots. Brazil and Cuba.

C. subcordata H.-Schäff. (186 b) is very similar, larger, body and bases of wings faintly greenish, the white spots much smaller with whitish fringes on the hindwings. Beneath as the preceding, but the hindwing unsotted with a deep chestnut disc and lighter brown distal and proximal margins. Brazil (Rio de Janeiro). — The form olympia Plötz (186 c) is distinguished by one more postdiscal spot and has a small white dot on the hindwing beneath. Fringes tinted more ochreous. Likewise from Brazil.

C. neroideis H.-Schäff. (186 c), without its habitat being known, is only doubtfully placed here and greatly resembles olympia, but it has one more narrow cellular and submedian spot, the latter yellowish. Beneath more olive-brownish or greenish with a large, whitish anal spot of the forewing and 2 to 4 whitish postdiscal dots on the hindwing.

C. tertianus H.-Schäff. (= warra Mschr. C, zola Mschr. C) (186 c) is above quite uni-coloured brownish-black, in the ♀ with 2 or 3 postdiscal hyaline spots, beneath lighter; on the forewing behind the middle near the distal margin a dirty white transverse band, on the hindwing the larger basal half is dirty white, like the inner-marginal part. Costa Rica, Guiana.

C. hilda Plötz (186 d) is above blackish-brown, on the hindwing with 3 small, whitish spots behind the lower cell-end. The ♀ has on the forewing 3 large ochreous-yellow postdiscal spots and 3 small apical spots, and on the hindwing in an acute angle to the 3 spots, which are here larger and ochreous-yellow, there is a third above them. Beneath very peculiarly marked: disc of forewing blackish-brown, distal margin behind the discal spots broadly light greyish-brown. Hindwing light brownish-grey, in the discal area, projecting distally in an acute angle and here bordered by whitish, darker; the whitish colour is the broadest towards the proximal margin, below it there is a large and a very small blackish-brown spot; a similar one is situate at the base of the costal margin. Brazil, Blumenau, 1 ♀ from Salta (Argentina) in the Coll. Setz.

C. nubila Mab. only doubtfully belongs hereto. Light brown with a ferruginous reflection, particularly towards the margin. Beneath lighter, more red; forewing with a submedian lighter, yellowish part, from the base to the middle blackish; hindwing still lighter and more monotonous. Expanse of wings: 36 mm. Porto Cabello.

C. astur Mab. Light brown with 2 white subapical dots and 2 spots behind the lower cell-angle, the upper being larger and quadrangular. Hindwing darker, fringes ferruginous brown. Beneath blackish, in the middle of the forewing more grey, only the upper discal spot being visible. Hindwing black with 4 white postcellular dots, the 2 lower ones being larger. Expanse of wings: 31 mm. Coary.

C. cleocharis Mab. Deep blackish-brown, on the forewing with 2 small white subapical dots and 2 spots behind the lower cell-angle; fringes whitish-grey. Hindwing unsotted with lighter fringes. Beneath on the forewing the spots are more distinct, the distal half is lighter; base of hindwing blacker; a postcellular semicircle of 4 white dots, a fifth in the cell. Expanse of wings: 29 mm. Valera.

C. oblinata Mab. is above dark brown with a light red-brown reflection and orange-brown, scarcely visible spots: 2 subapical ones and 3 postdiscal ones. Hindwing behind the middle lighter, fringes light ferruginous. On the forewing beneath the costal margin and apex are red-brown, the proximal part black with more distinct spots than above. Hindwing brown with a light red-brown band in the middle. The ♀ being placed hereto is larger and has white spots, it may belong to another species. Expanse of wings: 30 to 34 mm. Brazil (Rio Grande).

C. cannae H.-Schäff. (= osembo Mschr., byzas Mab. i. l.) (186 c, d) resembles Risthom bistrigula cannae. above, but it is well discernible by the absence of the stigma; the hyaline spots above are very variable in extent
and may be obliterated. Beneath the forewing is narrowly yellowish at the costal margin and apex, below the apex at the distal margin tinted somewhat lilac, hindwing in the proximal half brownish-yellow, at the distal margin narrowly strewn with lilac, with an indistinct, lighter, straight band from the apex to the middle of the proximal margin, and 2 light spots in the costal half. Mexico to Argentina.

**C. forris** Schs. Dark brown, ends of fringes whitish; forewing at the proximal margin haired greenish, spots yellowish-white hyaline, one in the cell, straggulated in the middle, 2 postdiscal ones, the lower of which is the largest, and 3 subapical ones. Hindwing in and below the cell haired greenish, with 2 small transparent spots above the median veins. Beneath brown, costal margin and apex of forewing, and hindwings strewn with greenish-yellow, base of forewing darker; spots as above, above the submedian another large whitish spot. Expanse of wings: 39 mm. Castro (Paraná).

**C. psyllus** is doubtfully placed here. Above black with large, white spots, a large one in the middle of the cell and two between the median veins, the upper one of which is small; base light grey. Hindwing without spots, in the disc dirty yellow, fringes dark grey, speckled with black. Forewing beneath at the apex, distal and proximal margins pearl-coloured grey, hindwing dark grey with a semicircular row of 5 or 6 whitish spots. Bolivia.

**C. derisor** Mab. Deep brown. Forewing with light yellow spots: 2 subapical ones, the lower of which is larger, 2 striiform, parallel ones in the cell, and 3 behind them in an oblique row, the lowest of which is the smallest and of a deeper yellow. Hindwing with 2 dots showing through from beneath behind the upper cell-end. Forewing beneath with a darker base, at the costal margin and apex reddish. Hindwing red-brown with a round cell-dot and the two spots mentioned above behind the upper cell-angle. Thoracal hairy of a green reflection. Expanse of wings: 46 mm. Venezuela.

**C. hypoxanthos** Mab. Black, towards the base yellowish. Forewing with a quadrangular cell-dot, 2 postdiscal spots and a submedian diffuse patch below them, and 2 subapical dots. Beneath very variegated, costal margin broad chestnut like the apex, the postdiscal ferruginous oblique band very much widened. Hindwing chestnut mixed with blackish, with reddish-yellow spots at the cell-end, behind it, below it near the proximal margin and at the blackish anal angle. 1 ½ from Muzo (Colombia) taken by FASSL.

**C. pascala** Schs. is above similar, somewhat lighter brown, the spots smaller, particularly the cell-spot very small. Beneath still lighter brown: beside the spots of above a postdiscal row of 5 small, black spots, the middle one of which is pupilled whitish. Hindwing with a black crescentiform cell-end-streak, behind it 4 black spots, the two lower ones intensely pupilled white, the 3rd indistinctly so, the uppermost quite black. Expanse of wings: 38 mm. Petropolis.

**C. arita** Schs. The dark brown forewing is without the cell-spot, with only one subapical dot. Beneath somewhat lighter, the costal margin of the forewing dusted with reddish, near the anal angle another light spot. Hindwing dusted with violet, with a small yellowish cell-dot and 5 small similar spots behind it in a bent row. Abdomen beneath whitish. Expanse of wings: 26 mm. Trinidad.

**C. stigmata** Mab. scarcely belongs hereto. Blackish-brown, costal margin of forewing reddish-yellow; 3 postdiscal hyaline spots; the lowest very small. Forewing beneath blackish, the costal and distal margins reddish; between the apex and lower median vein with a light violet band. Hindwing from the costal margin to the middle radial vein brown, from there whitish lilac, strewn with brown; through the middle extends a row of 6 brown double dots distally spotted white; towards the apex they are smaller and more remote; in the cell a round white spot. Expanse of wings: 21 mm. Patria unknown.

**C. cinerita** Plötz (186 d) is just as doubtful. Above blackish-brown with somewhat lighter fringes tinted ochreous, and on the forewing with 3 small postdiscal dots and 1 subapical dot. Beneath the hindwing is entirely unmarked light ashy grey; costal margin of forewing and apex somewhat lighter brown than the black disc, the submedian spot larger and ashy-grey. Brazil.

127. Genus: *Cobalopsis* G. a. S.

Scarcely separable from the preceding, only different by the strong and projecting valves of the ♀.

No stigma.

**C. pelora** Plötz (= autumna Plötz, edda Mab.) (186 d) entirely resembles the preceding above, the spots are small, especially the cell-dot and 3 subapical ones. Fringes of hindwings tinted ochreous. Beneath the same, forewing with a large, light anal angular spot; the hindwing is somewhat tinted olive and shows 4 postdiscal whitish punctiform spots. Mexico to Guiana.
C. dyscritus Mab. resembles the preceding, but the hindwing beneath is distinctly ochreous-yellow, *dyscritus*, and the genitalia are different. Mexico to Peru and the Amazon.

C. rogersi Kaye has an intense bronze-green reflection on the head, thorax and abdomen. Forewing dark blackish-brown with 3 white subapical dots; below the lower cell-angle there is a large, angular, white spot, a small one distally above it. Beneath the base of the forewing is black, the marginal area lighter; on the hindwing the disc is the darkest. Expanse of wings: 40 mm. Trinidad.

C. musa Kaye is somewhat smaller, above very similar, beside the spots of the preceding it has yet 2 dots close above each other in the cell-end and another one above the middle of the proximal margin; only 2 subapical white dots. Beneath the same, with a white inner-angular spot of the forewing, and on the hindwing with a cellular spot and 6 white postdiscal spots. Expanse of wings: 35 mm. Trinidad.

C. latonia Schs. (1891). Above dark brown, forewing with a fine whitish strigiform spot below the transverse vein, with 2 small subapical dots and a larger one behind the lower cell-angle. Hindwing with somewhat darker veins. Beneath on the forewing the costal margin, apex and distal margin are lighter yellowish-brown, the proximal margin greyish-white; hindwing yellowish-brown, with 5 bluish-white postdiscal spots and a blackish-brown wedge-shaped stripe near the proximal margin. Costa Rica.

C. hebon Mab. It is doubtful whether it belongs into this genus. Above blackish-brown with 4 hyaline spots, one in the cell, a small one behind it, a large, quadrangular one beneath the lower cell-angle, and a longish one below it; the base of the costal margin is red-brown, the fringes are light brown. The hindwing is proximally yellowish, behind the upper cell-angle there is a white quadrangular spot, parted by the cellular fold. The proximal margin is very concave with a broad, obtuse anal lobe. The forewing is beneath the same, at the costal margin lighter reddish, at the apex lilac, the hindwing is red-brown. Expanse of wings: 38 mm. Amazon (Massauary).

128. Genus: **Onophas** G. & S.

Antennae longer than half the costal margin; club as in *Cobalus*. Hindwing prolonged at the anal angle, middle tibiae spinous. The $\varphi$ exhibits a narrow, oblique scent-scale stripe from the rise of the upper median interrupted as far as the lower median vein; above the middle of the submedian there is a transverse fold.

O. columbaria H.-Schöfl. (= flosites Bltr.) (186 e) is easily discernible from all the similar species by the bluish-green head, body and base of wings, and the ochreous-yellow under surface of the hindwings. Above the forewing is blackish-brown with 2 indistinct, dirty ochreous-yellow, small spots between the median veins. Distributed from Panama to Brazil, and in Trinidad.

129. Genus: **Arotis** Mab.

Antennae as in the preceding. Distal margin of forewing convex, the middle radial vein at its rise nearing the lower one. Middle tibiae without spines. The $\varphi$ has a treble scent-spot; a straight stripe from the base of the upper median to the lower median vein, and in the submedian area 2 thick spots of erect scales.

A. sirene Mab. Above blackish-brown, distally somewhat reddish. Beneath the base of the forewing is blackish, in the marginal area beautifully violet. Hindwing in the basal half blackish-brown with a white cell-end dot, behind it whitish-lilac, with black veins, at the margin darkened. Brazil.

130. Genus: **Oeonus** G. & S.

Antennae half as long as the costal margin; the middle radial vein at its rise strongly bent downward; hindwing at the anal angle prolonged; middle tibiae spinous. An oblique scent-scale stripe extends in the $\varphi$ from below the base of the upper median vein to the lower vein near its rise, a short stripe is situated close below it, and a third in the middle of the submedian vein.

O. pyste G. & S. (186 e) is similar to *columbaria* above, without the intense green hue, only the frons somewhat greenish. It is larger, the 2 spots of the forewing are more distinct, the stigma thinner, more distinct; forewing sometimes with a minute subapical dot. Beneath lighter, the hindwing with 4 yellowish small dots near the distal margin. Mexico.

O. nausiphanes Schs. (189 e) is above dark brown, the costal margin of the forewing is somewhat scaled yellowish, the black scent-stripe fine; fringes of hindwing yellowish-grey. Beneath the forewing is darker in the basal halves of the cell and of the proximal margin. Hindwing dull brown with a broad, whitish discal shade, the broadest at the costal margin and not reaching to the proximal margin strewn with greyish-white. Costa Rica (Poas).

O. garima Schs. Dark brown, fringes greyish-brown; forewing with minute hyaline spots; a subapical one, two at the cell-end, a small one behind the lower cell-end, being strangulated in the middle, a qua...
drangular one farther distally to it, only a small whitish submedian one behind the stigma. Beneath light olive-brown, forewing at the base of the costal margin blackish, the submedian spot larger. Hindwing with a small whitish spot at the cell-end, behind it in a bent row 6 minute whitish spots between the veins. Expanse of wings: 27 mm. Trinidad.

O. degener Plötz (186 e) is above blackish-brown, on the body with a faint greenish reflection with a grey stigma, two postdiscal white spots, the lower of which is oblong and distally bordering on the stigma, and a subapical dot. Beneath scarcely lighter, in the disc of the forewing black, with 3 or 4 light postdiscal dots on the hindwing. Colombia (Pacho).

O. hydora Plötz (186 e) is similar, the body much robuster, the two postdiscal spots of the forewing much larger, quadrangular. The hindwing exhibits also above behind the lower cell-end a white dot. Fringes somewhat ochreous-brownish. Beneath more ochreous-brown, disc of forewing black, with a submedian large yellowish-white diffuse spot. Hindwing strewn with blackish, with 2 white postdiscal dots. Venezuela.

131. Genus: Mucia G. & S.

Distinguished from Onophas, in which the lower median vein of the forewing rises before the middle of the cell, by this vein rising from the middle of the cell; stigma a little bent, oblique, of 3 parts: a short scent-stripe from the rise of the upper median vein to the rise of the lower one, beneath it an oblique stripe and a straight one from the middle of the submedian.

M. thyia G. & S. (186 e) is above like Onophas columbaria, but without bluish-green, the small spots smaller. Beneath the same, forewing with 4 subapical black dots. Hindwing with 3 such dots near the apex in a bent row, whereby it differs from all the similar species. Mexico to Matto Grosso.

M. matallma Sehs. is above dark brown with a semi-transparent white spot behind the narrow black stigma, and a smaller one behind the lower cell-angle. Beneath olive-brown, forewing in the basal half dark brown, at the anal angle a somewhat lighter patch. Costal margin of the hindwing darker, near the apex a black dot and a postdiscal row of black dots, the 2 lowest being the largest. Expanse of wings: 34 mm. Petropolis.

132. Genus: Morys G. & S.

Discernable from the preceding genera by the hindwing being somewhat lobate at the anal angle, and the different scent-organs extending as an oblique, broad stripe from the lower median vein to the middle of the submedian.

M. valerius Ilschtr. (= cerdo Bed. ?) (186 e). Above as the preceding, but with 2 subapical dots. Beneath lighter, hindwing with 4 yellowish dots in a bent row near the apex. The stigma is tinted more purple, often with 3 white-hyaline postdiscal spots. It looks very much like Megistias tripunctus, however, is without the scent-stripe. Mexico to Colombia, Venezuela and Brazil; Trinidad.

M. credula Plötz (186 f) is much larger, but owing to the similar scent-stripe it may belong hereto. On the blackish-brown forewing there are in the cell 2 large white hyaline spots, behind them 3, and 3 subapical ones; scent-stripe silvery grey bordered with black. Beneath only somewhat lighter, more brownish, Brazil.

133. Genus: Perimeles S. u. G.

Separated from the preceding genera by the long-haired legs and by the scent-organ of the stigma: a bent stripe extends from the base of the upper median vein to the rise of the lower one, below it there is a short stripe and a transverse part proceeds from the middle of the submedian.

P. remus F. (= justinoides Bilt.) (186 f) is a common, well-known species, easily discernible by the characteristic under surface of the hindwing: in the basal quarter deep chestnut-brown, distally bordered by whitish like the whole costal margin, in the anal three quarters gradually turning greyish-brown. Above monotonously brown. From Mexico to Brazil and Trinidad. — f. vopiscus H.-Schäff. from Mexico is beneath more variegated, with a more chestnut tint, on the forewing with 2 pinkish-red costal-marginal spots.

P. beda Plötz (186 f) is a small species which may belong hereto. Above black with 2 minute postdiscal and 3 subapical whitish dots of the forewing, of the latter the middle dot is removed proximally. Fringes very faintly speckled lighter. Beneath the forewing is duller, more brownish, the fringes more distinctly speckled. Hindwing in the costal half with a light brownish-white broad longitudinal stripe from the base, which is sharply defined below towards the dark anal part, towards the costal margin gradually passing over into the narrow dark costal margin; in the middle of the light part there are some small dark brown spots. Brazil (Blumenau).
134. Genus: Tigasis G. & S.

Antennae longer than half the costal margin; otherwise all the same as in the preceding, except the 3 scent-organ; a bent stripe obliquely running from the rise of the upper median vein to the middle of the submedian and being parted by the lower median vein.

T. zalates G. & S. (1864) is above uni-coloured blackish-brown, with a darker stigma. Beneath somewhat lighter, more reddish, the proximal margin of the forewing near the anal angle still lighter. Costa Rica.

T. hemeterius Plötz (1864) may perhaps belong hereto, since it shows the same scent-stripe, but the forewing is somewhat longer, the apex more produced. The blackish-brown forewing exhibits one small white postdiscal and subapical punctiform spot each. Beneath the same, in the disc of the forewing darkened; on the hindwing there are behind the lower cell-angle also 2 minute white dots. Patria unknown. Godman mentions a couple of the same species from Cuba without the white spots; this form may be denominated: godmani form. nov.

T. samaeda H.-Schaff. (= eresina Plötz) (1864) is not identical with Rinthon cyprea (1851), but owing to the quite different scent-organ it much rather belongs hereto, although it does not quite match to it; the stigma consists of a stripe between the median veins on the median and a very short part below it in the same direction. The species entirely resembles hemeterius above, but it has one more postdiscal spot between the median veins. Beneath somewhat lighter, more reddish brown, in the disc of the forewing black; the hindwing shows some insignificant postcellular accumulations of greyish-white scales. Brazil.

T. aphilos H.-Schaff. (= obeda Plötz) (1864) may also be ranged into this group of species. Above blackish-brown, in one postdiscal and 3 subapical small white spots. Fringes of hindwings white, on the hindwing smoky. Beneath somewhat more reddish brown. Venezuela.

T. cyrus Plötz (= duroca Plötz) (1864) is placed to aphilos by Godman. Above blackish-brown, with a greenish reflection on the body and base of the wings, and 2 small white postdiscal spots. Beneath the same, but somewhat more reddish. Rio de Janeiro.

T. misera Sols. may provisionally be inserted here. Above dark brown with blackish fringes and a long, narrow scent-stripe below the cell between the median veins and from there twice interrupted to the submedian. Beneath brighter brown, the hindwing with 2 small yellow spots behind the cell, one behind the upper, the other behind the lower cell-angle. Expanse of wings: 40 mm. Petropolis, also in Trinidad.

135. Genus: Eutychide G. & S.

Antennae half as long as the costal margin. Otherwise very closely allied to Cobalus from which it differs by the lower median vein of the forewing rising before the middle of the cell; hindwing analwings produced. The stigma is composed of a very much extended, acute-angled part between the bases of the two median veins, a longitudinal stripe below it and a third similar one on the submedian.

E. cingulicornis H.-Schaff. (1864) is above brown, behind the cell of the forewing there are 3 white spots in a straight row, subapically there are 1 or (in southern specimens) 2 small spots, and there is often also a cellular spot. The hindwing exhibits 2 small spots behind the cell, which are absent in southern specimens. Beneath the costal margin of the forewing is reddish-yellow in the basal half, the anal angle light grey; the hindwing is in the basal third lilac-whisht grey, distally red-brown. Antennal club at the base curled yellow. Guatemala to Brazil, also in Trinidad.

E. complana H.-Schaff. (= midia Hew., gura Plötz, favetta Plötz) (1864, h) is much larger; on the forewing there are only 2 yellowish postdiscal spots and 3 subapical ones; the hindwing is uni-coloured. Beneath the same, scarcely lighter, the hindwing with 1 or 2 yellowish dots behind the cell. Head and body are haired greenish. Mexico to Venezuela.

E. ochus G. & S. (1864) is smaller, with smaller spots, the green on the body scarcely traceable: ochus. it also greatly resembles Rinthon cyprea (1851), but it is separated by the scent-organ and the absence of the light anal angle on the forewing beneath. Mexico to Guiana and the Amazon, and from Trinidad.

E. orthos G. & S. (1864) is still smaller than ochus, the subapical dots are absent. On the under surface the proximal margin of the forewing is lighter, the stigma above much less developed and finer. Head and body are greenish, the abdomen beneath white. Panama.

E. lycortas G. & S. (1864) resembles ochus above, but it differs above by a submedian, oblong, white spot of the forewing. Beneath very different, the submedian spot extraordinarily large, greyish-white; costal margin chestnut-coloured, in the apex with an oblique silvery line, the distal margin lighter grey; on the hindwing the costal margin is broadly chestnut-brown, the distal margin strewed with a lighter grey, with an indistinct light grey band from the apex to the cell-end, proximal margin purple-brown. Mexico.
E. achelous Plötz (= paria Plötz) (186 h). Above lustrous blackish-brown, not spotted, stigma of the same colour, very well developed; head and thorax with green hair. Beneath the proximal margin of the forewing is more whitish than in the preceding. Panama, Venezuela.

E. umber H.-Schäfj. is above the same. Beneath lighter, proximal margin of forewing and anal angle whitish as well as a spot behind the cell, apex, costal margin and hindwing reddish. From *Mnasinus palinge* (177 g), which it resembles above, it is separated by the very well developed stigma. Panama.

E. asea *Mob. (186 h). The colouring above is more dull greyish-brown, the stigma of the same colour. Beneath lighter, on the hindwing scantily strewed with whitish; behind the cell there are 3 black dots. Honduras, British Guiana.

E. subordinatus *Mob. looks above like the preceding, but scantily strewed with yellowish and has thereby a brownish effect. The hindwing is darker at the costal margin. The under surface is lighter, the forewing in the costal half and the whole hindwing strewed with ochreous-yellow, the margining of the eyes and palpi are likewise ochreous-yellow. Honduras.

E. leptosema *Mob. Blackish-brown with dark grey fringes, behind the black scent-spot there is a light yellow part. The under surface is reddish, in the proximal half of the forewing blackish, in the middle lighter yellowish-grey, the broadest below the median. Body black, the last abdominal ring ferruginos-brown. Expanse of wings: 36 mm. Rio Grande.

E. phaeus *Hev. Above dark red-brown, on the forewing with 6 silvery-white, transparent spots; one in the cell, 3 postdiscal ones and 2 subapical ones, hindwing with 2 small spots behind the cell. Beneath coloured the same, the lowest postdiscal spot is very much enlarged and united with that above it; the basal half of the costal margin and the apex is striped ochreous-yellow; the base of the hindwing is broad white, marked with indistinct brown spots. Expanse of wings: 11½ inch. Ega.

E. astiga *Schs. Above brown, forewing at the proximal margin darker; between the median veins there is a small, olive-yellowish spot and farther distally above it another one. On the under surface the costal margin of the forewing and the apex are broad, the distal margin narrowly olive-brown, the rest black. Hindwing olive-brown with a small, black spot between the median veins and another one between the lower radial veins close at the cell-end, behind it some lighter diffuse spots. Expanse of wings: 27 mm. Castro, Paraná.

E. candallarum *Strand. Above blackish-brown, especially on the hindwing with some yellowish hair. Forewing with 2 whitish subapical and 2 postdiscal spots, the lower of which represents an angle being open towards the margin. Beneath deeper brown, the lowest spot yellowish, behind it a yellow inner-angulat patch; the hindwing with an almost rectangularly broken lighter band before and a similar broader brownish-yellow one behind the middle. Expanse of wings: 26 mm. Costa Rica.

E. petrova *Schs. is above dark brown, without markings, with greyish-brown fringes, beneath scantily strewed with grey. This species is easily recognizable by the somewhat different scent-spot: on both sides of the lower median vein not sharply defined stripes extend to about one fifth of the length of the vein, and a black thickening along the submedian from the middle almost to the base. Expanse of wings: 30 mm. Petropolis.

E. barnesi *Schs. Thorax with dark green hair; the dark brown wings are tinted olive. Forewing in the basal half of the proximal margin with some whitish hair; between the median veins there is a large, hyaline white spot, a smaller one above it nearer at the distal margin, and a very small subapical one. Fringes of the hindwing at the anal angle white; a white spot is behind the lower cell-angle, parted by the upper median vein into a larger upper half and a smaller lower half. Beneath darker, apex of forewing dusted with lilac, before the distal margin very small dark spots. Hindwing lilac-brown with a dark basal shade and a broad oblique shade from the apex to the dark proximal margin; before the distal margin there are small dark spots between the veins. Expanse of wings: 30 mm. Petropolis.

E. sabina *Plötz (186 h). Above blackish-brown with 2 small, in the ♀ larger and quadrangular white postdiscal spots and 3 subapical dots. Fringes of the hindwing white, on the forewing smoky. Beneath the species resembles a *Cymaenes*. Apex of the forewing, and hindwing light grey, in the ♀ more yellowish-reddish striated with red-brown, the most densely so at the costal margin and analwards with 3 dark, confluent spots at the lower cell-end; the costal margin of the forewing is broad red-brown. Brazil (Novo Friburgo).

### 136. Genus: *Phanes* G. d' S.

Antennae somewhat longer, palpi as in the preceding. The ♀ scent-spot is angular, the larger side along the median between the veins, the shorter side along the lower median vein.

*Ph. justianus* Lutr. (aletes Hbn.) (186 i). Above like *Entychides lycorea* (186 h), beneath blackish-brown, the forewing analwards lighter. Disc of the hindwing ochreous-yellow, bordered by dark spots, otherwise dusted lilac like the apex of the forewing. Antennal club basally curled yellow. Mexico to Brazil.

*Ph. almoda* Hev. (186 i). Above blackish-brown with 3 white postdiscal spots and 2 small subapical dots. Beneath the costal part and apex of the forewing is light lilac like the hindwing; all the veins light yellowish
on both sides finely bordered with black; at the cell-end there is a large yellow spot; on both sides bordered with black, and before the distal margin a row of small black spots; fringes speckled somewhat darker. From Brazil.

Ph. rezia Plötz (= metanira Mob.) (186 i) is somewhat smaller, above the same. Beneath the veins are not striped lighter, and the yellow cellular spot is absent, only the black spots are present; the submarginal row on the hindwing is not quite parallel to the distal margin, but somewhat deposited below the apex. Brazil.

Ph. cumber Schs. Above brown with greyish-brown fringes, forewing with 3 small subapical and 2 postdiscal hyaline white spots, the lower being larger. Beneath the same, the costal margin of the forewing tinted reddish, apex and upper half of the distal margin dark grey. Hindwing beneath greyish-brown, in the disc darker, tinted reddish; at the cell-end there is a small light spot, behind it in a bent row several small light spots, the veins and a marginal line darker. Expand of wings: 26 mm. Petropolis.

Ph. tavola Schs. is larger than the preceding with but one subapical dot and 2 postdiscal spots. Beneath the base of the forewing is blackish, the costal margin and apex dusted reddish. Hindwing likewise dusted reddish with a very small, grey distal-marginal spot above the upper median vein. Expand of wings: 30 mm. Trinidad.

Ph. sylvia Kaye seems to be very closely allied to tavola. Blackish brown with 2 white postdiscal spots, the lower rectangular close beneath the lower cell-angle, the upper more quadrangular farther distally; 3 subapical dots. Beneath tinted more reddish, veins lighter brownish, on the hindwing a row of oblong, grey, small spots. Ventrum whitish, the 2nd palpal joint orange and black. Expand of wings: 30 mm. Trinidad.

Ph. ochroneura Mob. It is questionable whether it may be placed to this genus. Above ferruginous black, hindwings rounded. Fringes yellowish-grey, on the forewing somewhat darker with 2 small subapical dots and 3 yellow postdiscal rows. Forewing beneath black, the veins at the costal margin and apex deep yellow. Hindwing likewise black, with ferruginous yellow veins, the proximal margin dull black, with a yellow longitudinal ray, and a postdiscal row of yellow dots, before the fringes with another similar small streak. Expand of wings: 32 mm. Massauary.

137. Genus: Euroto G. & S.

Separated from Eutychide by a different stigma: one stripe is situate on the median between the two branches, another shorter one below it.

E. compta Brtr. (= geisa Mechtl.) (186 i). Brown with 2 postdiscal and 1 to 3 subapical small spots on the forewing. Beneath as above, but lighter, forewing towards the anal angle with an indistinct small ochreous band. Veins of hindwings light ochreous-yellow, at the cell-end there is an ochreous-yellow punctiform spot and in a bent row 6 behind it. Panama to Colombia and Brazil; Trinidad.

E. lyde G. & S. (186 i) differs from compta above by only one minute dot between the median and lower radial vein, and 3 subapical dots. Beneath the proximal and distal margins are lighter; the hindwing shows behind the middle and before the distal margin lilac transverse bands, the basal area is spotted somewhat lilac. Mexico to Costa Rica.

E. micrythus G. & S. (186 i) is above like lyde or also without any spots, very variable. Beneath lighter, on the forewing the costal margin and apex are more reddish than the whole hindwing, the forewing is lighter at the anal angle. On the hindwing at the cell-end a light ochreous-yellow dot and below it 2 or 3 more. Mexico to Costa Rica.

E. chlorocephala G. & S. (186 i) is above without any spots, with a large black stigma; head and thorax are green, the eyes very large. The under surface is lighter with 2 or 3 small lighter postdiscal spots; the hindwing exhibits a cell-end dot and 2 or 3 more in a bent row behind it. Panama.

E. oeagrus G. & S. (187 a). Above brown with 2 very large, coherent, yellow-hyaline postdiscal spots, and a subapical one; the costal-marginal area, the submedian area and the proximal part of the hindwing is above strown with golden yellow. Beneath as above, the costal margin, apex and hindwing strown with golden yellow, fringes ochreous-yellow. Costa Rica.

E. eelka Schs. Dark brown, ends of fringes grey. Forewing with 2 white subapical dots and 2 very small postdiscal spots. Beneath brown, distal margin of the forewing not dusted, the spots large. Hindwing at the proximal margin brown, otherwise violet with light brown veins; at the cell-end there is a small lilac spot, behind it in 2 rows lilac spots. Expand of wings: 28 mm. Trinidad.

E. coer G. & S. is above plainly dark brown, hindwing at the proximal margin blackish. Beneath the same with accumulations of minute yellow scales in a bent row behind the cell. Expand of wings: 25 mm. Novo Friburgo.

E. hyperythus Kaye is above dark reddish brown; behind the cell of the forewing there are 2 small hyaline spots, below them 2 larger ones. Beneath the marginal area of the forewing is lighter brown than the base and cell, the disc of the hindwing is reddish. Expand of wings: 28 mm. From Trinidad.

E. simplicissima Kaye. Above brownish-ochreous; below and behind the lower cell-angle of the forewing there are 2 white, small hyaline spots, subapically 3 minute dots. On the hindwing the costal margin is darker. Beneath the proximal part of the forewing is blackish, the proximal angle lighter, hindwing unicoloured brownish-ochreous. Expand of wings: 32 mm. Trinidad.
E. cocoa. *Key* is larger than the preceding, brownish-black, the basal half of the costal margin scaled golden; postdiscal there are 3 yellowish hyaline spots, the lowest of which is the largest; in the continuation there are 2 subapical dots. Hindwing more intensely scaled greenish golden. The forewing beneath is proximally blackish; hindwing brownish, somewhat iridescent with an indistinct row of lighter postdiscal spots. Expanses of wings: 34 mm. Trinidad.

E. purgis *Scha.* Above uni-coloured dark brown, beneath the same. Hindwing dark reddish-brown with a small white patch at the cell-end and a similar one behind it below the lower median vein; before the distal margin there is between the radial veins a large white spot and 2 smaller ones below it. Expanses of wings: 27 mm. Petropolis.

E. ritans *Scha.* Wings dark brown; the scent-spot extends below the median to the upper median vein. The under surface is likewise dark brown, the hindwing dusted reddish with a small yellow postdiscal spot near the apex and 2 others nearer to the anal angle. Expanses of wings: 25 mm. Petropolis.


Palpal terminal joint conical, very short; on the forewing the middle radial vein is strongly bent down at the base. Hindwing at the anal angle somewhat prolonged. The scent-stripe extends from the rise of the upper median vein to the middle of the submedian.

*Ph. tiberius* *Mab.* (= pertinax *Wis.* nec *Cr.*) (187 a). Above brown, the grey stigma is on both sides bordered with black; behind and below the cell of the forewing there are 4 spots in a bent row, the uppermost is very small, or also entirely absent; besides there are 3 subapical dots, all of them ochreous-yellowish. The under surface is lighter, the costal margin and apex of the forewing ochreous-yellow, the spots indistinct; the costal margin of the hindwing is broad yellowish like a transverse row of spots behind the cell. Mexico to Colombia and Guiana; Trinidad.

*Ph. pertinax* *Cr.* (187 a, b). Above blackish-brown, with a white cellular spot, 2 postdiscal ones behind it and 2 subapical dots; besides a submedian yellowish patch. Hindwing analwards with 2 or 3 lighter dots near the distal margin. Beneath the apex of the forewing and the hindwing shows a steel-blue reflection, with fine yellowish veins and a postdiscal row of 5 small whitish dots. Surinam.

*Ph. reticulata* *Plätz.* (= meton *Mab.*, suffenas *Mab.*) (187 a). Jet-black, costal margin of forewing as far as the cell-end, and the submedian space are light reddish-yellow; an indented band extends from the apex to the lower median vein, it is below guaved out and behind separated from the reddish-yellow colour by a black streak. Hindwing black with a reddish-yellow, rounded discal spot separated by the veins. Beneath the forewing is yellowish at the costal and distal margins, in the disc blackish, the oblique band only feebly pronounced. The hindwing dirty yellow, postdiscal darkened, in it a lighter band from the costal fold to the inner-marginal fold, analwards more yellow. Expanses of wings: 27 mm. Telfé.

*Ph. matuta* *Plätz* (187 b) is perhaps allied to *reticulata* (187 a) and differs by the orange band of the forewing being composed more of separate and smaller spots. The hindwing, however, is very much more extensively orange, with fine black veins, and uniformly narrow black margins. Patria unknown.

*Ph. vetula* *Mab.* approximates *pertinax* *Cr.* (187 a, b). Blackish-brown, fringes grey. Beneath browner, disc of forewing blackish-brown, at the apex with yellow veins, at the proximal angle light. Hindwing blackish-brown, with yellow veins. Brazil.

*Ph. voranus* *Mab.* doubtfully belongs to this genus. Ferruginous black, the costal margin of the forewing as far as the cell-end reddish-yellow; at the apex begins a reddish-yellow band and expands to the submedian, being divided by the veins into 6 dissimilar spots, proximally to it there is the black scent-stripe. Hindwing ferruginous-brown with short reddish-yellow postdiscal spots. Beneath the forewing is light reddish brown, in the middle and at the base blackish, the macular band lighter than above. Hindwing yellowish-brown with a broad whitish-yellow band extending from the costal margin across the cell-end to the inner-marginal fold. Expanses of wings: 27 mm. Colombia.

*Ph. trebius* *Mab.* Light brown with 3 small subapical dots and a white postdiscal spot behind the cell; hindwing with yellow hair. Forewing beneath brown, at the costal margin red-brown, the dots somewhat larger and one more at the lower cell-end, the distal margin being ochre-grey. Hindwing blackish, at the base darker, towards the apex with 2 lighter quadrangular spots. Expanses of wings: 27 mm. Bogotá.

*Ph. ileringii* *Mab.* Above blackish or olive-brown, on the forewing with 3 white subapical hyaline dots and 2 small postdiscal spots. Fringes of the forewing brown, at the hindwing ochreous. Beneath the forewing is blackish at the base, at the costal margin as far as the hyaline dots reddish, and below the discal spots lighter yellowish. Base of hindwing blackish, in the marginal area yellowish or reddish-grey or also reddish-yellow, always lighter. Expanses of wings: 27 to 28 mm. Rio Grande do Sul.

*Ph. mengeli* *Weeks* is doubtfully placed here. Above dark brown with 2 minute white subapical spots, a larger one behind the lower cell-end and below it 2 small ones next to each other. Stigma black. Hindwing dark brown with 4 whitish, small indistinct spots towards the apex behind the cell towards the anal angle. Beneath somewhat lighter brown, near the anal angle of the forewing dusted with whitish. Hindwing light
brown, with lighter veins, the light spots connected more like a band; in the disc before them there are traces of a similar band. Expanse of wings: 1.1 inch. Venezuela (Suapure).

Ph. metonidia Schs. Above dark brown, basal half of costal margin of the forewing ochreous-yellow; a postdisical row of bright yellow spots, those between the radial veins being very small, below the cell proximally bent and bordering distally on the stigma. Hindwing with greenish ochreous hair, with a postdisical row of ochreous-yellow, small spots. Beneath the base and proximal margin of the forewing is blackish, the costa and apex dark ochreous-yellow, spots as above, but darker. Hindwing ochreous-yellow, with yellow veins, the small postdisical spots very indistinct. Expanse of wings: 27 mm. Brazil (Tijuca).

Ph. faruga Schs. is above dark brown with reddish yellow fringes. Forewing with bright yellow spots behind the cell and submedian, the latter and the two upper ones very small, that between the median veins large. Hindwing without markings, with ochreous-brown hair. Beneath the colour is violetish-brown, the veins ochreous-yellow; forewing in the disc and at the proximal margin blackish, the submedian spot is absent. Expanse of wings: 24 mm. Novo Friburgo.

Ph. gulala Schs. Above dark brown with grey fringes; forewing at the costal margin above the cell with yellow hair; behind the stigma there is a yellow diffuse spot; between the median veins and above them there is one distally inconve hyaline spot each. Hindwing haired olive, with a yellowish-patch behind the lower cell-angle. Beneath olive-brown, proximal margin of forewing blackish, with a whitish submedian spot; hindwing with 2 small yellow spots below and behind the cell. Expanse of wings: 34 mm. Brazil (Tijuca).

Ph. chittara Schs. is much smaller, otherwise above similar; the yellow hairing of the costal margin is absent; the 2 postdisical spots are whitish hyaline, and a small round subapical spot. On the hindwing there are 2 small, faint, yellow spots behind the cell. Beneath the costal margin and apex of the forewing are strewn with a yellowish grey, hindwing entirely yellowish-grey with a small white spot at the lower cell-angle and 3 small round spots behind it, 2 analwards, one farther apically. Expanse of wings: 29 mm. Trinidad.

Ph. unia Blr. (187 b). Above dark brown with 3 small subapical and 3 larger postdisical spots; hindwing with an ochreous-yellow wedge-shaped stripe bending round behind the cell towards the apex. Fringes at the anal angle of the forewing, and the whole hindwing ochreous. Beneath the hindwing is yellow with small, indistinct, brownish antemarginal spots, 2 larger, dark brown postcellular spots and 5 postdiscal white spots. Brazil.

Ph. odilia Plotz (187 b) is very similar, above the same, beneath lighter, at the costal margin of the forewing and apex red-brown and lighter grey; the hindwing is very light reddish sand-coloured, without the white spots of the preceding. Brazil.

139. Genus: Lerema Schdfr.

Antennae shorter than half the costal margin; club with a long revoluted apex. Last joint of the palp short, conical. On the forewing the middle radial is basally only slightly bent. Middle tibiae spined. The scent-scale spot of the $\zeta$ consists of a thick, indented, interrupted stripe extending from the rise of the upper median vein to the submedian.

L. accius Abb. & Smith. (= monoco Schdfr., nortonii Edw., punctella Grt. & Rob., ceramina H.-Schäff., pattenii Schdfr., phocyilodes Plötz) (187 b). The upper surface is blackish-brown with 3 white, subapical small spots and 3 somewhat larger, but more or less dark dusted or blurred postdisical ones. Beneath the costal margin of the forewing is ochreous, the apex and hindwing greyish brown with a slight lilac reflection, and a postdiscal and an antemarginal band of dark spots; the uppermost proximal spot is removed far inwards. Sometimes the colour of the hindwing is also mixed a little with red-brown. North America to Brazil. — f. dido Plötz dido is a form from Venezuela, beneath more variegated, tinted ferruginous-red.

L. mooreana Dyar is similar to accius (187 b), but the $\zeta$ has a white, not transparent spot above the submedian, and a quadrangular one above it. Beneath tinted ochreous, disc of forewing black; on the hindwing there are 5 small, light postdiscal spots in an oblique line, the uppermost being removed inwards. Expanse of wings: 28 to 30 mm. British Guiana. It was bred from larvae on the sugar-plant.

L. parumpunctata H.-Schäff. (187 c) is much larger, the $\zeta$ only with minute subapical dots above and one postdiscal dot at most. Beneath the hindwing is more variegated, in the costal-marginal half cerise, mixed with ferruginous-brown and lilac, with a postdiscal band, the antemarginal band being absent. Venezuela, Brazil.

L. leptosema Mob. Blackish-brown, fringes dark grey; the stigma is distally brightened up by yellow. Beneath more reddish, in the proximal half of the forewing blackish, in the middle yellowish-grey, the broadest between the median veins. Expanse of wings: 36 mm. Rio Grande.

L. lochius Plötz (= bipunctata Mob., asella H.-Schäff.) (187 c) very much resembles parumpunctata; lochius, above only with 3 white subapical dots, fringes yellowish-grey. Beneath much darker and less variegated, without any red and ferruginous yellow tints, similarly coloured and marked as accius. Venezuela.

L. peneia G. & S. (187 c) differs from accius by 2 small ochreous-yellow spots behind the stigma; the stigma itself is narrower. Panama.

L. coyana Schs. (187 d). Dark brown, with a faint green reflection towards the base; stigma dark grey; on the forewing with a small postdiscal and a minute subapical spot. Beneath reddish-brown, towards
the base below the costal margin of the forewing blackish, anal angle greyish-brown. Hindwing with 2 small whitish spots behind the lower cell-angle and a subapical one. Expanse of wings: 33 mm. Petropolis.

*L. stacara Schr.* Above brown with a dark marginal line and lighter fringes, forewing basally at the proximal margin haired olive. The under surface is brown, at the costal margin, apex and distal margin of the forewing olive brown, the proximal margin and anal angle yellowish-white. Hindwing olive-brown with darker markings: a short, proximal transverse line and spot, an irregular median row of small spots, a broad shade from the apex to the cell-end and towards the proximal margin, and some diffuse patches before the distal margin. The 2 forewing show 2 postdiscal and 3 subapical white spots, the under surface is strewn with a more greenish yellow. Expanse of wings: 33 to 34 mm. Petropolis.

*postpuncta.*

*L. postpuncta sp. nov. (187 c).* Above dark brown, strewn with yellowish, 2 postdiscal small spots and one in the lower cell-angle, as well as a subapical dot are yellowish-white, 4 small spots behind the cell of the hindwing are more ferruginous-yellow. Fringes lighter, distally almost whitish. Beneath the costal margin of the forewing and the apex as well as the hindwings are light reddish-brown; the lower half of the forewing blackish; the spots of the hindwing are more indistinct than above, the fringes not lighter than the ground of the wings. From the Rio Songo (Bolivia).

*L. exclamationis* Mab. is above jet-black with a brownish-red reflection in the disc, on the forewing with 3 minute apical dots and 2 yellowish-white spots between the median veins, which are linear like fragments of an oblique stripe distally appressed to the jet-black scent-spot. Hindwing without spots, with blackish fringes. Beneath as above, at the proximal margin of the forewing paler; hindwing black with 4 light dots in a semi-circle. Bolivia.

*subgrisea.*

*L. subgrisea* Mab. It is doubtful whether this species and the preceding belong at any rate to this genus. Olive-brown with a yellowish reflection. Forewing with 3 very small apical dots and 2 small, yellowish, blotted spots between the median veins; the scent-stripe is faint; the costal margin is darker than the rest of the wing, the fringes light ash-grey. Forewing beneath grey, in the proximal half as far as the spots blackish, at the costal margin grey, the inner-marginal area yellowish-grey. Hindwing grey with a reddish shine and strewn with black, especially at the costal margin; proximal margin grey, haired reddish-yellow; occasionally there appear 3 or 4 small grey spots behind the cell. Bolivia.

*mullia.*

*L. mulla* Platx. (187 d). Above blackish-brown, the scent-stripe distally with a slight silvery grey reflection, behind its upper end there is a minute, white postdiscal dot, subapically 2 or 3. Hindwing without markings, with lighter, somewhat yellowish fringes. Beneath the forewing is lighter brown at the costal margin, apex and distal margin, in the disc there are 2 white dots. Hindwing brownish-grey, behind the lower cell-angle in an oblique row with 3 or 4 small light dots. Described from Surinam.

*elgina.*

*L. elgina* Schs. Above dark brown, with a small postdiscal spot behind the lower cell-end and a subapical one. Beneath the forewing is dusted reddish-brown at the costal margin and apex. Hindwing dark reddish-brown with a small yellow spot at the lower cell-angle and a subapical one. Expanse of wings: 37 mm. Novo Friburgo.

*hypoza.*

*L. hypoza* Dyar (187 d) is bronze-black, forewing with a series of small yellowish spots, one being submedian, a larger quadrangular one between the median veins, 2 small ones behind the cell, removed farther distally, and 3 subapical ones. Disc of hindwing haired yellowish. Beneath dusted whitish, especially the hindwing, except the apex, with a broad, whitish, bent median band. Mexico (Guerrero).

*miqua.*

*L. miqua* Dyar is allied to *lochius* (187 c), but whereas in the latter the bands of the hindwing beneath are parallel and oblique to the costal margin, here the proximal one is rectangularly flaved to the costa, the distal one being so much bent that it also touches the costal margin in a right angle. Peru (San Miguel).

*amblyspla.*

*L. amblyspla* Mab. Upper surface dark brown with a yellowish reflection in the marginal area; forewing with 3 indistinct yellow subapical dots; behind the cell there are 2 more dots being more distinct and not transparent; stigma jet-black, fringes yellowish-grey. Hindwing blackish with a small yellow dot behind the lower cell-angle. Beneath blackish, in the middle of the proximal margin grey, in the middle of the distal margin black; the spots are purer white, the middle one longer. Hindwing greyish-brown with a lighter curved band dying away behind the cell; proximal margin lighter. Bolivia.

*crassinota.*

*L. crassinota* Mab. is similar, but much larger; wings above olive brown with a yellowish lustre in the disc, with 3 small yellowish subapical dots and a larger spot behind the lower cell-angle; the scent-scale stripe, distally reflecting yellowish, is very distinctly bipartite by the lower median vein; fringes ashy-white. Hindwing yellowish with a lighter part behind the cell. Forewing beneath light reddish or reddish-grey, in the basal part blackish as far as the discal spot which is here more distinct; below it another spot. Hindwing reddish-grey with a postdiscal lighter band; at the margin there is a black line with small spots at the ends of the veins. Bolivia.

*loammi.*

*L. loammi* Whitt. (= *regular Edw.*). Above lustrous dark brown, fringes lighter; forewing with 3 quadrangular, small, subcostal spots, a larger postdiscal one below the cell, and a striiform one below it. Beneath dark chestnut-coloured, apex of forewing and border of hindwing dusted pearl-coloured grey, spots as above, with 2 more between them; hindwing with subbasal and antennomarginal, irregularly bent rows of white spots, bordered with black. The 2 is somewhat lighter, the spots increased. Florida (Jacksonville), taken in March.

*horus.*

*L. horus* Edw. is above uniformly brown, in the disc of the forewing somewhat lighter. Beneath brown, on the forewing with 2 or 3 small whitish subapical dots and postdiscal patches indicated by white scales. Texas.
L. lunus Edw. Forewing above dark brown with 3 semi-transparent, small subapical spots, a large, lunus.
hour-glass shaped cellular spot, and 2 postdiscal ones, the upper one being streak-shaped, the lower one large
quadangular. Beneath dark brown, apex of forewing densely dusted with grey with the spots of the upper
surface. Hindwing only little dusted with grey, with 2 blackish spots in the middle, in the distal one there is a
fine white streak. The ♀ has somewhat larger spots and one more postdisscally. Arizona.
L. deva Edw. is very similar, the spots are smaller, beneath greyer, on the hindwing only one dark deva.
spot without the white streak, fringes of the hindwing white, in lunus yellow. California, Arizona.
L. altana Schk. has only the upper part of the scent-stripe at the rise of the upper median vein, the
position being therefore only provisional here. Above dark brown, beneath bluish-grey, on the forewing with
a small white stripe in the cell; from the posterior half of the cell a black shade extends between the median
veins to the proximal angle, proximal margin whitish. Hindwing along the proximal margin lilac. The ♀
is lighter brown with a postdiscal band of white hyaline spots. Beneath more bluish, the inner-marginal
stripe of the hindwing more reddish. Expanse of wings: 34 to 40 mm. Castro Paraná.

140. Genus: Moeris G. & S.

Distinguished from the preceding genus by a somewhat stunted apex of the forewing and the velvety
black stigma not proceeding from the upper, but from the lower median vein, being otherwise shaped just
like in Lerema.
M. striga Hbn. (187 d). Blackish-brown, at the costal margin of the forewing in the basal half scaled
oreocheous-yellow. Beneath lighter, costa of forewing and apex broadly ocreous-yellow, marked chestnut-brown;
hindwing marbled chestnut-brown, the costal margin towards the apex mixed with ocreous. In some specimens
there are about 3 small subapical dots, 3 small postdiscal spots, and occasionally also a cellular spot. From
Mexico to Argentina.
M. hyagnis G. & S. is above blackish-brown; beneath the forewing is lighter towards the anal angle, hyagnis.
with a minute subapical dot. Hindwing with a whitish cell-end dot. Abdomen beneath whitish. It is also very
much like Musicles hickson (p. 985), but the stigma is broader, the last joint of the palp shorter and obtuser.
Mexico.

141. Genus: Metron G. & S.

Costal margin of forewing at the base somewhat convex. Veins little different, the middle radial at
its rise near the lower. Middle tibiae with long spines. The ♀ exhibits a little visible stigma of 2 parts: a
long stripe being situate on the median between the branches and being widened at its proximal end, a short
stripe below it and a third still shorter one in the middle of the submedian.
M. chrysogaster Butler. (= fascia Busbr., goza Hew., cuneata Plötz) (187 d). Blackish-brown with a chryso-
gaster.
golden yellow costal margin, 3 ochreous-yellow subapical dots which may also be absent, and 3 postdiscal spots.
Disc of the hindwing indistinctly ochreous-yellow. Beneath the forewing is lighter, the spots are whiter and
larger, the costal margin and apex tinted olive-yellow. The hindwing shows a straight, broad, whitish band
from the costal margin to the proximal margin. Anal angle broad blackish-brown, otherwise olive. Abdomen
beneath golden yellow. Mexico to the Amazon and Trinidad.
M. hypodesma Plötz (187 e) is very closely allied to the preceding and differs by its somewhat larger
hypodesma.
size and 4 postdiscal spots running in an oblique direction to the apex; the submedian one is small, that above
it is the largest and quadrangular; another, subapical, small spot; in the ♀ the spots are more yellowish, in
the ♀ white. Hindwing without spots. Beneath like chrysogaster except the increased spots, but the abdomen
is brownish and not yellow. From Rio de Janeiro and Pará.
M. fascia sp. nov. (187 d). Above blackish-brown, on the forewing with a white subapical dot, 2 fascia.
very small postdiscal spots and an ochreous-yellow submedian streak. Beneath somewhat duller brown, the
forewing marked as above; the hindwing shows a very broad, silvery white, greenish iridescent discal band
separated from the similarly coloured proximal margin by a black wedge-shaped spot; it is just as broad as the
distal margin in its middle. Colombia (Rio Aguaces Valley) in the Coll. Fassl.

142. Genus: Metrocles G. & S.

Distinguished from Metron by the middle tibiae not being spined and an entirely different stigma;
a broad, bent, interrupted scent-scale stripe extends from the rise of the lower median vein to the middle of
the submedian.
M. leucogaster G. & S. (187 d, e) is very much like Metron chrysogaster, but the spots of the forewing
leucogaster.
are white, the stigma is quite different, and placed more like in Lerema and Moeris. The hindwing shows beneath
a white band bordered with yellow. Abdomen beneath white bordered with yellowish. Panama.
M. hypochiora sp. nov. (187 e) is allied to the following. Above blackish-brown with a narrow ochreous-
hypochiora.
yellow band parted by the veins, and 2 subapical dots; hindwings uni-coloured. Beneath the forewing is blackish,
at the apex like the hindwing leek-green, the spots more whitish than above, the lowest very much widened towards the anal angle. The hindwing shows an almost straight, silvery white band, along the proximal margin a blackish, wedge-shaped spot. According to a $\xi$ of the Coll. Fassl from South Peru (Madre de dios).

**M. zimra Hee**. It is doubtful whether this species and the following belong hereto. Above red-brown with a postdiscal oblique band of 4 hyaline spots and 2 small subapical spots. Hindwing close behind the middle with an angular ochreous-yellow band; fringes light yellow. Beneath tinted green, marked as above, both wings with a submarginal band of ochreous-yellow spots, the hindwing besides with a yellow basal spot, the light yellow discal band is much broader and extends from the costal margin to the inner-marginal vein. Expanse of wings: $\frac{1}{2}$ inch. Brazil.

**M. oropo Hee.** (= angulina Plötz, fasciata Machler) (1871) approaches the preceding, but on the forewing it exhibits a coherent, orange band from the costal margin to the middle of the proximal margin, on the hindwing also above an orange basal spot beside the discal band. Beneath the same, but the bands are almost white, the apex of the forewing is tinted green, the hindwing is green and the band extends farther towards the anal angle. The basal spot is situated less closely at the base than in *zimra*. Expanse of wings: $\frac{1}{2}$ inch. Brazil.

**M. verdanta Weeks** seems to belong hereto, if it is not synonymous to the preceding. Above dark brown, towards the base strewn somewhat tan-coloured, with 3 small subapical spots, below them removed farther towards the margin are 2 small and below them 3 large postdiscal spots, all of them reddish-yellowish-brown. Hindwing dark brown with a broad tan-coloured band from the apex to the middle of the proximal margin. Beneath the wings are tan-coloured, at the costal margin and apex of the forewing and on the hindwing covered with green; the band of the hindwing is purely white. Expanse of wings: 1.15 inch. Venezuela (Suapure).

**M. caligula Sols.** may be provisionally inserted here. Above dark brown with lighter fringes and a fine scent-stripe at the transverse vein and a round scent-scale stripe between the lower median vein and cell. Beneath olive-brown, on the forewing with a darker cell-end streak; cell and base darkened, the apical half of the proximal margin light yellowish. Hindwing with a broad, white band from the apex to the proximal margin above the anal angle, shortly before the proximal margin interrupted by a light olive-brown stripe along the fold. Expanse of wings: 33 mm. Novo Friburgo.

143. **Genus: Papías G. & S.**

Distinguished from the preceding genera by the hindwing being somewhat prolonged at the anal angle; besides the $\xi$ is without the scent-organ.

**P. integra** Mab. (187 c) is above deep blackish-brown, the under surface somewhat lighter, blackish-brown, towards the margin lighter, especially at the anal angle of the forewing. The band is dirty grey; the eyes are surrounded by a dark reddish-yellow colour. Mexico to Brazil.

**P. dictys** G. & S. (187 c) is smaller, beneath more reddish, mostly with a small, white subapical dot; on the hindwing beneath there are 3 small postdiscal dots. Mexico to Panama.

**P. lycos** Mab. Silky black with a ferruginosus reflection in the disc, in it a small, diaphanous dot, above it a small one not transparent; 2 small, postdiscal, oblique spots, the lower twice as long; as far as the spots the proximal part of the wing is darker; fringes ferruginosus yellow. Beneath the wing is deep blackish-brown, the forewing with a metallic violet reflection, the hindwing with a blue lustre or entirely violetish-blue. Expanse of wings: 28 mm. Colombia.

**P. microsena** G. & S. (= phaeomelas Hbn.) (187 c) is above the same; beneath more reddish, the anal angle of the forewing is much lighter, more extensive; on the forewing there are 2 postdiscal dots and a subapical one; on the hindwing beneath 4 whitish dots in a bent row. Mexico, Costa Rica, Panama, Brazil, Trinidad.

**P. phainis** G. & S. is the same, but beneath without any spots with differently shaped genitals. Mexico, Guatemala, Costa Rica.

**P. rubida** Plötz (187 c). Above blackish-brown, on the body and bases of the wings with a very faint greenish reflection. Beneath somewhat duller brown, apex of the forewing and the whole hindwing deep chestnut-coloured, with distinct black veins. From the somewhat similar Eutychide umber it differs by the black anal part of the forewing beneath and the absence of the cellular spot. Brazil.

**P. dersa** Plötz (187 f) is a much larger species, monotonously blackish-brown, with greyish-brown fringes. On the under surface the distal-marginal half of the forewing is lighter brown, towards the dark disc dentately defined. Rio de Janeiro.

**P. subcostulata** H. Schiff. (187 f) is somewhat smaller than dersa, above the same, uni-coloured blackish-brown. Beneath the costal margin and apical half of the forewing and the hindwing is somewhat duller brown, with very fine light yellow veins. Fringes with a slight ochreous reflection. From Brazil.

**P. caura** Plötz (? = tristissimus Schs.) (187 g) is very much like integra (187 c); above uni-coloured brownish-black, beneath a little lighter, brownier with a broad whitish-grey inner-marginal part of the forewing. From Surinam and Peru.

**P. ctyanus** Schs. Above dark brown, on the vertex and on the palpi hairied yellowish. Beneath reddish-brown, the basal half of the forewing blackish; on the hindwing the inner-marginal part is light brown. Expanse of wings: 27 mm. From Trinidad and Novo Friburgo.
P. agassus Mab. Forewing jet-black, hindwing black with a very much indented distal margin. Beneath agassus, the forewing is black with a violet reflection, in the marginal area bluish-lilac, at the proximal angle lighter ferruginous. Hindwing black, from the cell to the distal margin dark lilac with 4 metallic blue spots behind the cell towards the apex, the 2 lower ones sagittiform, the others striiform. Expanse of wings: 26 mm. Massonary.

P. bobae Weeks is above velvety blackish-brown with an indistinct darker band, hindwing at the bobae, costal margin somewhat lighter. Beneath somewhat lighter, thereby the dark bands become more distinct; inner-marginal part very light. Hindwing as above. Expanse of wings: 27 mm. Venezuela (Suapure).

P. leucopogon Plötz (187 f) has above on the base of the wing and on the body a faint greenish reflection. leucopogon. Beneath lighter brown, on the forewing two basal thirds are darkened, the distal third is lighter, with 3 small light subapical spots. Hindwing with a darkened base and a dark semi-transverse band from the middle of the costal margin to below the cell, behind it projecting somewhat towards the margin. Venezuela (Lagunayra).

P. corisana Plötz (187 g) is above uni-coloured black; beneath lighter, more brownish, especially on corisana. The forewing analwards; here there are in the disc 2 whitish punctiform spots and above them 3 subapical ones. Hindwing likewise uni-coloured without markings, only at the proximal margin somewhat lighter. From Surinam.

P. sobrinus Schs. Above dark brown, fringes blackish, distally grey. Beneath dark brown, the forewing is lighter, with a postdiscal bent row of very small grey spots; the hindwing shows a postdiscal row of dark ochreous-yellow spots. Expanse of wings: 27 mm. Rio de Janeiro.

144. Genus: Mnasinous G. & S.

Antennae longer than half the costal margin, body slender. Middle tibiae bare. The ζ shows a tripartite stigma which is rather inconspicuous; a faint scent-stripe along the median between the two veins, a shorter one below it and a longer one on the submedian.

M. patage G. & S. (187 g) is above monotonously blackish-brown, beneath somewhat lighter, the patage. forewing at the proximal margin and anal angle still lighter; costal margin, apex and hindwing are dusted dark red. From Mexico and Panama.

145. Genus: Metiscus G. & S.

Different from the preceding by the ζ scent-organ: from the rise of the upper median vein a bent scent-scale stripe runs obliquely to the rise of the lower branch, below it there is a short stripe.

M. atheas G. & S. (?? = infuscata Plötz?) (187 f). Above uni-coloured blackish-brown, the narrow atheas. bent stigma equally coloured. Beneath as above, only the forewing at the anal angle lighter, fringes grey. Mexico to the Amazon, Trinidad.

146. Genus: Methion G. & S.

Costal margin somewhat more convex than in the allied genera; middle tibiae bare; the ζ is without a scent-scale stripe. The distal margin of the abdominal fold is long-haired.

M. melas G. & S. is monotonously blackish-brown, beneath somewhat more reddish, at the proximal melas. margin and anal angle of the forewing lighter. Palpi intermixed with golden yellow hair. From Guatemala.

147. Genus: Thargella G. & S.

The antennae are 2/3 of the length of the costal margin; forewing short and broad with a very convex costal margin. Stigma absent. The proximal margin of the abdominal fold is long-haired.

Th. fuliginosa G. & S. Above blackish-brown, beneath red-brown, the forewing analwards lighter. fuliginosa. Palpi golden yellow. Nicaragua to Colombia, British Guiana and the Amazon.

148. Genus: Mnasitheus G. & S.

Antennae half as long as the costal margin; costal margin of forewing slightly bent. Middle tibiae bare, a stigma is only present in cephis: a short stripe above the lower median vein, a longer one below it and a still longer one on the submedian.

M. cephis G. & S. Above uni-coloured blackish-brown, beneath with a somewhat purple tint. Smaller cephis. than the very similar Mnasitous uniformis with a different stigma. Distinguished from the following species by a longer terminal joint of the palp and different genitals. Mexico to Guatemala.
Mnasalcas

M. simplicissimus H.-Schäff. (= nigrilulus Mab., insignis Plötz, facilis Plötz) (187 k) is the same, but without a stigma, with shorter palpi beneath mixed with golden yellow. Fringes dark grey. South America, widely distributed as far as Trinidad.

M. lurida H.-Schäff. (187 g). Above monotonously blackish-brown. Beneath the costal-marginal part of the forewing is somewhat reddish, the distal margin of both wings is brightened up by a somewhat duller brown. Basal part and disc of the hindwing dark red-brown, at the costal margin extended to the apex. Described from Brazil.

M. chrysophrys Mab. is likewise very closely allied, but it has somewhat longer antennae, bright yellow fringes, and an indistinct, bipartite stigma. Expanse of wings: 21 mm. Colombia.

149. Genus: Mnasalcas G. & S.

Antennae of 2/4 the length of the costal margin, club stout with a long apex. The ♂ shows a tripartite stigma; a scent-stripe on the median between both veins, a short one below it, and a triangular part in the middle of the submedian.

M. uniformis Btr. Monotonously blackish-brown, beneath somewhat browner, with a lighter proximal margin of the forewing. Palpi haired blackish-brown. Costa Rica; Trinidad.

M. anatala Schs. Above dark brown, also at the base of the hindwing with an oblique scent-scale spot. Beneath likewise brown. Costal margin of forewing for two thirds, cell and basal half of the proximal margin darker, distally to it a row of indistinct, lighter spots. Hindwing dark violet-tish-brown in the basal 2 thirds, with some small postdiscal, indistinct, light spots. Expanse of wings: 31 mm. Novo Friburgo.

M. circellata Plötz (187 h) according to the figure by the shape of the scent-organ belongs hereto and is perhaps to be combined with anatala. Above blackish-brown, fringes somewhat ochreous-brownish. Beneath browner, basally darkened, on the fore- and hindwings with some small, postdiscal, light indistinct spots, the hindwing also shows a cellular dot. Brazil.

150. Genus: Mastor G. & S.

Antennae half as long as the costal margin. Costal margin of forewing at the base convex. Middle tibiae spined. The ♂ has an oblique scent-stripe from the rise of the upper median vein to the middle of the submedian (the stigma is absent in M. perigenes).

M. anubis G. & S. (= perloides Plötz) (187 g). Blackish-brown with a stigma of the same colour; beneath the same, palpi intermixed with golden yellow hair; the base of the antennal club beneath and distally ochreous-yellow; sometimes there is on the hindwing beneath a postdiscal row of ochreous-yellow dots. Mexico.

M. bellus Edw. (187 h) is easily discernible by the ochreous-yellow fringes of the wings. Arizona, Mexico in May. — phylace Edw. (187 g), according to recent reports, seems to be a second stock of bellus. It differs by the head and collar being golden yellow, the fringes, however, dirty grey. In this case phylace (187 h) would have to be the name of the species, and bellus its first form of generation. From Colorado, Arizona and New Mexico in July.

M. perla Plötz (187 g) is larger, above blackish-brown, with ash-grey fringes and similar hairing of the body. Beneath on the forewing somewhat lighter, the hindwing ash-coloured, with fine darker veins, a whitish cellular spot and 4 small postdiscal dots in the apical half. Rio de Janeiro.

M. perigenes G. & S. (187 g) is easily recognizable by the absence of the stigma and the hindwing beneath being peculiarly radiately striped brownish and whitish. Mexico.

151. Genus: Mnasilus G. & S.

Distinguished from the allied genera by a hair-pencil on the forewing above below the submedian. Middle tibiae spined; stigma absent.

Mn. penicillatus G. & S. (= zaluna Plötz) (187 h) somewhat resembles above Metron chrysogaster (187 l), but the ochreous spots form a complete oblique row as far as below the apex. Beneath somewhat lighter; hindwing with 5 lighter dots in a bent row. Mexico to the Amazon and Brazil.

Mn. sucova Schs. has the hair-pencil below the base of the median and may therefore be best inserted here. Above blackish-brown, fringes lighter, forewing with a somewhat darker shade at the cell-end. Beneath the forewing is blackish at the base, violet-tish-brown at the apex and costal margin; a small whitish hair-spot behind the lower cell-end. Hindwing violet-tish-brown with a bent row of small grey diffuse patches behind the cell. Expanse of wings: 29 mm. Petropolis.
152. Genus: Vehilus G. & S.

Antennae somewhat longer than half the costal margin, Otherwise the same as the following genus Megistias from which it differs by a different structure of the $^\circ$ genitales. Middle tibiae with very long spines.

V. illudens Mab. (187 h). Blackish-brown, 2 postdiscal spots and 2 or 3 subapical ones are ochreous-yellowish. Disc of the hindwing dark reddish-yellow. Under surface lighter, the subcostal and radial veins as far as the distal margin dirty ochreous-yellow, of the same colour are the veins on the hindwing; disc, base and distal margin are darker. Mexico to Colombia.

V. venosus Plötz (187 h) resembles illudens, but on the forewing it has a cellular and a submedian spot besides. Hindwing with a band of distinct spots. Beneath with distinct light yellow veins, between the veins there are yellowish antemarginal dots. Mexico to Brazil, Trinidad.

V. norma Dyar. Dark brown, costa of forewing and proximal margin in the basal half strewn with reddish-yellow, with 2 postdiscal, reddish-yellow dots and 2 more small subapical ones. Hindwing in the disc reddish-yellow. Beneath somewhat lighter, with reddish-yellow veins, on the hindwing with a postdiscal row of 4 reddish-yellow dots. Expans of wings: 36 mm. British Guiana. It was bred from larvae living on a water-plant (Paspalum gracile).

V. sacchariphila Dyar resembles norma above, but without any reddish-yellow at the costal and proximal margins of the forewing. Beneath the hindwing is light greyish-brown with 2 irregularly broken, black, bent lines in and behind the middle. Expans of wings: 25 mm. British Guiana, bred on sugar-cane.

V. almonesus Sems. Above brown with a yellow cellular spot and a postdiscal row of spots. Hindwing likewise with a row of oblong, yellow postdiscal spots. Beneath brown, with light yellow veins, the spots of the hindwing more numerous than above and light yellow. Expans of wings: 24 mm. Peru.

V. subplanus Kaye. Above deep dark brown with a yellowish spot behind the cell of the forewing and one below it farther towards the base. Beneath the same, the veins faintly lighter. The hindwing are still somewhat lighter, the veins scarcely lighter. Expans of wings: 26 mm. Trinidad.

V. seriatus Mab. Black, with a reddish-yellow reflection. Forewing with 7 small, yellowish-white dots, below the margin rounded, then oblique, in the middle of the cell near the costal margin a dot, at the costal margin itself 2 similar streaks, fringes lighter. Forewing beneath blackish with the same dots, on the veins at the apex 5 or 6 yellow dots; the veins of the hindwing are striped light yellow, the anal part is strewed with yellow, with 2 indistinct yellow stripes; the cell is closed by a yellow streak; 6 small, postdiscal, yellow streak-shaped spots. Expans of wings: 18 mm. Valera.

V. scheria Plötz (187 h) is a larger species the position of which is questionable. Above black. Beneath towards the margin above and almost on the whole hindwing steel-blue with fine white postdiscal and subapical dots. The submedian anal area of the forewing is very light, almost white. Brazil (Pará).

V. carasta Scms. Above brown, on the forewing postdiscal with a bent row of small yellow spots. Beneath brown, tinted violet, costa of forewing basally yellow, 2 yellow cellular spots, the postdiscal spots more distinct; on the margin there is a yellow line, between the veins distally convex and proximally connected with yellow streaks; the same line and internerval streaks also on the hindwing; proximal margin broad dark grey, strewed with yellow; in the cell and above it one yellow spot each as a well as a postdiscal row. Expans of wings: 24 mm. Petropolis.

V. chinta Scms. Dark brown with reddish-grey fringes. Forewing with small, yellowish-grey, indistinct spots, 3 postdiscal ones and 3 subapical ones. Hindwing banded lighter brown. Beneath brown with lighter veins; on the forewing the costal spots are lilac, the anal angle light. The hindwing shows an undulate, lilac postdiscal band not reaching to the broad, light brown inner-marginal part. Expans of wings: 22 mm. Petropolis.

153. Genus: Megistias G. & S.

Antennae half as long as the costal margin; otherwise only distinguished from Vehilus by the different structure of the $^\circ$ genitales.

M. tripunctatus Latr. (= obsoleta Lischcr.) (187 i) is above blackish-brown with faded, light spots, 2 postdiscal ones and 3 subapical ones. Beneath lighter, at the distal margin with a narrow dark line. Hindwing strew with grey, in the disc with a row of blackish-brown spots, which is irregularly curved. Mexico to Brazil.

M. jera G. & S. (187 i) resembles isus, but it has a less pointed apex of the forewing, more indistinct spots and differently built genitales. Mexico (Guerrero).

M. labdacus G. & S. (187 i) looks above like tripunctatus. Beneath lighter, the hindwing strewed with grey, with a bent row of grey spots towards the costal angle. Mexico to Costa Rica and Venezuela, as well as Trinidad.

M. oebasus G. & S. is above monotonously blackish-brown, beneath the same, but somewhat lighter, oebasus. The costal margin, apex, and the apex of the hindwing are marbled purple grey; fringes light, a little dark-speckled. Costa Rica.

M. edata Plötz (= isus G. & S.) (187 i). Above dark brown, with 3 small, white subapical dots edata, and a postdiscal one behind the lower cell-angle. Beneath the hindwing as well as the anal part of the forewing are somewhat lighter violetish-grey, with a broad, straight, greyish-brown nebulous band from the costal angle of the hindwing to the middle of the proximal margin. Mexico to Guiana.
M. catocala H.-Schäff. (187 i) is larger, the 2 shows 3 postdiscal spots, the submedian spot of which is yellowish, 3 subapical white dots and below them farther towards the margin 2 more small ones; fringes yellowish, speckled darker. Beneath the hindwing is violetish-grey with irregular darker macular bands at the base, in the disc and before the margin, the latter being deposited above the cell. Patria unknown. PLOETZ’s figure entirely resembles that of Halbutus saxula (= angellus, 183 c).

M. theogenis Cap. (187 i) entirely resembles tripunctatus above, blackish-brown with 3 small, white subapical and 2 postdiscal spots. Beneath much lighter brownish-grey, in the disc of the forewing blackish, in the submedian area lighter whitish. Hindwing with whitish dots in the cell and behind it in a bent row.

M. tripunctus H.-Schäff. (= anecus Mabull., ? conta Plötz?) (187 k) is above somewhat like theogenis, but it has only two subapical dots and besides another small yellowish submedian spot; fringes of hindwing somewhat yellowish. Beneath likewise allied to the preceding, on the hindwing with a blurred cellular spot and a lighter grey postdiscal band. South America, Cuba.

M. uruba Plötz (187 k). Above brownish-black with entirely extinct, small subapical spots, below them 2 spots removed more towards the margin, and 2 postdiscal spots. Beneath of a somewhat lighter and brownish tint, on the forewing with larger spots, the anal part broadly lighter grey. The hindwing is broadly hued purple-brown at the costal margin, in the larger anal half violetish-grey with 2 bands of purple-brown spots obliquely extending from the apex to the proximal margin and not crossing the inner-marginal fold. Brazil.


M. telata H.-Schäff. (= tyrtacetus Plötz) (187 i). Above like frus, but besides with 2 postdiscal spots and 2 often indistinct, dirty white, small spots in the middle of the costal margin. Beneath blackish-brown, the spots larger, the costal margin ferruginous-brown, the distal margin grey. Hindwing ferruginous-brown with 2 irregular bands from the proximal margin to the costal margin and apex. Mexico to Venezuela and Guiana.

M. corticea Plötz (= epiberus Mab.) (187 k). Above blackish-brown with an oblique row of ochreous-yellow spots; hindwing almost entirely scaled and haired ochreous-yellow. Beneath ferruginous-brown or ochreous-yellow, forewing in the proximal half blackish with 2 yellow discal spots. Mexico to Brazil and Trinidad.

necis. — f. nocis Plötz is above and especially beneath very much darkened. From the Chiriquí. — f. lysias Plötz is a transition to it from Venezuela.

M. leucone G. & S. (187 k) is similar, somewhat smaller, the forewing with only 2 postdiscal spots and 2 subapical ones; hindwing less ochreous-yellow. Beneath likewise darker. Guatemala.

M. corius Schs. (187 k). Dark brown, fringes distally grey; the forewing shows small postdiscal accumulations of minute yellow scales between the veins. Beneath the forewing is black, at the costal margin and apex strewn somewhat ochreous, with a whitish subapical band. Hindwing lilac-grey, strewn with whitish, in the basal half of the costal margin and a broad shade from the middle of the proximal margin to the apex brown dark, strewn with ochreus. Allied with telata. Expans of wing: 21 mm. Castro (Paraná).

M. xantho Schs. (189 k). The blackish-brown forewing shows a yellowish-brown costal-marginal stripe in the basal half and a similar one above the inner-marginal vein and small postdiscal spots scaled yellowish, the hindwing exhibiting a similar postdiscal shade. The light brown fringes are more or less spotted black. Beneath the veins in the costal-marginal and distal-marginal half are striped yellowish, the spots similar as above. Hindwing more lilac-grey, with yellowish veins, with a bent, dark discal band and large marginal spots. Costa Rica (Juan Vinas).

M. ranesus Schs. Above plain dark brown, with lighter fringes. Forewing beneath dark brown, at the proximal margin lighter, at the distal margin and apex strewn with lilac, at the base of the costal margin and before the apex mixed somewhat with ochreous. Hindwing in the costal half reddish-brown with an ochreous-red basal spot, in the distal half brown, strewn with lilac; lilac scales towards the base below the cell. Expans of wings: 20 to 24 mm. Castro (Paraná).

M. polisison Schs. Dark brown, fringes reddish-grey. Forewing with 2 small, whitish postdiscal spots, at the base of the costal margin scaled olive; subapically and above the middle of the submedian accumulations of yellowish scales. Beneath light olive-brown, disc of forewing blackish, with a postdiscal row of small yellow-reddish spots and a similar cellular spot. Expans of wings: 27 mm. Petropolis.

M. erythrosticta Plötz (187 k). Above purple-brown with a small cellular spot and 2 small postdiscal spots, and a subapical dot; fringes grey, speckled darker. Beneath lilac-grey, disc of forewing darkened with purple. Hindwing lilac-grey, strewn with ashy-grey, with indistinct purple macular bands in the middle and before the distal margin, as well as a darkened base. Rio de Janeiro.

M. servilus Plötz (187 k). It is questionable whether the species is correctly placed here. Above black with 2 white postdiscal spots and a small submedian one. Beneath light brown, with finely darker veins and a whitish stripe along the lower median vein of the hindwing. From Surinam.
M. fimbrata Plötz (187 f). Its position here is just as questionable. Easily recognizable by its orange-red head and pali, and orange fringes. It is much larger than Mastor bellus (187 h) and is easily discernible from it by the absence of the stigma and the entirely red head. Mexico.

M. miabana Schs. (188 a). In an unknown habitat is above dark brown with grey fringes; forewing with 2 minute postdiscal dots and a subapical one. Beneath the forewing is blackish in the cell and at the proximal margin, the costal margin, apex and distal margin is light brown with yellowish veins, beside the small spots of the upper surface with a light anal-angular spot; the light brown hindwing has yellow veins with a white dot at the cell-end, and a series of white dots behind it. Expans of wings: 28 mm. Novo Friburgo.

M. distigma Plötz (= chula Schs.) (188 a) is above brown with grey fringes and greenish tinted veins, with 2 white, hyaline postdiscal spots and a yellow one above the middle of the submedian. Hindwing at the costal margin dusted with violet. Beneath dark brown, at the costal margin reddish-brown, the distal margin lilac, the spots as above. Hindwing line-grey, at the costal margin broad violet, at the proximal margin reddish-grey with a round white spot at the cell-end and a bent row of indistinct, small, whitish postdiscal spots. Expans of wings: 27 mm. Petropolis.

M. vanilia Schs. Above uni-coloured dark brown. Beneath light violetish-brown, at the costal margin greenish and at the proximal margin broadly greyish-black with a lighter anal-angular spot; a subapical yellow dot. Hindwing at the proximal margin thickly strewn with yellow and a yellow dot at the cell-end and small yellow postdiscal dots. Expans of wings: 28 mm. Petropolis.

M. gispara Schs. Dark brown with grey fringes and a postdiscal row of small, indistinct, grey spots; gispara. At the costal margin and apex scantily strewn with ochreous; the hindwing is haired somewhat lighter brown. Beneath the forewing, dusted ochreous-yellow, at the proximal margin of the forewing broadly blackish, the hindwing with a back dot behind the lower cell-angle and one above it, behind both with a bent lighter patch. Expans of wings: 29 mm. Petropolis.

M. vorgia Schs. (188 a). Above dark brown with grey fringes with 2 small white hyaline postdiscal spots and 3 minute subapical ones. Beneath the forewing is blackish in the cell and at the proximal margin, at the costal margin, apex and distal margin light reddish-brown; veins and small internerval stripes yellowish. Hindwing reddish-brown, with yellow veins and small, indistinct grey internerval stripes, and 4 small whitish postdiscal spots. Expans of wings: 28 mm. Castro (Paraná).

M. choa Mab. belongs hereto. Above coppery yellowish-brown; forewing with 3 blurred, small apical spots and in the disc behind the cell 2 or 3 small transparent spots; fringes dirty yellow. Forewing beneath yellowish with a reddish costal margin; basal half blackish, only the 2 lower spots are visible on the margin of the black. Hindwing yellowish with a greenish lustre. Bolivia.

M. xenos Mab. is somewhat smaller than choa. Above dark brown; forewing with 3 hardly visible apical dots and 2 minute yellowish dots behind the cell; costal margin along the cell yellow. Hindwing in the middle of the margin light yellowish. Forewing beneath grey with a lilac lustre, in the proximal half dull blackish, the punctiform spots more distinct; in the cell there are grey clouds. Hindwing ash-grey with a reddish or lilac lustre, strewn with white, with white veins; a postdiscal row of small grey scale-spots with a pink lustre. Before the greyish-white fringes there is a black line on both sides bordered with white. Bolivia.

M. sulia Plötz (188 a). Above black with 3 subapical and 3 postdiscal whitish spots. Beneath light grey, in the disc of the forewing black, on the hindwing with some fine black dots in and behind the middle. Colombia.

M. arcas sp. nov. (188 a) is above dark brown with 3 postdiscal and 3 subapical, small, hardly lighter spots on the forewing. Beneath duller brown, on the forewing the small lighter spots are a little more prominent owing to their being slightly surrounded by dark. Hindwing in the basal two-thirds a little darker than at the margin, in this marginal area near the margin of the darker discal area there are 4 or 5 small, darker eye-spots. Rio Songo (Bolivia).

M. argus sp. nov. (188 a) beneath somewhat resembles Cobulus argus (186 a). Above uni-coloured brown, beneath lighter; behind the cell of the hindwing there are, between the somewhat lighter veins, 5 dark spots distally bordered by somewhat lighter spots; that between the radial veins is the largest and quadrangular, and lies directly behind the lighter transverse vein before which there is yet a blackish transverse streak in the cell. From Matagang (Upper Cauca Valley).

M. sancoga Schs. Forewing above dark brown with an oblique dark shade from the lower median vein to the apex. Beneath brown, dusted with ochreous; hindwing with a small brown postcellular dot and a very indistinct brownish postdiscal shade. Expans of wings: 30 mm. Petropolis.
M. carinna Schks. Wings dark brown with more reddish fringes. Forewing at the cell-end somewhat darkened. Beneath the forewing is violetish-brown, the distal margin dusted with lilac, with a light brown anal-angular spot; hindwing the same with a bent postdiscal row of small, lilac-white spots. Expanse of wings: 23 mm. Castro (Paraná).

M. jamaca Schks. is above dark brown, basally haired somewhat lilac-white, with a small, semi-diaphanous postdiscal spot and three small subapical ones. Beneath lighter, only the cell and proximal margin of the forewing darker, hindwing with a postdiscal row of small grey spots. Expanse of wings: 31 mm. Jamaica.

M. corensec Schks. Dark brown with 3 subapical and 2 postdiscal small hyaline spots. Beneath brown, forewing at the distal margin lilac, the broadest at the middle radial vein. Hindwing dusted with lilac except the apex and the brown distal shade and some small antemarginal spots. Expanse of wings: 24 mm. Castro (Paraná).

M. mendica Hub. is above blackish-brown with a reddish-brown and a white submedian area of the forewing, the basal half is black as far as the cell-end, here bordered by a undulate line and indistinct yellow clouds. Hindwing in the proximal part somewhat ferruginous-brownish. Beneath reddish-brown, the basal part of the forewing blackish, the small yellowish clouds clearer than 7 small spots. Hindwing reddish-brown with a bent demi-band through the disc. The ♀ is darker, otherwise similar. Bolivia.

154. Genus: Parphorus G. u. S.

Distinguished fromMegistias by its bare middle tibiae, more slender body and a thick stigma in the ♀, extending from the rise of the upper median vein to the submedian, filling up the angle of the base of the lower median vein, and bordered by a stripe of velvety-black scales.

P. storax Hub. (188 a). Blackish-brown, behind the stigma haired ochreous-yellow in the shape of 3 small spots. Beneath lighter, at the costal margin and apex of the forewing, and on the hindwing with yellow veins. Panama to Colombia, Venezuela, and Guiana. Trinidad.

155. Genus: Vorates G. & S.

Distinguished from the preceding genus by the different structure of the genitals and the scent-spot of the ♀ consisting in a long scent-scale stripe on the middle of the median and a shorter longitudinal stripe.

V. decorus G. & S. (= tanaquilis Mächtl. ?; saturnus P. ?) (188 b). Blackish brown, with a darker stigma and 3 ochreous-yellow spots behind and below the cell, and a minute subapical dot. Beneath the same, but the inner-marginal spot is absent; costal margin, subcostal and radial veins a well as the hindwing veined yellow. Mexico to Brazil.

V. goámani sp. nov. entirely resembles the preceding, but the stigma is larger, and shaped as in Phlebodes tiberius (187 a). South America?

V. sapala G. & S. (188 b) is likewise very closely allied, but the stigma is longer and below its upper part there is an oblong hyaline spot. Hindwing above more olive ochreous. Beneath as decorus. Panama.

V. auristriga sp. nov. (188 b) is very well distinguished by the very long, narrow, orange stripe below the median with a continuation behind the upper median vein and a sagittiform subapical spot. Hindwing in the disc, as well as the forewing at the costal margin and submedianly with a somewhat ferruginous reflection. Beneath like decorus, but with bright orange veins. Described according to I ♀ from the Songó (Bolivia) from the Coll. FASSL.

V. cotisio Schhs. (189 i). Above dark brown, costal margin as far as the middle olive, striped the same above and below the inner-marginal vein; below the median between the veins striped yellow, a small spot distally above it, with a yellow subcostal dot. Disc of hindwing of a bright brown. Beneath as above, but the veins in the marginal area striped yellow, on the hindwing in their whole length. Costa Rica (San Mateo).

156. Genus: Pheraeus G. u. S.

Antennae somewhat longer than in the preceding genera, with a long and fine apex of the club. The ♀ stigma is angular, thick, situated between the middle part of the median and the rise of the lower median vein. Only one species:

Ph. epidius Hub. (188 b) is very well distinguished by a long, yellow submedian stripe of the forewing; the hindwing is almost entirely reddish-yellow, with a darker margin. Hindwing beneath in the basal two thirds yellow like the body beneath. Nicaragua, Panama.

157. Genus: Moló G. & S.

Apex of forewing more prolonged than in the affinities. Middle tibiae covered with few short spines. The ♀ has no scent-organ.
M. heraea Hew. (= xenarchus Mab.) (188 b) is above blackish-brown, in the basal half of the costal margin and in the cell, on two thirds of the proximal margin, in 4 postdiscal spots growing smaller towards the apex, and a bipartite subapical spot lustrous orange. Hindwing orange, the costal margin broad, the proximal margin narrow, and a shortened basal line below the cell blackish-brown. Beneath yellow, marked red-brown, forewing with an irregular median band from the base to the apex; proximal margin and anal angle are blackish, the hindwing at the proximal margin blackish-brown. Panama to Guiana and the Amazon District. In fresh specimens the hindwing is iridescent.

M. nebrophone Schs. (1894) resembles heraea above; the orange colour is browner, in the cell there is a blackish-brown stripe-spot; the black costal margin of the forewing exhibits in the middle a projection towards the cell, the proximal margin is broader black. The hindwing is distally reddish with yellow postdiscal spots and a blackish-brown shade behind the cell. The forewing is predominantly blackish-brown with smaller yellow spots. Costa Rica, Panama.

M. kenava Blr. (= myrorna Plotz) (188 b). Blackish-brown, at the proximal margin of the forewing kenava, red-brown, with an oblique postdiscal band and a separate subapical spot. Hindwing in the disc reddish-yellow. Beneath yellow, the lower half of the cell, the proximal margin and anal angle black. Hindwing yellow speckled with red, with a small red-brown discal spot and a black proximal margin. Described from Venezuela.

M. humeralis Mab. (188 e) differs from heraea by its larger size and much more extensively blackish-brown, the cell containing only a small yellow dot at its upper end. Hindwing black with a broad, straight, orange transverse band. Beneath red-brown with postdiscal bands of yellow spots on both wings, at the proximal margin of the forewing black, at the costal margin of the hindwing dusky greenish. The forewing is very much more extensively blackish-brown. Brazil, Colombia.

M. apella Schs. almost exactly resembles humeralis above. Hindwing beneath brownish-yellow with black marginal dots; by darker antemedian and postmedial shading an orange postdiscal band is distinctly prominent; also before the margin is dark shading; the veins are somewhat lighter. In the forewing the ground-colour is darker olive-brown. Expanse of wings: 37 to 45 mm. Costa Rica (Carillo).

M. misius Mab. Jet-black, costal margin of forewing at the base reddish-yellow, two such spots misius, at the cell-end, behind them a macular band from the apex to the submedian, from here as a broad stripe to the base. Hindwing black with a short, bent discal band, also the proximal margin being reddish-yellow. Fringes of forewing reddish-yellow speckled with black. Fringes of hindwing plainly reddish-yellow, not speckled. Forewing beneath more yellow, the costal margin as far as the apex reddish-yellow, at the base and the proximal angle black. Hindwing yellow, with long, black streak-shaped spots between the veins, at the costal margin bordered with black, at the proximal margin black with a yellow longitudinal stripe on the fold; below the costal margin there are 3 small black strigiform spots. Expanse of wings: 27 mm. Massauary.

158. Genus: Vinius G. & S.

Chiefly distinguished by the stigma on the forewing: a scent-stripe on the lower median vein, another one below it. The hindwing near the base of the proximal margin shows a tuft of whitish hair.

V. sagitta Mab. (188 e) is very similar to M. heraea (188 b) but smaller, the yellow is darker, less sagitta. Bright orange, the blackish-brown colour broader, the hindwing broadly bordered with blackish-brown. Beneath the same, but paler yellow, the hindwing with dispersed, oblong, brown spots. Panama.

V. arginote G. & S. (188 e) is very much like the preceding, more reddish-yellow and more extensively arginote. So especially in the disc of the hindwing. Hindwing beneath with rounded, not oblong submarginal spots. Amazon, Brazil.

V. exilis Plotz (188 d) is above blackish-brown, in the cell reddish-yellow like an oblique band to exilis. The apex extending at the proximal margin to the base, and a postdiscal costal-marginal spot. Hindwing only in the basal third black with a roundish yellow cellular spot, behind it bright orange with a narrow black border. Beneath the light yellow hindwing exhibits a larger black cellular spot and no postdiscal nor antennal punctiform spots. The habitat stated, California, is wrong. Patria unknown. Perhaps identical with ephesus Hbn, which originates from Surinam.

V. nicomedes Mab. (= letis Plotz) (188 d) is very much like arginote above, but the hindwing beneath nicomedes is without the blackish spots. From Brazil (Rio de Janeiro, Manos).

V. ephesus Hbn. (188 c) is smaller, lighter yellow, especially the whole costal-marginal part broadly ephesus yellow; also at the proximal margin near the base a yellow, oblong spot. Hindwing in the disc yellow with a but narrow black margin. Guiana.

159. Genus: Synale Mab.

Antennae and palpi like in the following genera. Forewing with a rounded apex; the bent costal is nearer at the uppermost subcostal vein; the uppermost median vein rises before the cell-end. Posterior tibiae grey-haired.
S. hylaspes Cr. (188 d). Above black with 2 large white discal spots and a broad subapical band of the forewing, and a roundish spot near the apex of the hindwing. In the ♀ the spots are longer and narrower, and besides there is a submedian spot and a small postdiscal spot. Beneath the hindwing shows a long longitudinal ray from the base to the middle of the distal margin, proximally more orange, distally lighter yellow. Brazil (Pará).

S. silanion Pltz (188 d) is very similar, somewhat smaller. The hindwing exhibits a longitudinal ray above being shorter, beneath extending from the base to the middle of the distal margin, and being interrupted at the cell-end. Fringes white. From Bahia.

160. Genus: Paracarystus G. & S.

Different from Carystus by another ♀ genital organ, the strongly prolonged valves being bent. Middle tibiae spine.


P. radiatus Mob. It is questionable whether it belongs here. Above blackish-brown, with 3 yellowish hyaline spots; one in the cell and 2 quadrangular ones behind it and below it, the latter being larger. Forewing without spots with a somewhat indented margin. The forewing is beneath similar, at the costal margin and apex lighter; hindwing blackish with broad white veins, along the upper edge of the cell, on the upper radial vein and the subcostal vein with a brown white band furocking towards the margin like a Y and being below shaded with red-brown. Fringes reddish-white. Expanse of wings: 39 mm. Brazil (São Paulo).

P. menetriesii Latr. (= rona Hec.) (188 d, e) is most variable in its size and the number of the white spots. Above blackish-brown with or without 1 or 2 cellular spots and 2 or 3 postdiscal ones. Beneath the apex of the forewing and the whole hindwing are dull metallic violettish-blue, in the ♀ more greenish-blue, with 2 brown, narrow transverse bands. Fringes dark brown. From Colombia and Brazil.

P. koza Bitr. (188 e) is above similar, intensely spotted white on the forewing. Beneath on the forewing a large, subapical, blue spot, hindwing light metallic blue, in the discal area yellowish iridescent, with a brown, bent transverse band from the apex almost to the middle of the proximal margin. Brazil.


Antennae long and slender with a fusiform club; second palpal joint rising, projecting beyond the eyes, the conical last joint hidden in the hair of the 2nd joint. Apex of forewing obtuse. Femora clad with thick short hair. The ♀ shows a very conspicuous scent-organ; a silvery hair-scale stripe begins pointed at the rise of the upper median vein and grows broader, filling up the angle of the rise of the lower branch and extending to the base of the median.

Z. abdon Pltz (188 f) is a large, above monotonously blackish-brown species with a grey scent-stripe. Beneath the apex of the forewing and the whole hindwing are dark slate-coloured blue, with brown veins. From Brazil.

162. Genus: Cyclosma gen. nov.

Distinguished from the preceding genus by a somewhat longer, conical and obliquely rising terminal joint of the palps. On the forewing the upper median vein rises close at the cell-end; below its proximal third there is a circular, black, convex scent-spot corresponding to a slight depression on the under surface; in the lower cell-end there is a thinly scaled part.

C. abdonides sp. nov. (188 f). Above uni-coloured blackish-brown, the scent-spot black, the thinly scaled part in the lower cell-angle is yellowish. Ends of fringes lighter, tinted ochreous, at the anal angle of the hindwing almost white. Beneath dull greenish slate-coloured, with black veins, below the cell of the forewing and from there in the shape of a bow to the anal angle blackish, before it in the submedian area whitish. Anal margin of hindwing brownish. According to 1 ♀ from the Songo (Bolivia).


Antennae long, with a long club and a long reverted apex; last joint of the palp short. Cell of forewing of two thirds of the length of the costal margin. ♀ without a scent-organ.

C. claudianus Latr. (188 e). Above blackish-brown with 2 large white cellular spots, one between the median veins and a smaller one behind it; a subapical band of 4 lilac-white spots. Hindwing with a large,
rounded white postcellular spot. Beneath spotted the same, two thirds of the costal margin and the apex are lilac-grey, as well as the hindwing in the costal-marginal part, behind the cell and at the distal margin, with black veins; fringes of hindwing analwards and the abdomen beneath white. Guatemala to Bolivia.

**C. diores** Plotz (188 g) resembles the preceding above, but the hindwing is beneath marked just like **diopes**.

**C. phorcus** Cr. (188 f) entirely resembles **Vettius marpesia** (189 d) above and beneath, but it is larger and distinguished by the absence of the scent-scale spot. Above the white band of the hindwing is longer and extends almost to the proximal margin, and the fringes are in their whole extent yellowish-white, too. Surinam.

**C. ambrosei** Weeks is above black with a white subapical dot of the forewing, below it there is a post-distal row of 5 spots to the middle of the proximal margin; the two uppermost spots are very small, the next is very large, the next small, and the lowest very small. Hindwing with a broad white band from the middle of the proximal margin to the cell-end; the proximal margin is grey-haired. Beneath more brownish, the spots closer together; on the hindwing the band being yellowish-white here extends from the middle of the proximal margin in the same width to the apex. Expanse of wings: 1.1 inch. Venezuela (Suapure). It may perhaps be better to place it to **Vettius** (p. 981).

**C. richardi** Weeks. Forewing above dark brown with 2 small, white subapical spots and 4 postdistal spots, of which that below the median is the largest, the two upper ones being small. Hindwing brown with a whitish patch near the base. Beneath as above, forewing submedianly very much streaked with white; hindwing dark brown, the basal area except the brown costal margin yellowish-white. Expanse of wings: 1.3 inch. Venezuela (Suapure). It may perhaps be better to place it to **Vettius** (p. 981).

**C. jolus** Cr. (188 f). Above blackish-brown with 2 cellular spots 5 postdistal and 2 subapical white jolus. spots. Hindwing with a cellular spot and an oblong diffuse patch behind it. Beneath the apex of the forewing, and the hindwing are golden yellow, with chestnut-coloured veins, with the white spots of the upper surface and golden yellow spots at the costal margin and subapically on the forewing. Surinam.

**C. bursa** Hew. (188 f) is not dissimilar, but the hindwing above shows a large, round discal spot. Beneath duller black, apex of the forewing and hindwing especially the latter thickly streaked with a yellowish-green and with black veins. Eyes red. Mexico to Panama.

**C. subviridis** Plotz (188 g). It is questionable whether this large, beautiful species belongs hereto, subviridis.

Above jet-black with an oblique row of 4 postmedian, white spots, the lowest being very small, that above it the largest, quadrangular; 2 subapical white dots; fringes of hindwings somewhat lighter, more grey. Beneath the costal margin and the apical half of the forewing is of a deep green with fine yellowish veins. The hindwing is coloured the same, with a somewhat lighter postdistal band and a blackish inner-marginal wedge. São Paulo.

**C. cynaxa** Hew. (188 g) is above black, suffused with steel-blue, with a white, blue iridescent discal band of the forewing. Beneath duller black, apex of the forewing and hindwing especially the latter thickly streaked with a yellowish-green and with black veins. Eyes red. Mexico to Panama.

**C. piers** sp. nov. (188 g). Above blackish-brown with a broad, silvery white, semi-transparent discal oblique band of the forewing composed of 3 spots, 2 small postdistal ones behind them and 3 subapical ones, the lowest of which is situate more towards the margin. Beneath the apex of the forewing is reddish-brown, the hindwing with deep chestnut-brown veins on a blackish-brown ground, with a very broad silvery band of long, wedge-shaped spots, running through the cell and reaching neither to the costal margin nor to the proximal margin. 1 ♀ from the Rio Songo (Bolivia), type in the Coll. Fassn.

**C. ebusa** Cr. (= pseucus Cr., belistida Hew.) (188 g). Forewing blackish-brown, hindwing almost entirely white, only the broad costal margin and distal margin brown. Beneath lighter, the apex steel-grey, costal margin ferruginous brown, with some white postdistal spots towards the apex. Hindwing white, veins and a cellular spot chestnut-brown, the distal margin towards the apex irregularly marked chestnut-brown and steel-grey; anal angle blackish-brown. Panama to the Amazon and Bolivia.

**C. antenora** Ehren., described as *Panphila*, may presumably be ranged here. Above dark brown, antenora.

with a reniform hyaline spot in the cell, a large, quadrangular one touching it beneath, above it a triangular one, its apex directed distally, above it more distally a grey streak-spot. Beneath somewhat lighter, the forewing apically tinted lime, marked the same. Hindwing entirely white with a pinkish-reddish lustre. Expanse of wings: 42 mm. Venezuela (Suapure).

**C. marcus** F. (= lycéea Plotz) (188 g). Above black with a small white cellular spot, 3 postdistal spots and 2 subapical ones, hindwing with a broad, white transverse band which, being widened, almost reaches to the proximal margin. Hindwing yellowish, in the disc more white with a brown longitudinal stripe above the cell to the distal margin, a shorter one below it, and a large black anal spot. Brazil (Bahia, Pará), Panama to Guiana, and Trinidad.

**C. aurellius** Plotz (188 h) is very much like **marcus**, the white discal spot of the hindwing extends to the anal angle; beneath the inner-marginal part is white, not blackish-brown. Nicaragua to Colombia, Venezuela and Brazil.
C. diversus H.-Schäff. (= maeon Mab.) (188 h) is also very similar, but the hindwing has beneath blackish-brown veins. Nicaragua to Brazil.

C. fantassos Cr. (= abelthus Cr., echerus Plötz) (188 h). Above blackish-brown with 3 postdiscal and 2 or 3 subapical creamy spots, hindwing with a similar discal band. Beneath the forewing has a reddish-brown apex, the hindwing is Isabel-colored, with red-brown veins, a chestnut-brown spot at the cell-end and a larger one behind and below the lighter discal band; anal angle blackish. Mexico to Brazil. The green larva lives on grasses such as Panicum ramosum.

C. ploetzii Capr. (188 h) is above black, at the proximal margin of the forewing with olive hair, with 2 yellowish-white, quadrangular postdiscal spots and 3 small subapical ones. Hindwing in the disc light olive. Beneath on the forewing the costal margin and apex are chestnut-coloured, the spots as above. Hindwing reddish-yellow, with chestnut-brown veins, at the base except the costal margin, in the apical half of the distal margin and at the proximal margin chestnut-brown, from the base to the anal angle extends a black wedge-shaped spot being here very broad. From Brazil.

C. clavicula Plötz (= furcifer Mab.) (188 i). Brown, the forewing with 5 white subapical dots and 2 postdiscal spots, below them a third disappearing in a whitish brightening which extends to the thorax. Hindwing with a light reddish-yellow band of 4 oblong spots. Forewing beneath blackish, the apex tinted light yellow, with black veins and black intermarginal stripes. Hindwing light yellow with black veins which, except the lower median vein, are forked at the margin; at the cell-end a black areolate stripe. From Brazil.

C. lucretius Latr. Above brown with 3 postdiscal spots and an ochreous-yellow anteterminal band on the hindwing; beneath the hindwing is blackish-brown with a white costal-marginal spot near the base and an oblique, olive-yellow band from the apex to the proximal angle, which below the cell sends forth a white continuation to the proximal margin. Brazil.

C. abaris Mab. is above black, on the forewing with 3 apical hyaline dots and 3 postdiscal spots behind and below the cell-end. The hindwing is in the disc dusted with ferruginous brownish. Beneath the forewing is black, in the apical part lilac with 3 black, small sagittiform spots between the hyaline dots. The hindwing is blackish, in the basal part and at the costal margin lilac-white with a black cellular spot and 2 smaller black apical spots behind the cell. Fringes grey. Expans of wings: 28 mm. Porto Cabello.

C. arva Hew. must be allied to the preceding; the description, however, of this species has not been accessible to us.

C. micon Mab. is likewise similar to abaris, but much larger. Deep blackish-brown with 2 longish, yellow apical hyaline dots; in the cell-end are 2 streak-spots above each other, behind them there are 3 more, the lowest being diffuse, reddish-yellow, the uppermost very large, oblong quadrangular; the base of the costal margin is yellow. The hindwing shows 2 small postcellular spots. Beneath the forewing is blackish, at the costal margin and apex reddish, the hindwing reddish-brown with the 2 dots of the upper surface, besides one in the cell and one more towards the apex. Expans of wings: 34 mm. Brazil.

C. artona Hew. (188 i). Blackish-brown with 2 white cellular spots, 3 postdiscal and 3 small subapical spots; the hindwing shows 4 white spots in a bent row. Beneath the forewing is lighter, the apex grey; the hindwing is purple-grey with whitish-grey veins, costal part and proximal margin as well as intermarginal stripes; below the cell are 5 whitish spots in a bent row. Nicaragua to Brazil.

C. bebarus Plötz (188 i) is similar, smaller; the forewing is without the cellular spots; the small spots of the hindwing are minute and insignificant, of a yellowish tint. Beneath browner, with light yellowish veins and small, yellowish, postdiscal peniform spots. Colombia.

C. coryna Hew. (= catarynagae Plötz.) (188 i) is easily discernible by the hindwing being silvery beneath with 2 red-brown longitudinal stripes. Mexico to Bolivia.

C. superbiens Mab. is black, the forewing with 2 white hyaline spots; 3 subapical ones, 4 postdiscal ones in an oblique row and 2 oblong cellular spots, the base striped yellow. Hindwing with a white, bipartite hyaline stripe through the cell; inner-marginal fold streaked with white. Forewing beneath as above, at the costal margin yellow, proximal margin white; at the margin are yellow spots between the veins. On the hindwing the median area round the hyaline stripes is blackish, between the veins striped yellow. Head with 4 white spots. Expans of wings: 52 mm. São Paulo.

C. dion Plötz (= dianna Plötz i. l.) (189 a) is not unlike fantassos above, but the ground-colour is more olive-black, not brown, at the costal margin of the forewing and proximal margin of the hindwing dusted with whitish. Fringes white, blackish on the ends of the veins. Beneath the forewing is the same, but at the distal margin grey in the lower half. Hindwing yellowish-white with a large, oblong cellular spot, above it in the cell clouded grey with a bread, olive grey nebulous band in the middle of the distal margin. São Paulo.

C. seitzi sp. nov. (189 a) is very similar, above browner, the subapical dots almost extinct, on the hindwing there is on the contrary a very much broader, coherent postdiscal band extending to the grey, densely white-haired inner-marginal part. Shape of wings longer, anal angle of the hindwing very much extended. Beneath the forewing as in dion, the hindwing purely white with a brown, ferruginous-haired costal-marginal
spot near the base; beneath and comprising the cell like a bow, there is a large, irregular spot, in the upper proximal part which with a tooth extends into the middle of the cell, it is black strewn with light blue scales, distally and beneath olive-brown, strewn with ferruginous; at the distal margin, between the radial veins, there is a similar, olive-brown spot, between and below the median veins there are 3 extinct, small, grey nebulous spots before the margin. South Brazil (Sa. Cruz) in the Coll. Setz.

C. subrufescens Schs. (1891) is above dark brown with a reddish base of the costal margin of the forewing and yellowish-white hyaline spots: 1 stripe in the cell-end and a spot below it; 3 postdisal spots, the two lower ones small, and 2 subapical spots; fringes at the proximal angle yellowish. Beneath black, costal margin, apex and margin of forewing reddish-brown, hindwing likewise brownish-red with fine yellow veins. Expanse of wings: 36 mm. Costa Rica.

164. Genus: Zenis G. & S.

Wings narrower than in Carystus, distal margin of forewing concave; the lower median vein rises close at the base, the upper one at the lower cell-angle. The \( \varphi \) does not exhibit a stigma, but a hair-pencil below the lower median vein of the hindwing.

Z. minos Latr. (= jebus Plötz, melabena Plötz) (189 a). Above blackish-brown with a large, white hyaline spot in the lower cell-end and below it, as well as 4 or 5 small subapical spots in a broken row. The hindwing shows a short, narrow, white median band. Beneath somewhat lighter, more reddish, with a straight, white, at the edges ochreous-brown transverse band from the apex to the middle of the proximal margin, before it interrupted. Mexico to Brazil.

Z. calvina Hew. is above black with a narrow white cellular spot and a large, quadrangular one below calvina. It ends towards the apex somewhat more pointed and is somewhat strewn with brownish, especially at the margins and on the veins. Beneath as above, but the hindwing shows a yellowish, broad transverse band from the apex to the middle of the proximal margin. — In f. dissoluta Plöt (189 b) there is besides a large, white submedian spot on the forewing. Bahia; Pará.

Z. ozeta Bhir. (189 a) is above hardly discernible from the preceding, but the spot of the hindwing ozeta. Ends towards the apex somewhat more pointed and is somewhat strewn with brownish, especially at the margins and on the veins. Beneath as above, but the hindwing shows a yellowish, broad transverse band from the apex to the middle of the proximal margin. — In f. ozeta Plöt there is besides a longish, white submedian spot on ozeta. the forewing. Brazil, Venezuela.

165. Genus: Vettius G. & S.

Antennae remarkably long, club with a long reverted apex. Middle tibiae spined. The \( \varphi \) exhibits a triangular scent-spot in the angle of the rise of the lower median vein, and a longitudinal stripe below it.

V. phyllus Cr. (189 b). Above blackish-brown with a longish, white hyaline spot at the lower cell-end and a large, obliquely quadrangular spot below it; behind it and below in front of it there is one smaller spot each, the latter being lustrous silvery, before it grey hairy. Two very small subapical spots, and on the hindwing a hyaline median band composed of 3 oblong wedge-shaped spots; inner-marginal fold in the middle white-haired. Beneath the apex of the forewing is lighter, the hindwing greyish-black, with darker veins, in the costal-marginal half yellow with a brownish-black longitudinal stripe in it. Panama to Brazil.

V. laurae Hew. (189 b) is very closely allied to the preceding and above scarcely separable, the band of the hindwing at most being broader on an average. Beneath it also resembles phyllus very much. The hindwing is of a purer yellow in the larger costal half with a black spot at the costal margin near the apex and two broad, brown longitudinal bands; the lower one borders downwards on the yellow colour, towards the proximal marginal on the grey anal colour; base of costal margin and the extreme proximal margin are brownish-red. Guiana, Brazil (Rio de Janeiro), Trinidad.

V. macon Mab. Above black with two small, white postdisal spots and a yellowish diffuse spot below the lower cell-end; the spot above it is larger; fringes brown. Hindwing black with an oval-triangular white discal spot being proximally defined in a blurred manner and separated from the inner-marginal fold by a similar spot which, however, extends farther downwards. Forewing beneath black with a white apical spot bordered by red towards the costal margin. Hindwing yellowish-white, at the base shaded with a ferruginous brown, with a blackish spot at the end of the proximal margin and a similar one behind the cell. Expanse of wings: 30 mm. Panama (Chiriqui).

V. elvira Plötz (189 b). Blackish-brown, towards the base and on the body somewhat greyer with a double white cellular spot and 3 postdisal ones. Beneath reddish violettish-brown, beside the spots on the forewing above with an oblique, yellow subapical band. Hindwing yellowish-grey between the thickly reddish-brown veins; a broad, yolk-coloured stripe extends through the cell to the distal margin. South America, exact habitat not stated.

V. lafresnayi Latr. (189 c). Above brown with a white-hyaline cellular spot and pendent below it a large, quadrangular spot, above it 2 more small, postdisal and 3 subapical ones. Hindwing with a white
discol band and an inner-marginal fold haired bluish-white. Hindwing beneath white with a chestnut-brown costal margin, a broadly brownish distal margin and some minute spots in the discol area. Panama to Brazil. 

**V. peninsularis** Plätz (180 c) is above similar, but it has no cellular spot and the hindwing is not spotted. Beneath the hindwing is white with a large, blackish-brown triangular spot in the cell and a brown distal margin being broadest opposite the cell and growing very narrow at the anal angle. From Pará. 

**V. triangularis** Hbn. (= pican H.-Schäff.) (180 c) is above similar, but it has a broad, white discol band of the hindwing reaching the proximal margin. Hindwing beneath white, at the costal margin broadly black with a small triangular spot below the cell and a broad blackish-brown margin. The white disc is hued yellowish towards the margin. Brazil. 

**V. monacha** Plätz (180 c) has above rather small white spots; the band of the hindwing is also shortened and does not reach the proximal margin. The under surface is lighter, browner, the white area of the hindwing very extensive and bluish-grey, in some places strewn with brownish. Costal margin red-brown like the broad distal margin except the apex; the small triangular spot is minute. From Pará. 

**V. hypargus** Mab. is a small, black species with 3 white, subapical hyaline dots and 5 spots in a bent row below and below the cell-end, but there is no spot between the lower radial veins; in the middle of the proximal margin there is a white-dusted spot and another one in the cell-end. The hindwing exhibits in the middle a large, white triangular spot, behind the lower cell-angle a whitish longitudinal patch. Forewing beneath red-brown, spotted as above. Hindwing in the proximal half yellowish-white, in it with the white spot of the upper surface; the marginal area is red-brown. Expans of wings: 27 mm. Manaus. 

**V. marpesia** Hew. (189 d) is a larger, very much white-spotted species with a brown body and brown bases of the wings. Beneath the hindwing is light violet, with brown veins and a white spot before the middle of the distal margin and two blackish spots at the anal angle and above it at the distal margin. The costal margin of the forewing is white, the fringes of the hindwings are also white towards the anal angle. Amazon District. 

**V. perlphare** Mab. is above black, the base of the forewing strown with yellow; the forewing exhibits at 3 apical hyaline dots, 2 small ones in the cell and 3 somewhat larger postdistal ones. The margin of the hindwing is yellowish with a narrow, oval, white longitudinal spot; fringes of hindwing white as far as the lower radial. Beneath the forewing is blackish with a large, yellow, black-veined apical spot. Hindwing at the proximal margin light yellow, in the costal-marginal part yellowish-green, in the discol area brownish. Expans of wings: 36 mm. Amazon (Massauay). 

166. Genus: **Coeliades** Hbn.

Antennae long, with a slender club. Forewing long, with a concave distal margin and a basally convex costal margin. Hindwing at the anal angle feebly lobate; body slender with long legs and bare middle tibiae. The fray exhibits a tripartite stigma: a short scent-stripe in the middle of the median between the branches, a longer one on the lower median branch, and the longest on the submedian. 

**C. dudius** Cr. (= virga Btbr.) (180 d) is above blackish-brown, towards the margin suffused with a leaden or steel-grey lustre, with 2 small postdistal and subapical spots. Beneath at the apex of the forewing and on the hindwings deep red-brown or carmine, on the hindwing with a narrow yellow transverse band from the apex to the middle of the proximal margin. Surinam. 

**C. elenora** Ehrn. is unknown to me; we place this species having been described as *Pamphila* to this genus, because the description coincides with that of *dudius* with which it may agree; the scent-organ, however, is not mentioned. Described from Venezuela. 

**C. fisella** Hew. (= halateatus Mab.) (180 c). Blackish-brown with a large, bipartite cellular spot, a trapezoid spot below it, and farther towards the margin with a submedian, longish small spot and 3 subapical ones in a straight line. Hindwing with a brownish-smoked band across the cell-end. Beneath with the same spots, at the costal margin and apex of the forewing and on the hindwing chestnut-red except the proximal margin of the hindwing, with a yellowish transverse band from the apex of the hindwing to the middle of the proximal margin. Nicaragua to the Amazon. 

167. Genus: **Dion** G. & S.

Distinguished from the preceding genus by a stronger, stouter body and the scent-stripe extending from the base of the upper median vein obliquely and somewhat bent to the middle of the submedian. 

**D. gemmatus** Btbr. (180 c). Above blackish-brown with a grey stigma. Beneath the forewing is lighter at the apex with darker veins; the hindwings are blacker, in the anal two thirds chestnut-brown, with black veins, in the disc with a black spot with 3 or 4 light-blue eye-dots in it. The female is in the apical half of the forewing above pale reddish-brown with dark brown veins, the apex itself is dark. Costa Rica, Panama.
on the forewing with a yellowish, black-veined postdiscal area. Hindwing greyish-brown, with black veins and
interneural streaks with a brick-red costal margin and inner-marginal stripe and a brick-red longitudinal
diffuse patch along the lower margin of the cell. Eyes red. The 2 is also above postdiscally lighter yellowish-
white. Peru, Bolivia. — In Colombian specimens: f. accrea Plötz (189 c) there is only the red stripe below the
cell, those at the costal and proximal margins being absent.

D. pruinosa Plötz (189 c). Above monotonously blackish-brown with a grey stigma. Beneath the
forewing, towards the apex at the distal margin, is dusted with violetish-bluish like the whole hindwing except
the costal part; some small, postdiscal, brownish diffuse spots. Brazil (Chapada).

168. Genus: Flacilla G. & S.

Antennae of two-thirds of the length of the costal margin with a slender club and an almost semicircularly
bent apex; terminal joint of the palp long and pointed. Forewing long with a concave costal margin. The 2
exhibits a scent-spot from the base of the median to the rise of the lower branch, a stripe below it and a third
longer one on the submedian; the hindwing shows long hair in the anal fold.

F. aecas Cr. (189 d) is easily recognizable by the steel-blue, white-veined hindwing with a
submarginal row of whitish dots; also the costal margin and apex of the forewing is steel-blue; the proximal
margin of the hindwing is broad brownish-grey. Panama to Brazil; Trinidad.

F. coatepeca Schd. Head reddish-brown, collar and thorax violetish-brown. Wings dark brown, coatepeca.
forewing with a small, white-hyaline longitudinal spot in the cell, a large spot below it, 2 smaller ones farther
distally and 2 subapical, small, quadrangular spots. Beneath dark brownish-red, on the forewing the cell and
proximal margin blackish, with the spots as above. Hindwing with a blackish-brown inner-marginal part.
Expanse of wings: 42 mm. Mexico (Coatepec).

F. ergola Schd. Above brown, the basal third of the costal margin of the forewing as well as the anterior
body more red-brown; a large spot between the median veins, and a smaller one above it and farther distally
are yellowish-hyaline. Beneath the forewing is black, the costal margin, apex and distal margin are red-brown.
Hindwing reddish-brown, at the costal margin darker, with a broad, dark postdiscal shade and a light violet
cell. Expanse of wings: 37 mm. Novo Friburgo.


Antennae long and slender; terminal joint of the palp long and erect. Body slender, middle tibiae
bare, in the 2 a scent-organ.

C. malitiosa H.-Schäff. (= lycenoideus Plötz) (189 c) is above of a plain blackish-brown, beneath
lighter, the forewing at the costal margin and apex watered red-brown like the whole hindwing which exhibits
a broad, irregular dark transverse band being interrupted in the middle and broadest at the costal margin.
Mexico to Costa Rica and Cuba and Trinidad. Very closely allied to silius (189 f) from which, however, it is
easily separated by the hindwing beneath.

C. lutilenta H.-Schäff. (189 c) is above like the preceding. Beneath lighter, the hindwing whitish
and watered with brownish-red, at the costal margin broadly red-brown, in the middle of the lower margin
interrupted by a light streak of the ground colour. Panama to Colombia and Venezuela.

C. silius Latr. (antistia Plötz) (189 f). Blackish-brown with a reddish-yellow oblique band from the
proximal margin before the base of the apex of the forewing, where it ends narrowed. Costal margin strewn
with ochreous. Beneath the costal margin is broader reddish-yellow, otherwise the same; the hindwing is
dark ochreous-yellow, strewn with blackish-brown. Mexico to Brazil. Allied to lunata, but the reddish-yellow
band is narrower, the hindwing beneath lighter.

C. lunata Plötz (= berus Mah., sinidiosa Mah.) (189 f) is very similar, but the reddish-yellow is much
more extensive than in silius, so that only a cellular longitudinal stripe and the dentate margin remain dark.
Beneath red-brown, towards the proximal margin light ochreous or grey. Hindwing ferruginous-brown, in
the disc and at the distal margin dusted with lilac-grey. The species is very variable; specimens from Costa
Rica are on the forewing beneath analwards ochreous-yellow, on the hindwing beneath with a more or less
distinct, narrow, dark band proceeding from the costal margin near the apex. Costa Rica to Brazil. — f. silene
luhdenia. Plötz is above darker, the reddish-yellow reduced and more red-brown, beneath also darker, on the forewing
without the submedian lighter part.

C. sylaces G. & S. (189 f). Forewing above reddish-yellow with a large, triangular basal spot and
quadrangular subapical spot of a blackish-brown colour and a broad, similarly coloured margin. Hindwing
below the broad black costal margin in the disc strewn with ferruginous yellow. Beneath the forewing is the same,
the hindwing grey or ochreous-yellow, strewn darker, with a dark brown triangular costal-marginal
spot and a smaller one below the cell-end; distal margin broadly darkened. Mexico to Guatemala.

C. pericles Machl. (189 g) is above similar, but more extensively yellowish-brown, especially on
hindwing. Beneath quite different, the hindwing being monotonously yellowish-brown with a narrow black
marginal line. Forewing coloured and marked as above. Colombia, Venezuela, Trinidad.
C. nux Schs. Above dark brown, with 3 small, white, postdiscal hyaline spots in an oblique row and a very small subapical dot; fringes of hindwing white. Beneath the forewing is blackish-brown, at the apex lighter, in the middle of the distal margin shaded darker; the lowest spot is larger than above and not transparent. Hindwing whitish, streaked brown, costal margin brown with a large, dark spot below the cell-end, traversed by the light median veins. Expanse of wings: 35 mm. Novo Friburgo.

C. lucia Capr. (189 g). Dark brown with a curved postmedian band of lighter spots and lighter speckled fringes. Beneath in the apical part of the forewing and on the hindwing reddish-grey, watered with dark brown, with broad, brownish-grey or violetish-grey demi-bands proceeding from the darkened anal part and taperingly not reaching to the costal margin. Brazil.

dubitan.s. C. dubitas Schs. Above dark brown with a feeble light brown oblique shade behind the cell. Beneath olive-brown, the proximal margin of the forewing greyish-brown; hindwing in the middle of the distal margin tinted violet, at the costal margin darker with a dark oblique shade from the apex to behind the cell. Expanse of wings: 29 mm. Novo Friburgo.

intermedia. C. intermedia Schs. (189 g). Dark brown with a light olive-brown diffuse patch from the middle of the proximal margin to the lower cell-end; hindwing haired olive. Beneath the forewing is dark brown, the proximal margin not lighter. Hindwing dark olive-grey, densely striated brown, at the costal margin darker, with a dark shade from the cell-end to the apex. Expanse of wings: 28 mm. Brazil (Tijuca), also found in Mexico.

occulta. C. occulta Schs. Above dark brown, beneath duller, dusted with reddish, on the forewing the inner-marginal part lighter brown. The hindwing exhibits a dark oblique shade from the lower median vein to the apex, the proximal margin is lighter brown. Expanse of wings: 29 mm. Rio de Janeiro.

170. Genus: Mnaseas G. & S.

Antennae shorter than half the costal margin; terminal joint of the palp long and slender. The 3 exhibits a narrow, interrupted scent-scale stripe from the base of the lower median vein obliquely to the first third of the submedian. Only 1 species:

bicolor. M. bicolor Hab. (= bias Plötz) (189 g). Above lustrous blackish-brown with a stigma of the same colour. Beneath lighter, the forewing at the costal margin and apex, and the hindwing is ferruginous brown; the fringes are dirty ochreous-yellow. It greatly resembles Mastor anabis (187 g) and is separable by the narrow, oblique stigma and the longer, slender terminal joint of the palp. Mexico to Colombia.

171. Genus: Methionopsis G. & S.

Antennae long with a long club; terminal joint of the palp long, erect. Stigma bipartite: one part rests on the middle of the median, the other side on the lower median vein. In typhon the lower side of the angle is absent.

ina. M. ina Plötz (= modestus G. & S., philemon Blkr.) (189 g). Above blackish-brown with a similarly coloured stigma. The forewing exhibits some postcellular ochreous-yellow scales. Beneath the same, at the proximal margin of the forewing somewhat lighter. Mexico to Brazil.

typhon. M. typhon G. & S. is above the same. Beneath tinted somewhat purple; on the whole smaller, the stigma less developed. Guatemala.

caerulans. M. caerulans Hab. is somewhat smaller than ina, above blackish-brown. Beneath black, in the disc of the forewing there are 2 small grey dots, the hindwing shows 4 or 5 dots at the distal margin; the costal and distal margin of the forewing as well as the disc of the hindwing show a bright blue reflection. From Pará.


Antennae and palpi as in the preceding genus. Cell of forewing three fifths of the length of the costal margin; the middle radial at its rise very much bent and nearing the lower radial; body slender. Middle tibiae without spines. The 3 exhibits a sagittiform scent-scale stripe in the angle between the median and its lower branch.

phthia. E. phthia G. & S. (189 g) is blackish-brown, stigma of the same colour; the forewing exhibits some small, ochreous-yellow postcellular scales. Beneath the same, at the proximal margin lighter, at the costal margin and apex, and on the hindwing scantily strewn with ochreous. Smaller than M. ina which it very closely resembles, only separable by the stigma and veins. Mexico to Guiana.

volusus. E. volusus G. & S. is very closely allied to the preceding, beneath more reddish, only very diffusely strewn with ochreous. The stigma is less distinct. Panama.
173. Genus: Eprius G. & S.

Antennae and palpi as in the preceding; on the forewing the middle radial vein is less far depressed. The stigma consists of 2 longitudinal stripes; one of which is situate on the median between its branches, while the other extends proximally to it as far as the rise of the lower branch; the hindwing shows very long hair at the proximal margin of the abdominal fold.

E. veleda G. & S. (189 g). Blackish-brown with a similarly coloured stigma. Beneath scantily strewn veleda with yellow; base of antennal club beneath ochreous-yellow. Mexico to Panama, Trinidad.

174. Genus: Mnasicles G. & S.

Distinguished from the preceding genus by the stigma extending from the rise of the lower median vein obliquely to the middle of the submedian, being broad, though indistinct and interrupted.

M. geta G. & S. (189 g) is blackish-brown with a similarly coloured stigma. Beneath scarcely lighter. geta.

The forewing at the proximal and distal margins and the hindwing in the basal half and at the distal margin scantily strewn with lilac grey. Base of antennal club beneath ochreous-yellow. Mexico to Costa Rica.

M. hicetaon G. & S. resembles geta above. Beneath lighter, the forewing in the middle darker, at hicetaon the costal margin and apex as well as the whole hindwing scantily strewn with ochreous-yellow. Mexico.

M. rivera Plotz (189 h) is twice as large as geta, above almost black, beneath more variegated, at rivera the distal margin of the forewing in the upper half tinted yellowish-grey with a subapical, light costal-marginal spot and an inner-angular spot. Hindwing with a yellowish-grey apical band and a lighter grey distal margin and proximal margin. From Rio de Janeiro.

175. Genus: Callimormus Scudder.

Separated by the scent-organ being composed of 2 stripes, one of which in some species is acutangular with differently long sides on the middle segment of the median, the other being below the submedian. Terminal joint of the palp long, slender and pointed and almost vertically erect.

C. juventus Scudder. (189 h) is above dark brown, behind the stigma with 2 or 3 small, indistinct ochreous juventus spots. Beneath with lighter yellow veins, a darker marginal band and basal part, so that a postdiscal band of light yellowish spots is prominent. Mexico to Brazil.

C. polita Plotz (189 h) is above similar, but especially on the hindwing with broad ochreous-yellow polita fringes. Beneath the hindwing is much darker, olive-blackish, with yellow veins and a double postdiscal row of yellow dots. Patria unknown.

C. filata Poey (= radiola Mab.) (189 h) differs from polita by its larger size, darker ground-colour filata and just as dark fringes. Beneath the same, at the apex of the forewing, and on the hindwing with yellowish veins. Panama to Colombia, Venezuela, Guiana, Brazil, in Cuba and Trinidad. Distinguished from Porphorus storax (188 a) by a longer terminal joint of the palp and a different stigma, being larger than the likewise very similar gracilis with distinct yellow veins.

C. vetula Mab. (= interpunctata Plotz) (189 h) is above purer black, with a slight steel reflection vetula and darker veins, beneath as polita from which it differs by entirely dark fringes. Brazil (Bahia, Pará).

C. fabulinus Plotz (189 h) is allied to the preceding, larger, more slender, above browner with fabulinus traces of small, lighter, postdiscal, subapical and cellular spots. Beneath somewhat darker than vetula, otherwise the same. Surinam.

C. gracilis Plü. (= alismo Plotz) (189 k) is above darker than juvenis, beneath without light gracilis discal spots; forewing above at the costal margin, between the median veins and at the cell-end scantily strewn with yellow. Beneath the apex of the forewing, and the hindwing with light ochreous-yellow veins. Mexico to Colombia and Venezuela.

C. corades Plü. (= decrepida H.-Schäffer, tenera Plotz) (189 k) has above mostly more distinct ochreous- corades yellow cellular, postdiscal and subapical spots than the other species; but they may also be fainter or almost absent. Beneath the hindwing is yellowish or more lilac-grey with a postdiscal row of dots and a darker marginal band. Mexico to Brazil and in Trinidad.

C. diaces Scüb. Above dark brown with lighter fringes and on the forewing some small ochreous- diaces yellow postdiscal scales. Beneath brown, dusted with violet, apex of forewing and distal margin with yellow veins, hindwing with yellow veins and a disical streak and a postdiscal row of minute whitish spots. Expanse of wings: 19 mm. South Eastern Brazil.
elides. C. elides Weeks. Above dark brown, on the forewing with 2 white subapical dots; postdiscal below the cell 2 small white spots. Beneath lighter, hindwing more ferruginous-brown, basally still lighter, at the costal margin with a diffuse spot of the ground-colour; a short, lighter, postdiscal band. Expanse of wings: 1 inç. Venezuela (Suapure).

veranes. C. veranes Schs. is a somewhat larger species. Above dark brown with lighter fringes; on the forewing the costal margin shows olive-greenish scales, and similar scales are situate postdiscal in the shape of small indistinct spots. Beneath the forewing is brown, at the proximal margin lighter with a yellow marginal line; subcostal veins as far as the middle radial yellow, a longitudinal streak in the cell and the median veins at the distal margin being yellow, too. Hindwing violet, with bright yellow veins; inner-marginal part dusted with yellow; an antemarginal row of yellow spots. Expanse of wings: 22 mm. Peru.

176. Genus: Mnestheus G. & S.

Chiefly distinguished from Callimorbus by a different scent-organ consisting of 2 short longitudinal stripes, one of which is situate in the angle of the rise of the lower median vein, the other being right below it.

Petx-opolis. M. petx-opolis Btrc. (189 k). Above blackish-brown with a similarly coloured stigma. The forewing shows 3 white postcellular spots in an oblique line. Beneath the same, the lowest spot extinct. The proximal margin of the hindwing and a broad band from the proximal margin to the middle of the distal margin are silvery or yellowish-silvery, both flowing broadly together at the costal margin. In southern specimens the hindwing is more red-brown instead of blackish-brown. Panama to Bolivia.

Petx-opolis. M. cometho Btrc. (189 k) is above blackish-brown, the spots arranged as in the preceding, but ochreous with another small, subapical one; disc of hindwing reddish-yellow. Beneath lighter, the veins of the costal margin, apex and distal margin being ochreous-yellow as well as those on the hindwing, between them there are small, whitish postdiscal spots, By its larger size and the ochreous-yellow spots it differs from ludens; larger than virginus, with much more distinct spots on both wings beneath. Mexico.

Petx-opolis. M. ludens Mhb. Above like cometho (189 k), but the spots whitish-similar. Beneath without the white internervial spots; the yellow veins on the hindwing beneath are interrupted at the cell-end. Panama to Venezuela.

Petx-opolis. M. virginus Mshlr. (189 k) resembles cometho above, but it is smaller; beneath blackish-brown with yellow veins except the inner-marginal half of the forewing, the spots of the forewing above being also beneath faintly visible, especially below the subapical ones two being removed far towards the margin. Surinam.

Petx-opolis. M. petxova Schs. looks above like cometho (189 k), the spots of a purer yellow and diaphanous except the lowest above the submedian, which is triangular and not transparent; in the cell there is also a spot; hindwing in the disc dusted yellowish with small postdiscal yellow spots. Beneath the forewing is dark brown, spotted as above with yellow veins at the distal margin and apex and subcostally; hindwing violet, with brownish-yellow veins and an undulate yellow postdiscal line; inner-marginal part brown bordered with yellow. Expanse of wings: 26 mm. Petropolis.


Petx-opolis. E. paripuncta Plötz (= angularis Mshlr. ) (186 d) is above blackish-brown with a slight greenish reflection on the thorax and bases of the wings, on the forewing with one minute postdiscal and subapical dot each; fringes somewhat lighter, more yellowish. Beneath the same, scarcely lighter, only the submedian area of the forewing is brownish-grey and the distal margin of the hindwing is a little lighter brown. Fringes with a yellowish tint. Costa Rica to Guiana.

178. Genus: Artines G. & S.

Antennae and palpi long, as in the preceding genera. The stigma is sagittiform and situate in the angle of the rise of the lower median branch and the median; hindwing at the anterior edge of the abdominal fold with long hair. In atizies the stigma is absent.

Petx-opolis. A. atizies G. & S. (190 n). Blackish-brown, on the forewing with 2 small whitish spots below and behind the cell in an oblique line and 2 small subapical ones. Beneath lighter, at the apex of the forewing and on the hindwing dusted with lilac; spots on the forewing as above, analwards whitish with a subapical, narrow, blackish-brown band which is crossed by light veins. Hindwing with large, black dots encircled by ochreous-yellow, and 5 blue-pupilled spots. Panama, Venezuela, Guiana, Brazil and Trinidad.
A. aepitus Hbn. (190 a). Above black with 2 small postdiscal and 1 minute subapical white spot. aepitus. Beneath the forewing at the apex and the hindwing are violetish-grey, in the disc lighter, more bluish-white, with a thick black spot at the cell-end and behind it a curved band of faintly ochreous-yellowish spots, on both sides bordered with black. Brazil.

A. aquilina Plötz (= tertius Stgrl.) (190 a) is similar, somewhat smaller, above not different. Beneath aquilina. the apex of the forewing is lilac with a row of black dots; the hindwing is lilac-grey with a postmedian dentate band of bluish-violet, on both sides bordered with black; between it and the margin there is another black dentate line; the space between both and behind the cell contains dispersed ochreous-yellow scales. Brazil (Santos, Minas Geraes).

A. anna Mab. is questionable as to its position. Blackish-brown, forewing with 3 small subapical anna. dots, below them 4 small yellowish clouds. Hindwing with a yellowish discal reflection, fringes yellowish-brown. Forewing beneath light greyish-red, at the apex and costal margin blackish; spots more distinct than above, in the submedian area 2 white diffuse patches. Hindwing light reddish-grey, in the cell with a roundish, lilac brightening and a brown streak in it, and in a semicircle behind it 5 lilac spots on both sides bordered with black. Bolivia.

A. ursula sp. nov. (190 a) somewhat resembles anna. Above plainly blackish-brown with traces ursula. of lighter postdiscal and subapical diffuse spots. Beneath dull blackish-brown, apex of forewing and proximal angle lighter grey, the former with a roundish spot of the ground-colour in it, the 2 postmedian spots more distinct than above. Hindwing in the disc with large black spots, only separated by the light veins and the transverse vein; behind these spots, parallel to the distal margin, 5 oblong, bluish-violet spots, also distally bordered with black. From the Upper Madre de Dios (South Peru) from the Coll. Fassl.

A. acroleuca Plötz (189 k) is above black with a whitish apex of the forewing before the black fringes. acroleuca. Beneath lighter brown with whith postdiscal and subapical macular bands; that on the hindwing is distally pupilled with black; both wings exhibit fine black undulate lines before the distal margin; the hindwing besides a small white, black-pupilled cellular dot. Brazil.

A. farinosa sp. nov. (190 a) is larger, above with a minute subapical dot, 2 white postdiscal spots farinosa. and a yellowish submedian patch. Beneath similar as aepitus, hindwing densely strewn with white, with a very large, jet-black cellular area, surrounded by bluish-white; behind the cell there are oblong bluish-white wedge-shaped spots, part of the brownish veins and proximally and distally narrowly bordered by brown, distally touching the broad dark brown distal margin. According to several specimens from Colombia (Rio Aguaca and Rio Negro), taken by Fassl.

A. melitaea sp. nov. (190 a) is above uni-coloured brown, ends of fringes somewhat more whitish, melitaea. on the forewing with 3 small, lighter, subapical diffuse spots which may also be absent. On the but slightly duller under surface they are distinctly prominent as 3 to 5 small, oblong, whitish spots, behind them close before the apex a small white spot. Hindwing in the disc white, basally somewhat, towards the margin more broadly and intensely smoked brownish, with 3 or 4 dark brown, somewhat dentate lines marked like Melitaea, partly their interspace is strewn with brownish; before the margin parallel to it some more, small, whitish, diffuse spots. Fringes on the veins somewhat speckled. Rio Aguaca Valley (Colombia); Fassl.

A. pavo sp. nov. (190 a). Above blackish-brown, forewing with 2 white postdiscal spots, an indistinctly lighter submedian diffuse spot and 2 minute, scarcely visible subapical dots. Beneath somewhat duller brown, on the forewing marked the same, before the distal margin a somewhat curved, rather indistinct band of darker nebulous spots. Hindwing in the disc white, towards the proximal margin bluish, at the base of the costal margin and at the distal margin brownish, the median and radial veins behind the cell ferruginous, between them are 3 long, jet-black, wedge-shaped spots exhibiting round, bluish-white pupils near the distal end. In the 2 these spots are confined to 2 small, roundish, black, not pupilled spots, the discal area is more yellowish. A couple taken by Fassl on the Songo (Bolivia).

179. Genus: Falga Mab.

Antennae and palpi as in the preceding. Wings particularly long and narrow, costal margin of forewing at the base convex, hindwing at the anal angle somewhat lobate. Body long and slender. The 3 shows a tri-partite scent-organ; a stripe in the middle of the median, another one below the lower median branch, and a third before the middle of the submedian.

F. jeconia Bltr. (190 a) is above blackish-brown with a yellow longitudinal stripe below the cell jeconia. of the forewing and a yellow spot almost covering the whole hindwing. Beneath the apex of the forewing and the whole hindwing are uni-coloured yellow. Venezuela. — f. abalus Mab. (190 b) has almost entirely black abalus. forewings, the hindwing beneath towards the proximal margin strewn with brown; found in Colombia.

F. sciras G. de S. (190 b) is above almost quite reddish-yellow, only at the apex and distal margin sciras. of the forewing broadly blackish-brown, like the basal and costal veins; hindwing broadly bordered with blackish-
brown, the broadest at the anal angle. Beneath blackish-brown with a large, oval, ochreous-yellow discal spot of the forewing the apex of which is reddish-yellow; hindwing light yellow with 2 small blackish-brown discal spots and an indistinct macular band parallel to the distal margin. Honduras.

**F. hermine** Schs. It is questionable to which genus it belongs. Above black with an orange subcostal vein and a broad, orange-brown postmedian shade united with a similar stripe-spot below the cell. Hindwing orange-brown, bordered with black. Fringes orange, on the forewing spotted black. In the ♂ the orange colour is not so extensive on the forewing. Costa Rica.

180. Genus: **Enosis** Mab.

Antennae \(\frac{3}{4}\) of the length of the costal margin; palpi ascending with a short, conical terminal joint. Forewing broad, at the base convex. Body slender, with very long legs. With a tripartite scent-scale spot: a triangular spot in the angle where the lower median vein rises, a short longitudinal stripe below it and a similar one before the middle of the submedian.

**E. quadrinotata** Mab. (190 b). Above blackish-brown with a similarly coloured stigma. Beneath lighter, with a broad, grey proximal margin of the forewing; in the disc 2 small light dots. Hindwing with 4 yellowish discal dots, the apex of the forewing, costal margin and the hindwing scantily strewn with yellow. Panama.

**E. simplex** Mab. is above and beneath jet-black, on the forewing with 2 small white hyaline dots before the apex and a third farther below. The under surface exhibits the same dots and besides on the hindwing a grey postcellular dot. Fringes white, towards the tips somewhat smoky. Expanse of wings: 42 mm. Venezuela.

**E. atrata** Mab. is as large as simplex and on both surfaces quite uni-coloured black without any spots. Fringes purely white. Discernible from the very similar **immaculata** (190 b) by the forewing being at the apex somewhat longer, more pointed and by the entirely white fringes. Colombia.

**E. dognini** Mab. Blackish-brown, in the disc of both wings somewhat lighter reddish. The forewing exhibits 3 small, white, subapical hyaline dots and a quadrangular, similar spot behind the lower cell-angle. Beneath the forewing shows a broad whitish band from the apical dots to the proximal margin, the hindwing a postdiscal band of 6 oblong-quadrangular silvery spots, the uppermost of which is only half as large as the others, owing to an ochreous-yellow spot in front of it. Expanse of wings: 42 mm. Ecuador (Loja).

**E. immaculata** Hew. (190 b) is above uni-coloured blackish-brown, with fringes of an ochreous-yellowish reflection, and a very slight bronze-green reflection on the body and wings. Beneath the same, of a scarcely duller colour. Venezuela.

**E. inframaculata** Strand. We cannot tell to what extent this species may be identical with quadrinotata. Above blackish-brown with single yellow hair-scales in the costal half of the forewing. Beneath the forewing shows 2 roundish, yellow, small spots, the hindwing a postdiscal transverse row of small yellow spots. Costa Rica.

181. Genus: **Carystoides** O. & S.

Antennae \(\frac{3}{4}\) of the length of the costal margin; palpi ascending, last joint hidden. Body robust. Middle tibiae without spines. ♂ without a stigma.

**C. basochesii** Latr. (= argyrocoryne Mab.) (190 b). Above blackish-brown with light brownish-grey fringes, a more or less broad, white apex of the forewing before them, and 3 hyaline discal spots, the hindwing with a tripartite discal spot. Beneath the apex of the forewing is grey with 3 dark dots in it. Hindwing particularly at the base densely strewn with yellowish-grey. Honduras, Panama, Colombia, Brazil and Trinidadd. — f. replana Plötz (190 b) has the spot of the hindwing reduced to 2 minute spots, — and f. valentina replana. Plötz (190 c) has on the forewing much smaller discal spots, and on the hindwing the discal spots as 3 separate small spots. The latter form originates from Surinam. — f. benchos Weeks from Bolivia resembles replana, but it has another, small, subapical spot on the forewing.

**C. sicania** Hew. is above red-brown, with a white apex of the forewing, a tripartite hyaline discal spot and a small subapical dot; also the hindwing exhibits a hyaline spot in the middle. Beneath as above, but the costal margin and apex of the forewing, as well as the hindwing are red, the latter towards the base somewhat lighter. Expanse of wings: 13 inches. From Brazil.

**C. cathaeas** Hew. (190 d) differs above from the preceding by the absence of a spot on the hindwing, being otherwise very similar. Beneath quite different, the apex of the forewing, and the hindwing greyish-brown, tinted violet, with whitish, dark-edged veins and blackish longitudinal patches on the hindwing, 2 in the costal half and a broader one along the inner-marginal fold. From Pará. — f. boliviana form. nov. (190 b) from the Songo has a somewhat smaller cellular spot and the apex of the forewing is not white.
182. Genus: **Lychnuchoides** G. \& S.\textsuperscript{1}

Antennae half as long as the costal margin. Cell of forewing very long and broad, \(\frac{2}{3}\) of the length of the costal margin; hindwing at the anal angle lobate. Body stout, densely haired. The \(\delta\) has an angular stigma, the upper part of which borders on the middle of the median, the lower on the lower median branch. MABILLE places here also *hierbas* Cr. (= ozias Hew.) having been dealt with by us as *Ancistrocompta* on p. 879; (190 c).

**L. saptine** G. \& S. (190 c) is a large, blackish-brown species with a darker stigma, a broad, ochreous- \textsuperscript{saptine} yellow, centrally hyaline transverse band; apex of hindwing yellow. Beneath the same, at the apex of the forewing lilac-grey; hindwing red-brown clouded with grey. Larger than the very similar *Ancistrocompta celsus* (171 a), the yellow band more irregular and the under surface different. Costa Rica, Panama.

183. Genus: **Nyctus** Mab.

Distinguished from *Carythus* by the long, horizontally porrect palpi; hindwing extended into a broad, obtuse lobe; at the base of the inner-marginal fold there is a very long hair-tuft, and on the median veins are also long, bent hairs partly extending beyond the margin of the wing and touching the abdomen.

**N. crinitus** Mab. is a magnificent, velvety black species with a very broad orange oblique band \textsuperscript{crinitus} exhibiting proximally 3 angular projections (subcostally, on the lower median vein and on the inner-marginal vein), and being distally gnawed out at the lower cell-angle. Hindwing at the costal angle with an orange marginal line and fringes; the hair-pencil with a green reflection. Beneath the forewing is red-brown, the hindwing black with brilliant green veins. Expanse of wings: 52 mm. Brazil (Pebas).

**N. triangularis** Kaye. Above dark brown, costal margin and the larger inner-marginal half lighter. \textsuperscript{triangulari} A cellular spot and 4 postdiscal spots yellowish hyaline as well as 2 subapical dots. Hindwing with 3 small spots in one line behind and below the cell. Collar golden yellow. Beneath very much lighter, especially the base of the hindwing. Expanse of wings: 42 mm. Trinidad.

184. Genus: **Lychnuchus** Hbn.

Antennae long; the long club exhibits a slender, long apex. The terminal joint of the ascending palpi is hidden. The anal angle of the hindwing is lobate, above it somewhat concave. The \(\delta\) shows a bipartite stigma: a stripe on the central part of the median between the branches, another one on the lower median vein. We enumerate here only two species, the third: *celsus* F. (= clearchus Plötz) (171 a) which is inserted here by MABILLE, we have already dealt with in *Ancistrocompta* on p. 879. As to the synonymy of the species and genera there is still much uncertainty prevailing. Comp. also the genus *Lychnuchoides* (t. 190 c).

**L. olenus** Hbn. (190 c) is of a plain blackish-brown with a very broad orange discal band which \textsuperscript{olenus} is semi-diaphanous in its central part. Beneath the same, but the brown is slightly duller and more reddish. Widely distributed in South America: Brazil, Colombia, Bolivia.

**L. pertica** Plötz (190 c) resembles *Ancistrocompta celsa* (171 a), but the narrow discal band is white, pertica, only at the costal margin somewhat yellowish, and there are 3 white subapical punctiform spots. Beneath somewhat duller brown, otherwise the same. Palpi beneath ochreous. South America, habitat not exactly stated.

185. Genus: **Tisias** G. \& S.\textsuperscript{2}

Antennae longer than the cell of the forewing. Terminal joint of the palp short. Forewing long with a bent costa; hindwing at the anal angle lobate. Body robust. Middle tibiae with spines. The \(\delta\) has an angular stigma on the middle of the median and the lower median branch, a longitudinal stripe below it, and \(s_{1}\) still longer one on the submedian.

**T. myna** Mab. (190 c). Blackish-brown, with a similarly coloured stigma, and 4 large hyaline white \textsuperscript{myna} spots, 3 postdiscal ones and 1 cellular spot. Hindwing with a small cellular spot and 2 near the distal margin. Beneath lighter, the costal-marginal area behind the cell grey; the submedian spot is larger than above. Panama.

**T. quadratus** H.-Schäff. (190 d) has a double cellular spot, and only 2 postdiscal ones; on the hindwing there are 4 postdiscal spots and the cellular spot is absent. Body and bases of wings with a faint bluish-green reflection. Beneath the apical half of the forewing, and the hindwing are ferruginous-brown, the hindwing the lightest in the apical half, with the spots of the upper surface and a broad white anal angle of the forewing. Brazil.
186. Genus: **Themesion** *G. & S.*

The long antennal club exhibits a very long, reverted apex; last palpal joint short. Cell of forewing shorter than two thirds of the costal margin; the abdomen projects beyond the hindwing. Body very robust; middle tibiae without spines; posterior tibiae with 2 pair of spurs, the upper being very short.

**Th. certina** Hew. (= lebbaeus Hew., *lota* Hew.) (190 e) is above rather similar to *T. myna* (190 e).

Blackish-brown with 4 large, hyaline white discal spots and 2 small subapical spots. Hindwing with 1 or 2 small postdiscal dots. The under surface is lighter, in the middle of the forewing darker. The hindwing exhibits a dark dot at the cell-end, and 4 behind it, 2 of which are pupilled white. Panama to Venezuela.

**Th. noseda** Hew. (= brinaoides Mschlr.) (190 e). Above dark brown, towards the base with a slight violetish-brown tint, a white cellular spot and 3 postdiscal ones, the submedian one of which is the smallest. Hindwing with a white spot behind the cell. Fringes ochreous-brownish. Beneath the costal margin and apex of the forewing as well as the whole hindwing are violetish-grey, the disc and inner-marginal part of the forewing black, marked as above. Described from Surinam.

**Th. alda** Plötz (190 d) is above blackish-brown, at the base of the costal margin of the forewing somewhat more reddish with 2 large discal spots, and 1 smaller one each behind and above them. On the hindwing there are towards the apex 1 to 3 small white spots which may also be entirely absent. Beneath the costal margin and apex of the forewing are greyish-brown, tinted violet, on the hindwing there are some small black punctiform spots. Brazil.

**Th. maroma** Mschlr. (190 d, e) is very similar, but the cellular spot is very much strangelated and farther remote from the spot below it, the submedian spot is yellowish, and there are besides 1 to 3 small subapical spots. Beneath darker brown than in *alda*, and mostly yet with a small white cellular spot on the hindwing. Surinam.

**Th. moeros** Mschlr. (190 f). Here the cellular spot is above divided into 2, and below the subapical spots there are yet 2 small punctiform spots farther towards the margin. Body, base of wings, and hindwings are haired olive-brown. Beneath the costal margin and apex of the forewing as well as the whole hindwing are deep dark green with fine black veins, the hindwing with a black cellular dot and 2 or 3 behind it. Proximal margin of hindwing blackish-grey. Described from Surinam.

**Th. orbis** *G. & S.* is smaller than *certina* (190 e), the discal spots ochreous-yellow, with one more submedian spot; the hindwing exhibits 3 postdiscal dots in one row. Beneath lighter, dusted with lilac. The species very much resembles *Caryetoides sicaria* which, however, is without the yellow submedian streak, the discal spots being also differently placed and only one subapical spot being present. It also greatly resembles *Turesis lucasi* and *these* (190 f), but the short upper spurs of the posterior tibiae preclude their relationship to the genus *Turesis*. From Nicaragua.

187. Genus: **Turesis** *G. & S.*

Antennae 2/3 of the length of the costal margin. Veins as in *Caryetus* (p. 979). Body strong, middle tibiae posterior, double long, spurs.

**T. lucasi** F. (= complanula H.-Schöff., *yma* Plötz, heben Mob., silacea Mschlr.) (190 f). Above like *Th. orbis*, the spots larger, more whitish; hindwing with only one yellowish dot. Beneath lighter, more reddish, the hindwing spot of the forewing larger, more yellow. It somewhat resembles *Thr. salius* (191 e, f). Panama to Venezuela, Amazon, Brazil, Antilles.

**T. theste** *G. & S.* (190 f) is similar, smaller; the 3 discal spots are combined forming an angular spot parted by the veins; a small subapical spot, the submedian spot absent; hindwing without any spots. Beneath lighter, more reddish, on the hindwing with a yellow cellular dot. Costa Rica.

**T. brooksi** *Weeks* may belong hereto. Above dark brown with 3 white subapical dots, a white cellular spot and 2 postdiscal ones. Beneath black, spotted as above, at the costal margin and apex reddish-brown. Hindwing reddish-brown, in the basal and marginal areas darker with 2 white postcellular dots. Expanse of wings: 5 cm. Venezuela (Sapuare), taken at the end of July.

188. Genus: **Megaleas** *G. & S.*

Different from *Turesis* only by the scent-scale spot: it extends from the rise of the upper median vein obliquely and interrupted somewhat before the middle of the submedian. Antennal club thick and long.

**M. synna** *G. & S.* (190 e) is a very large species: above blackish-brown with a large, oblong, yellow cellular spot filling up the distal 3/4 of the cell; beneath it and below it a very large tripartite spot, and 3 small subapical spots. Hindwing with a cellular dot and 3 larger dots in the costal-marginal half behind it. Beneath lighter, more reddish. Costa Rica.
189. Genus: **Lycas** G. & S.

The antennae attain the length of the cell of the forewing; the club is long and slender. Cell of forewing of \( \frac{2}{3} \) of the length of the wing and pointed at the apex. Body strong, middle tibiae spined. The \( \delta \) has no scent-scales.

**L. argenteus** Hew. (191 a). Blackish-brown, base of forewing and proximal half of hindwing haired \( \text{argenteus} \), ochreous-brown; in the disc there are 3 yellow hyaline spots in an oblique row, one of which is submedian; in the cell there is a distally concave spot, subapically 3 dots. On the hindwing the apical half of the costal margin and a submarginal spot are ochreous-yellow. Beneath the same, apex of forewing grey, anal angle spotted whitish. Hindwing silvery with a chestnut-brown band from the middle of the costal margin to the anal angle, being narrower or interrupted at the cell-end; distal margin red-brown. Fringes of hindwing dotted ochreous-brown. Mexico to Brazil.

**L. godarti** Latr. (= ceraca Hew.) (191 a) is similar, the basal half of the costal margin ferruginous-brown. Beneath in the basal third of the forewing blackish-brown, apex and costal margin more reddish, in the middle of the costal margin there is a yellow spot. Hindwing chestnut-red, at the distal margin lighter with 2 oblique silvery bands. Panama, Guiana, Brazil.

190. Genus: **Orphe** G. & S.

The long antennae reach to the cell-end, club slender; terminal joint of the palp short and hidden. Middle tibiae not spined. The \( \delta \) scent-stripe extends obliquely from the rise of the lower median vein to the inner-marginal vein.

**O. gerasa** Hew. (= subcordatus Mab., milo Mab.) (191 a). Above black, scent-stripe silvery grey, \( \text{gerasa} \), fringes brownish; forewing with a cellular spot and 4 postdiscal and 3 subapical small white spots. Beneath duller blackish-brown, at the distal margin and anal angle of the forewing as well as at the margin and in the disc of the hindwing tinted violet; before the margin of the hindwing with a black nebulus band beginning broad at the costal margin and dying away towards the proximal margin. Colombia, Amazon.

**O. vatinius** G. & S. entirely resembles the preceding except the stigma showing a very distinctly \( \text{vatinius} \), undulate upper surface, whereas in \( \text{gerasa} \) it is smooth, only at the lower edge with a ridge-like elevation. Guiana, Amazon, Peru.

**O. porius** Mab. It was impossible to find a description for this name.

191. Genus: **Damas** G. & S.

Antennae and palpi as in the preceding genera. Hindwing at the anal angle somewhat prolonged and before it slightly concave. Body robust, femora very hairy and middle tibiae spined. The \( \delta \) stigma consists of a triangular part in the angle where the lower median vein rises and a longitudinal stripe below it.

**D. clavus** Erichs. (= ampyx Mab., evote Hew. - Schäff., angulius Plotz, cervus Msclr.) (191 b). Blackish- \( \text{clavus} \), brown, with a grey stigma, an oblong, yellow-hyaline cellular spot, 3 postdiscal and 3 subapical ones, which may also be absent. Beneath the apical half of the forewing, and the hindwings are tinted violet. Panama to the Amazon.

192. Genus: **Orses** G. & S.

Distinguished by very long antennae of more than \( \frac{2}{3} \) the length of the costal margin, with a long, slender club and a long reverted apex. Forewing with a slightly convex costa; in the \( \delta \) the upper median vein rises far before the lower cell-end, in the \( \varphi \) close at it, the submedian is in the \( \delta \) somewhat angular. Hindwing analwarks prolonged. Middle tibiae without spines; in the \( \delta \) a scent-scale stripe extends obliquely from the rise of the upper median vein to the lower.

**O. cynissa** Strans. (= catina Hew., payas Reak.) (190 f.) is a very easily recognizable species. Above \( \text{cynissa} \), black, in the \( \delta \) with 3 yellow discal spots situate close together, in the \( \varphi \) with a white oblique band; fringes and margin of the hindwing apically broad white, in the \( \delta \) more yellowish-white. Beneath the same, but the discal spots are prolonged yellow as far as the costal margin. Distributed from Mexico to Colombia and Brazil.

**O. iricolor** G. & S. (191 b) is above similar, but on the body and base of the wings hairied bluish-green, particularly on the proximal margin of the hindwing. The under surface is quite different: on the hindwing with 2 oblique, parallel, sulphur-yellow bands from the apex to the distal margin and from the basal third of the costal margin to the anal angle; the hindwing is rather long extended. Venezuela.

**O. itea** Strans. (190 f, g) above entirely resembles \( \text{cynissa} \) (190 f), but the very large, in the \( \delta \) yellow, \( \text{itea} \). in the \( \varphi \) white discal spots are of a rounder shape. Beneath very easily recognized by the light grey, black-veined wings, the hindwing showing 2 light yellow bands at the apical distal margin and from the base of the costal margin to the anal angle. Brazil.

Antennae long and slender, with a long, pointed club; palpi appressed to the face, ascending, with a short terminal joint. Forewing triangular with a straight distal margin; cell shorter than two thirds of the costal margin. Hindwing rounded off with an oblique distal margin, at the anal angle not lobate. Posterior tibiae with long, slender spurs.

*O. vulpina Fldr.* (190 g). Upper surface black, basally more brown, in the upper half of the distal margin lighter blackish-grey, with small white cellular and 3 discal spots, as well as 3 subapical dots; the latter proximal half of the hindwing is of a bright brownish red. Beneath duller blackish, on the hindwing with a white band from the middle of the costal margin to the anal angle; costal margin basally yellowish-white. Colombia.


Antennae and palpi as in *Oenides*. Apex of forewing prolonged, cell longer than in the preceding; distal margin above the anal angle concave; the middle radial vein rises almost from the same place as the lower; Distal margin of hindwing likewise somewhat concave and the anal angle lobate. Posterior tibiae only with terminal spurs.

*Ch. psittacina Fldr.* (190 g, h). Above blackish-brown, on the forewing subapically lighter, above it with 4 small, very oblong hyaline spots, at the cell-end and below it with a very large, double hyaline spot and a greenish-yellow, semi-transparent, postdiscal spot on the hindwing; the submedian area of the forewing and the cell of the hindwing are greenish-yellow; fringes analwards white. Beneath the hindwing and a very large subapical spot of the forewing are yellowish-green, the hindwing with black veins, the cell in the lower half and the anal fold broad black. Colombia to South Peru.


The reverted antennal apex is very long. Hindwing at the anal angle very much prolonged, body very robust; middle tibiae in *phidon* spined, in the other species bare. The 3' shows a long stigma extending from the rise of the upper median vein to the middle of the inner-marginal vein. Several species are without it.

*Th. phidon* Cr. (191 b). Above black, basally and on the body metallic bluish-green with 3 large, white, discal hyaline spots and sometimes a small submedian spot. Beneath red-brown, base of costal margin on the forewing and base of hindwing white; the discal spots of the forewing are broadly connected with the white anal area. Panama to Colombia, Guiana, Brazil.

*Th. peratha* Plotz (191 b) is above almost quite metallic greenish-blue, on the forewing with a very large, bipartite discal spot, the lower distal apex of which almost touches the margin. Beneath somewhat lighter more brownish, the anal part of the forewing broad white, the cell bluish-green, palpi beneath dark ferruginous-brown. Bahia.

*Th. luda Hbx.* (= *hundurensis* Mab., *nealus* Plotz) (191 c) has no stigma; the blue is less bright, the cellular spot large and double. Body beneath and legs beneath darker. Honduras to Guiana.

*Th. motion* G. & S. (191 b, c) has only 2 spots, one in the cell and one between the median veins, the submedian one being absent; below the apex there are 2 small subapical dots. The under surface is lighter, the anal angle of the forewing light, the hindwing is whitish at the base of the costal margin. Mexico.

*Th. bajula* Schs. Coloured as *motion* (191 b, c), with 2 semi-transparent white spots, that in the cell being distally gnawed out, parted by a fine line, the second extending below the cell-end to below the lower median vein, being prolonged below the latter to the distal margin. Base of hindwing with metallic blue hair. Beneath brown, the basal third of the costal margin of the forewing white, at the base with some metallic blue scales, at the apex strewn with yellow; at the anal angle there is a large white spot. Hindwing in the basal third of the costal margin white. Expanse of wings: 41 mm. Novo Friburgo.

*Th. phidonides* Mab. is perhaps only a form of *motion* (191 b, c) and resembles *bajula* from which it differs by the presence of 3 subapical dots. Beneath there is a bluish-white dot below the white costal margin of the hindwing. Ecuador.

*Th. joannisii* Mab. (191 c). The jet-black wings show a metallic greenish-blue reflection, distally to the scent-stripe with 3 hyaline white postdiscal spots in a straight line, the stigma itself being whitish, bordered with black and tripartite. Beneath the wings are suffused with purple at the apex, costal margin and disc of the forewing as well as in the disc of the hindwing, whereas here the costal and proximal margins remain black. Fringes white. Described according to a 3' from Panama (Chiriqui).

*Th. panimeron* Drc. is above uni-coloured deep indigo-blue, in an oblique light in the inner-marginal part of the forewing and the basal half of the hindwing metallic ultramarine-blue and opalescent green. Fringes white, towards the apex brownish. Beneath dark greenish-indigo, apex of forewing, and the hindwing with copper-reddish scales. Proximal margin of forewing brown, in the cell a metallic blue stripe; at the base of...
the median a greyish-brown, black-haired scale-stripe. Palpi and collar reddish-orange. From Bolivia (La Paz).

**Th. cinia Hew.** (191 c) resembles *molion* (191 b, c), but it is much darker and duller blue at the cinia, base, and the costal margin of the hindwing beneath is not white at the base; the δ exhibits long hair below the submedian.

**Th. braescia Hew.** is also very much like *molion*, but the bases of the wings are quite brown, without braescia. any blue nor subapical dots. Pará.

**Th. uridon Dyar** is above black, on the body and bases of the wings bright metallic blue; forewing *uridon.* with a white, distally pointed cellular spot. Beneath dark greyish-brown, the costal margins of both wings basally white, on the forewing an oblique white band, widened below, the ground-colour before and behind it darker; a subapical, bent, dark shade. Hindwing with bent dark median and postmedian bands. Expanse of wings: 49 mm. Mexico (Guerrero).

**Th. hyas Mob.** is above brown, at the thorax and bases of the wings metallic blue; the forewing *hyas.* shows 4 white hyaline spots beside the long scent-stripe; 2 dots in the cell end at the opposite edge each, two medium sized spots behind it, and a subapical dot. Fringes dirty yellow. Under surface red-brown, at the apex and distal margin of the forewing like; below the apex there is a brown band extending down to the lower median vein. The hindwing is like with 2 red-brown bands, one at the costal margin, the second in the middle; proximal margin and fringes are yellow. Expanse of wings: 43 mm. Cauca Valley.

**Th. cilissa Hew.** (191 e). Above black, body, basal half of forewing and almost the whole hindwing *cilissa.* metallic bluish-green; the forewing exhibits in the δ 3 white discal spots, in the φ only 2. Beneath light red-brown, the anal part of the forewing very broad white, the cell green. On the hindwing several green spots arranged band-like. Amazon.

**Th. nanea Hew.** (191 d as nanea) is above similar though much darker, the spots of the forewing smaller, hindwing without any green. Beneath the inner-marginal part of the forewing and the whole hindwing are deep blackish-brown with a violet reflection, almost without any marking; cell of forewing and the space behind it deep metallic greenish-blue. Palpi below orange. From Maranhão.

**Th. henricus Stgr. (= mardonius Macbr.)** (191 d) is above without any discal spots, uni-coloured *henricus.* blackish-brown with a blue body and base of the wings. Beneath brown, the forewing at the anal angle yellowish, the hindwing at the distal margin broad bright orange, the fringes ochreous. Panama.

**Th. aroma Hew.** (191 d) is above like *henricus,* but the fringes are grey. Beneath the forewing is *aroma.* broad whitish at the anal angle. The costal area is greenish-blue in the basal two thirds. Hindwing in the disc with a dark transverse band. Costa Rica to the Amazon.

**Th. seron G. & S. (= saron Mob.)** (191 d) shows on the dark brown upper surface 2 oblique post-seron. discal spots, the cellular spot is absent. Beneath besides with a submedian spot. Hindwing monotonously brown, at the base green. Fringes ochreous-yellow. Honduras.

**Th. aurifer G. & S.** (191 d). Above blackish-brown with a grey stigma. Forewing in the distal aurifer. half steel-blue with a double cellular spot and 3 large white postdiscal spots, above them 2 small ones and angularly to them 3 subapical ones. Under surface red-brown, forewing spotted as above; hindwing with 7 golden spots: one in the cell-end and 6 in a row behind it; the proximal margin is ferruginous-brown, the eyes are bordered with red-brown. Costa Rica.

**Th. theodora Ehrn.** we only place here on account of a certain resemblance to aurifer; it is described *theodora.* as a "Pamphila." Chestnut-brown with 6 yellowish subapical spots and 2 cellular hyaline spots, the upper being triangular, the lower quadraangular; a submedian, brownish, longitudinal patch, above it a golden yellow spot. Hindwing with 7 golden, oblong spots from the apex to the proximal margin. Fringes light yellow. Beneath as above, but instead of the subapical spots there is a broad white band tinted red-brown at both its ends: anal angle dirty white. Hindwing subcostally white, in the cell a black spot, instead of the golden spots a broad white band; anal part reddish-white. Expanse of wings: 48 mm. Venezuela (Shapure).

**Th. polles G. & S.** (191 c). Brown; on the median of the forewing a narrow cellular spot, 3 larger polles. ones obliquely behind it; 3 subapical, small, yellow hyaline spots. Under surface lighter, anal angle yellowish; hindwing grey with 3 indistinct, whitish discal spots. Nicaragua to Brazil.

**Th. placens Blr. (= laurens Mob.)** (191 c). Above dark brown with a cellular spot and 4 behind placens. it, the uppermost being very small; 2 subapical small spots. Base of wings and the hindwing almost entirely ferruginous-brown. Beneath purple-brown, bases of the costal margin and of the hindwing broad yellowish white, the anal angle ferruginous-brown. Panama to Colombia.

**Th. salius Cr. (= antoninus Latr.)** (191 c, f) is distinguished by the light violet basal area of the salius. hindwing, which is concavely defined towards the broad, brown marginal area, in the latter there are 2 or 3 small light spots. From Mexico through the whole of South America to Argentina and Trinidad. — In f.
matthiolus. *matthiolus* H.-Schäff. (193 a) showing a more intensely green reflection the marginal area of the hindwing as well as the basal area are darkened blackish-grey, both scarcely contrasting with each other. Colomibia.

Th. *longirostris* Sepp (= tegelonus Hbn.) (191 f) resembles *salius*; the cellular spot is much larger, C-shaped, the spot of the hindwing just as variable as in *salius* and it may disappear altogether. Very common from Mexico to Brazil and in Trinidad.

Th. *orusca* Schs. is above dark brown with a small semi-hyaline cellular spot, a quadrangular submedian spot, a large, oblique one between the median veins and 3 smaller spots above it; 3 subcostal punctiform spots; on the hindwing a subapical row of 3 yellowish-white spots. Beneath the forewing is brown, at the proximal margin grey, in the basal half of the costal margin Isabel-coloured; before the small subapical spots there is a reddish-brown spot, the apex is parted by a lilac stripe. The hindwing is at the base and proximal margin broad lilac, the basal part bordered by a light, inwardly curved line; costal margin apically olive-brown; before the proximal margin as far as the anal angle is a light brown area. Expanse of wings: 40 mm. Petropolis.

Th. *hermesia* Hew. (191 e) is undoubtedly a distinct species, in which the anal angle of the hindwing is more extended in a flap-like fashion. On the hindwing beneath the light yellowish-brown basal part very gradually, without a distinct delimitation, passes over into the violettish-brown marginal part in which there are 1 or 2 small light spots. Ecuador, Colombia.

Th. *fisheri* Hew. (191 f) is likewise a good species. Above little different from the preceding; the hairing of the body and of the bases of the wings is olive-brown; fringes of hindwing whitish. Beneath the costal margin and apical half of the forewing, as well as the hindwing with the exception of the anal angle, are of a peculiarly dull bluish-green with fine dark veins and thereby not to be mistaken for any other species. Colomibia, Rio de Janeiro.

Th. *chiomara* Hew. (191 f) resembles *salius* (191 e, f), but it differs by the apex and costal margin of the forewing and hindwing being reddish-brown except the anal angle. Panama to the Amazon.

Th. *anneta* Plötz (191 c) is above brownish-black with 2 white cellular spots, 2 larger quadrangular spots below and behind them, and 3 small subapical spots. The hindwing also exhibits 2 white spots behind the lower cell-end. Beneath the same, but at the costal margin and apex of the forewing and in the marginal area of the hindwing reddish-brown. Rio de Janeiro.

Th. *lesueuri* Latr. (= caesena Plötz) (191 f) differs above by a submedian spot of the forewing and only one postdiscal dot of the hindwing which, however, shows another one in the cell. Beneath on the hindwing the apical half of the distal margin is lighter violettish-brown. Brazil.

Th. *haworthiana* Siesm. (190 h). Above almost like *O. cynissa* (190 f), but on the body and bases of the wings deep metallic green and of a different shape of the wings. Beneath lighter, more violettish-brown; hindwing darker with 2 green transverse stripes converging somewhat towards the anal angle. From Brazil, apparently very rare.

Th. *ethoda* Hew. (190 h) is a very conspicuous insect; basal halves of the wings and fringes orange-brown, discal spots very large, yellow, also the hindwing with 3 postdiscal spots and one cellular spot. Beneath on the apically orange-brown hindwing there is a very broad, silvery white longitudinal band. Rio de Janeiro.

Th. *bisseta* Schs. Above dark brown with a long, light grey scut-stripe on the submedian. In the cell of the forewing there is a double, long, hyaline white spot parted by a dark longitudinal line; below it a large one, a small, distally concave one above it, and 3 small subapical ones below the costal margin. Hindwing light ochreous-brown, costal margin broad violettish-brown; at the cell-end a small light spot, 3 postdiscal ones behind it. Beneath dark brown, forewing spotted as above; on the hindwing the spots are more distinct, in the disc strewn with violet. Expanse of wings: 37 mm. Trinidad.

Th. *stupenda* sp. nov. (190 h). Above blackish-brown, hairing of the body and the base of the hindwing in a certain exposure to light with a green reflection. Beneath the bases of both wings are dark brown, on the forewing in the shape of a streak prolonged along the median and transverse vein; apical part somewhat lighter reddish-brown, between canary-coloured: on the hindwing 2 basal thirds are dark brown, the distal third being yellow; between the two colours in the disc of the wing 4 silvery white spots on the yellow ground; the middle of the distal margin is narrowly brownish. 15 from the Rio Aguaca (Colombian Western Cordilleras), taken at an altitude of 2000 m; in the Coll. Fass.

Th. *lotana* Blfr. (193 a) is above purple-brown, towards the base blacker and haired greenish as on the body. Forewing with a white cellular spot, 3 postdiscal ones and 3 subapical ones, hindwing with 2 pale yellowish spots and yellow fringes. Beneath the distal margin of the forewing is lighter. The hindwing is yellow, at the base, costal-margin and a subapical costal-marginal spot black like the proximal and distal bordering of the hyaline spots: an antemarginal, blackish band. Amazon (Tocantins).

Th. *xanthura* G. & S. (190 h) resembles *Rhithon antirracina* (185 h), but it has no scent-stripe, a longer antennal club and yellow anal-angular border of the hindwing; the yellow as of a very variable extent, changing from a narrow yellow marginal line to a large yellow anal spot. Under surface reddish-brown, the discal area of the forewing as well as the proximal margin blackish-brown, behind the cell tinted purple, the distal margin analwards narrowly yellow. The hindwing is in the middle of the cell broadly purple, at the distal margin and anal angle broadly yellow, the submedian fold-striped blackish-brown; fringes of hindwings yellow. Honduras, Panama, Colombia.
196. Genus: Alera Mab.

Palpi and antennae as in *Thracides*. Apex of forewing somewhat stunted, distal margin running straight down to the middle radial vein, then very oblique to the anal angle; the two lower subcostal veins forked. Posterior tibiae with long hair.

**A. furcata** Mab. The very long, blackish-brown forewing shows in the middle an oblique band of forewing beneath blackish, apex lilac-white. Hindwing at the base greyish-yellow, otherwise brownish-violet with a lighter part at the distal margin. Body above metallic blue. Expans of wings: 56 mm. São Paulo.

197. Genus: Perichares Soldr.

Antennae long with a very long club and very long apex. Veins not different from the usual veins. Hindwing prolonged at the anal angle. Body strong; middle tibiae with short spines. The ♀ exhibits a strong scent-scale stripe from the rise of the upper median vein to the middle of the submedian.

**P. corydon** F. (= phoeon F., doloris Reak., adela Hew., marmorata Soldr.) (192 a). This very common and widely distributed species is above brown with yellow hyaline spots, and beneath in the apical part of the forewing and on the hindwing marbled lilac; fringes distinctly speckled. Abdominal end beneath ochreous-yellow. From Mexico to Brazil, in the Antilles, Cuba, Jamaica, Hayti.

**P. tripuncta** sp. nov. (191 g) is above dark brown, at the cell-end above the median a narrow hyaline spot, below it and distally to it a V-shaped one, above it another small, quadrangular one. Beneath somewhat lighter, hindwing brown without any markings. Described according to 3 ♀♀ in the Coll. Seitz from Honduras and Southern Brazil.

**P. heroni** Kaye. Above deep chocolate-brown, at the apex of the forewing narrowly white; in the cell a yellow spot strangled in the middle, below it 2 wedge-shaped spots; behind the cell-end another small, yellow, punctiform spot. Beneath the apex of the forewing and the costal margin are reddish-lilac, the rest dull black with the yellow spots. Hindwing reddish, suffused with brown, with 2 small yellow postdiscal dots. Expans of wings: 48 mm. Trinidad.

**P. trinidad** Lieut. (192 a) differs so much from *corydon* (192 a) with which it was confounded, that we must better consider it to be a distinct species, at least as an especial insular form (from Cuba). From *corydon* it differs by only 3 spots of the forewing, a hook-like bent spot in the cell and 2 behind it. Fringes speckled; beneath not different from *corydon*.

**P. agrippa** G. de S. (191 g) is blackish-brown, at the base green, the stigma grey; 3 postdiscal white-hyaline spots, a transverse one between the median veins and a smaller one behind it, before in the cell a long, oblique, curved spot. Beneath somewhat lighter, costal margin of forewing apically lighter whitish; hindwing scantly dusted with grey, fringes ochreous. Nicaragua.

**P. lotus** Bl. (192 a). The ♀ is blackish-brown, fringes of hindwing whitish ochreous. Body and bases of wings green; in the cell of the forewing there is a large, yellowish, distally concave spot, a triangular spot behind it, stigma grey. Beneath the same, apex of forewing, and hindwing marbled lilac-grey. The ♀ has white spots, beside the cellular spot a large one between the median veins and one small spot each below and above it. Mexico, Panama, Colombia, Venezuela, Ecuador, Trinidad.

**P. luscinia** Plotz (192 c) resembles *corydon* (192 a), but differs by the absence of the white spot of the forewing above the submedian and by the hindwing beneath, where the dark spots flow together forming transverse shades which rest almost rectangularly on the submedian fold. South Brazil, known from the Colony of Blumenau in Sa. Catharina.

**P. lindigiana** Fldr. (= colenda Plotz) (191 f) is very easily recognizable by the broad orange proximal margin and anal angle of the hindwing. Forewing with 3 large white discal spots which are beneath prolonged to the costal margin. Apex of forewing, costal margin, and the hindwing lilac, mixed with brownish, with 3 brown transverse bands and a broad similar marginal band, Fringes of hindwing at the apical part yellowish-white. From Colombia and Venezuela.

**P. crotona** Hew. (= elisa Plotz) (191 g) has above 2 very large yellow discal spots and one smaller one, which are situated close together; above the submedian there is mostly yet a yellowish longitudinal patch which turns a large white spot on the under surface, extending almost to the proximal angle. Hindwing violet with large brown spots and a broad brown margin. Colombia, Brazil.

**P. anitta** Plotz (192 c) is rather similar to *corydon* (192 a) above, but in the apical part of the forewing there are 5 or 6 minute hyaline spots. Beneath the hindwing is uniformly coloured lilac-grey, only the cell and anal lobe are filled up with dark brown and before the margin are some narrow, small internerval spots. From Brazil.
P. butus Plötz (192 b) is blackish-brown, towards the base and on the body green, with a small yellow cellular spot, a subapical spot and one behind the lower cell-angle. Beneath the hindwing is dark green with black dentate bands and spots, at the distal margin and proximal margin violetish-grey; on the forewing the cellular spot is enlarged and there is a green spot before the subapical spot. From Surinam.

P. triplaga Sch. is above dark brown, on the body and bases of the wings metallic dark-blue; in the cell of the forewing there is a quadrangular, hyaline yellow spot, a triangular one between the median veins and a smaller quadrangular one above it; fringes at the anal angle yellowish. Hindwing unmarked with yellow fringes being dark brown at the anal angle. Beneath the same, above the cellular spot there is a yellow costal-marginal one; from the cell-end to the apex dusted with lilac. Hindwing at the costal margin, base and two thirds of the proximal margin light brownish, behind it dark brown, growing lighter towards the distal margin, before the margin with a lilac nebulous band. Expanse of wings: 49 mm. Castro (Paraná).


Distinguished from Perichares by the broader, round shape of the wings, on the forewing a less oblique discocellular. Stigma the same, very distinctly developed.

T. sergesius Clerck (= sinon Cr.) (192 b). Above dark brown, on the body and wings basally haired ochreous. Forewing with a cellular spot, 3 postdiscal and 3 subapical spots; hindwing with a small, round hyaline spot behind the cell; fringes orange-ochreous. Under surface suffused with red-brown, analwards on the hindwing before the fringes narrowly orange. The ♀ has much larger spots and one submedian spot besides, which may occasionally also occur in the ♂. — f. adjunctus Plötz (192 d) is above and beneath much darker. Mexico to Brazil and Trinidad.


As the name indicates, the genus contains exact copies of the genus Sarbia Wts., from which, however, it is separated by the veins and very distinctly by the structure of the antenna the club of which is not reverted like a hook, but stretched forward like a fusiform knob. The larvae are quite different, too. All the species known live in Brazil and Argentina.

P. phaenicola Berg. (193 a) is such a true copy of Sarbia pertyi or spixii (164 f) flying in the same district that it is impossible to distinguish them in the open air. Both species have the same size, red ends of the bodies and the yellow, Y-shaped maculad bands in the forewings. They chiefly differ by the patagia showing in the Sarbia a lemon-coloured, in the Pseudosarbia a red middle streak. Besides phaenicola has the head and collar as scarlet as Sarbia, but the end of the abdomen is decidedly fiery red or miniate. — The larva is unicoloured green, also the head which shows a shaggy yellowish-green haired face. The thoracic segments of the larva are also bristly haired. South Brazil and Argentina.

P. elana Plötz (192 b as elana). Above black with white fringes, a tripartite discal spot and a quinquepartite subapical spot of the forewing and a white postdiscal band of the hindwing; apex of abdomen white. Beneath the same, but the hindwing shows yet a yellow longitudinal band above the median, and the discal spot of the forewing is continued yellow to the costal margin. From Brazil (Chapada).

mitella. P. mitella Plötz (192 c) is very much like elana, smaller, of a more brownish ground-colour; fringes and the band on the hindwing are more yellowish, the latter beneath quite yellow and continued almost equally broad to the costal margin; the yellow longitudinal ray is absent. Apex of abdomen beneath ochreous-yellow. Brazil (Chapada).

200. Genus: Pyrrhopygopsis G. & S.

Antennae and palpi shaped as in Perichares. Cell of forewing attaining not quite two thirds of the length of the forewing; the middle radial vein at the base very much bent down and rising near the lower one. The genus is placed to the Hesperini by Mabille, but as the authors quite correctly recognized, undoubtedly belong to the Pamphiliinae in the propinquity of Thracides and Perichares. In the exterior some species entirely resemble the Pyrrhopyge (p. 837—840, t. 162) from which they are immediately discernible by the antennae.

P. socrates Mén. (165 b, c) entirely resembles a Pyrrhopyge, above black with white fringes; head and anus red. Beneath the apical half of the forewing and the larger costal-marginal half of the hindwing except the black inner-marginal part are bronze-green with black veins. Brazil.

oratus. P. oratus Drc. (= aviola Mab., socrates Stgr.) (165 c) is above lustrous steel-black; beneath like socrates, but the basal area of the hindwing broad white. Head, palpi and anus red, fringes white. Panama to Peru.
P.  igniculus  Drc.  is closely allied to the preceding species from which it differs by the reduction of igniculus.

the white basal area on the hindwing beneath, consisting only of a white spot above the costal vein and some white scales at the lower edge of the cell. From Peru (Pozuko).

P.  caninus  Drc. is likewise closely allied to oratus (165 e), but coloured lighter, with a white border caninus.

of the hindwing before the white fringes. Beneath the costal margin is white from the base to behind the middle of the cell. Head, palpi and apex of abdomen red, like the anterior hips and pectoral hair-tufts. Colombia (Rio Meta).

P.  tenebricosa  Hew. (165 e) likewise greatly resembles the preceding; above coloured the same as tenebricosa.

the preceding. Beneath of a more yellowish tint, with a yellowish basal area of the hindwing as far as the cell-end, gradually passing over into the bronze-green tint, being not so distinctly defined as in oratus (165 e). Shoulders red-brown. Peru.

P.  lugubris  Drc. Above uni-coloured jet-black with white fringes which, towards the apex on both lugubris.

wings and at the anal angle of the hindwing, are smoked grey. Beneath both wings are dark green, with black veins, the proximal margins on both wings blackish brown. Head, palpi and legs are black, posterior tibiae and sides of the chest with red-brown hair-tufts, abdominal end likewise red-brown. Bolivia (La Paz).

P.  subvirescens  Schs. Above bluish-black, fringes of the preceding apically brown, analwards whitish, subvirescens.

fringes of the hindwing yellow. Beneath olive-green, with black veins, on the forewing the lower half of the cell and the proximal margin as far as the upper median vein are bluish-black, on the hindwing the inner-marginal part. Palpi red except the black terminal joint; the last 3 abdominal rings and the anus are red. Expanse of wings: 43 mm. Castro (Paraná).

P.  quispica  Plötz (= reedii Weeks) (165 e) differs from the preceding by the ground-colour above quispica.

being more brownish-black, and the fringes orange-red or yellow. Beneath as soerates (165 b, c). Peru and Bolivia.

P.  camposa  Plötz (166 b, c) is above greenish steel-blue with whitish fringes and red anus. The camposa.

under surface is of a bright green, the costal margin of the foregoing yellow, the proximal part black; the middle of the hindwing is crossed by a broad black band, the inner-marginal part is likewise broad black, towards the base with a green spot in it. Brazil.

P.  maravilha  Foetterle (165 b as camposa) very much resembles camposa, but easily discernible by maravilha.

red shoulder-covers and beneath the absence of the yellow costal stripe of the foregoing; the colour of the hindwing is more golden yellow, and in the steel-blue inner-marginal part there are 2 oblong spots of the ground-colour. South Brazil.

P.  cleanthes  Latr. (165 d as cleanthus). Above steel-black with 2 white discal spots, and on the cleanthes.

hindwing white fringes being red at the anal angle. — f. apicalis H.-Schäß. is only a form of it with very small apicals.

spots. Brazil. — f. romula  Drc. (165 d) probably also belongs here to and has larger, confluent, white romula.

discal spots. Colombia.

P.  telmela  Hew. (192 e) has a much more extensive white discal band, since beside the spots of telmela.

the preceding there are yet a quadrangular cellular spot and a submedian spot; in addition often yet a distally remote 5th spot and a subapical one; these forms belong to f. ochrope  Plötz. Brazil (Pará).

P.  xanthothrix  Mab. Sooty black with a violet reflection, forewing at the base lighter. Fringes yellow, xanthothrix.

at the apex of the foregoing and anal angle of the hindwing blackish. Under surface as in the following agaricon. Shoulders anteriorly bordered with red, bases of palpi spotted red; the two last abdominal rings are margined with red, abdomen laterally spotted red. Expanse of wings: 55 mm. Peru (Huayabamba).

P.  agaricon  Drc. (161 a) is above dark purple-brown, body and basal third on both wings tan-coloured, agaricon.

Beneath golden lustrous olive-green, with black veins, in the proximal part of the forewing and at the proximal margin of the hindwing brownish-black. Colombia.

5. Subfamily: Megathymini  Mab.

We append here this group of very much deviating species to the Hesperids, in order not to conflict with the opinions expressed in the works we have hitherto followed in general (especially Mabille's Catalogue of the Hesperids andWytsman's Genera Insectorum), which might prejudice the utility of both works. We remark, however, that the Megathyminae have, especially of late, been often quite correctly regarded as a separate family. A work as the „Macrolepidoptera of the Earth“ serving essentially a practical use has its main point more distinctly there where the single groups are to be inserted than in the rank that may be attributed to the single groups. We therefore do not try to correct Mabille.

The head of the Megathyminae is much smaller than otherwise in the Hesperids. Antennae thick and fixed with a stout club and a very short point on it. Body long and stout. Middle and posterior tibiae with a pair of very short terminal spurs. Veins as in the last genera: the middle radial vein of the forewing at the base very much bent downward and nearing the lower. Peculiar, hairy insects externally reminding us of the Castnia. The larvae, as far as they are known, live in the interior of plants.

From the following genus only separated by 3 insignificant, morphological differences: the so-called pulvillus or „cushion“ on the ventral side of the last tarsal joint is strongly developed, forming a globular convexity. The 2nd palpal joint is long and uniformly narrow, the 3rd very short, conical, somewhat pointed; the basal covering of the palps consists of large, triangular scales, being towards the apex entirely covered by the long, rough hairing. On the 3 forewing the upper median vein is at its base not bent down and nearing the lower. Only 1 species:

A. hesperiaris Wkr. (= kollari Fldr., agavis Blasquin) (193 e) is a large, monstrous insect very much like a Castnia. Above light fox-coloured, postdissally somewhat paler with 3 whitish subapical hyaline spots, a black marginal band, postmedian subcostal spots and a dentate antemedian oblique band; hindwing with a blackish-brown border, an indistinct nebulous band at the cell-end. Beneath the hindwing is grey, with thick whitish hair and 2 or 3 indistinct blackish dentate lines; forewing lighter yellow than above. Mexico. The larva lives in the stalk of Agaves and is eaten by the Indians.

2. Genus: Megathy mus Seldr.

The genus contains somewhat smaller, not so monstrous species. The wings in several species are covered with hair partly standing vertically on the surface of the wings. The pulvillus is not developed, only forming a short, conical projection between the terminal claws. The 2nd palpal joint is short and obtuse, the terminal joint not conical, obtusely rounded off; the scaling of the palpi is only intermixed with few hairs. The upper median vein is in the 3 very much bent downward at the base and nearing the lower. The 3 fly wildly and timidly about in the hot sunshine on sandy, hot places.

M. neumoeigeni Edw. (= aryxna Skinn.) (193 b) above entirely resembles cofaqui, but on the forewing it exhibits yet a spot above the middle of the submedian, and instead of the marginal band a more proximally removed antemedian band. Beneath the same, though greyer. Arizona, South California to Mexico. — f.

M. aryxna Dyar is extremely similar to the preceding and often also only differs by variable characters, so that only a precise examination of the genitals affords a guarantee; the distal valval end is shorter and obtuser than in neumoeigeni, the processus basalis at the beginning much broader, the distal spinning of the penis quite different, consisting only of 3 or 4 minute teeth at the distal edge, in neumoeigeni on each side with a row of 5 or 6 teeth. aryxna is generally much larger, the spots are mostly larger, flown together to a band, the 2nd spot from the the proximal angle is proximally wedge-shaped; the yellow basal haring is much less extensive; the under surface of the hindwings is darker, less abundantly strewed with white. From South Arizona.

M. polingi Skinner looks quite different, more like A. hesperiaris (193 e) and is above bright orange-brown with a black distal margin being broader at the apex, a large black subapical spot and a large, irregular discal spot. Hindwing bordered with black, before it with a broad, orange-brown band not quite reaching to the costal margin nor to the proximal margin. Basal areas of both wings orange-brown. Beneath the yellow colour is subapically whitish. The hindwing is grey with an irregular whitish band parallel to the costal and distal margins; in the middle of the wing 2 whitish spots, the lower being much larger. Expanse of wings: 44 mm. Arizona.

M. yuccae Bd. & Lec. (193 c, d) is a larger species; above brown, basally more intensely haired olive, with a yellow cellular spot and a band of 3 spots being removed far towards the margin and analwards; 3 or 4 subapical and farther distally below them 2 more whitish hyaline spots. In the 3 the postdiscal band is much broader and united with the cellular spot, with another submedian spot, and the hindwing shows a yellow postdiscal band. Fringes of forewings grey, of hindwings yellow, speckled darker. Beneath more grey, on the forewing apically and the whole hindwing strewn lighter, the hindwing with a large, light costal-marginal and anal-angular spot. South Carolina, Georgia, Florida. — The larva is bone-coloured with a lighter lateral and greenish dorsal stripe; it lives in Yucca and changes in an inwardly white-spun cocoon into a white pupa. — f. coloradensis Streek: (= navajo Skinn.) is a scarcely different, smaller, less dark form from Texas, Colorado, Arizona.

M. cofaqui Streek. (193 b) is easily distinguished from yuccae by a much broader, yellow discal band cohering with the costal spot, by a short, squat shape of the wings, and by 4 white spots on the hindwing beneath which is strewed with grey, one at the anal angle, 2 at the costal margin and one in the cell. Hitherto only one 3 seems to be known. Georgia; Florida.

M. ursus Poling seems hitherto only to be known in 2 specimens. Above brown with 3 yellowish-white subcostal spots and a band of 5 large orange spots from here to the proximal margin and a similar spot
near the cell-end. Hindwing without spots, with white fringes. Beneath the hindwing shows 2 white costal-marginal spots and 4 more in one line behind the middle. South Arizona (Pima County).

**M. streckeri** Skinner is very much like the preceding *ursina*, but of a black ground-colour and the *streckeri* marginal band of the hindwing is absent. Colorado, New Mexico, Arizona, — *f. texana* Barn. & Me D. (= *cofa- texana*, qui actu.) from South Texas differs little, the ground-colour being browner, the spots more orange-yellow and smaller.

**M. smithi** Drc. is above dark brown with light yellow spots, one in the cell-end, 3 subapical ones *smithi*, and a submarginal row of small spots as far as the proximal angle with brown and light yellow speckled fringes. The hindwing also shows a submarginal row of indistinct yellow spots, the fringes being here white. Hindwing beneath brown, at the proximal margin grey with 2 white zigzag lines from the costal margin to the proximal margin. Texas and Mexico (Guerrero).


**M. rethon** Dyr. (193 b, e). Black with a steel-blue reflection, on the forewing with but one minute *rethon*. white subapical spot, otherwise without marking. Fringes speckled white and black: hindwing from the direction of the distal margin somewhat bordered with white. Beneath the same, but with 3 minute subapical spots; hindwing struen with grey, especially submarginally in the shape of small spots and at the margin itself which is separated from the fringes by a black marginal line which is not visible above. The 2 has above in the cell-end a small light yellow spot and traces of a lighter, yellowish postdiscal band. Expanse of wings: 50 mm. Mexico (Guerrero).

---

### Alphabetical List

of the forms of the American Hesperidae with reference to the original descriptions.

*) signifies that the form is also figured at the place cited.

- *aberrans* Telem. Mab. u. B. Ann. Sci. Nat. Paris 18, p. 120.
- *aea*Butterly *Dyr.* Proz. U. S. Nat. Mus. 12, p. 44.
List of the American Hesperidae.


euphanna Bech. Mob. le Naturaliste 1888, p. 221.

List of the American Hesperidae.

The text contains a list of scientific names and references, likely related to taxonomy and entomology, indicating a focus on American Hesperidae or related species. The text appears to be a catalog or index, possibly from a scientific publication, detailing species, authors, and publication years related to the Hesperidae family in North America.
List of the American Hesperidace.

vesura Catta Plötz, Exot. Schmett. 29, Hesper. Tab. 612.*
vibex Thym. Bln. Zatr. Exot. Schmett. Fig. 685.*
videaces Pot. Mab. Genera Insect. 17 d, p. 64.
virgatus Teleg. Mab. le Naturaliste 1888, p. 170.*
vidicaces Ser. Plötz, Reise Novara Lep. p. 516, Tab. 71.*
vridiceps Nic. Mab. le Naturaliste, 1889, p. 99.*
vitreus Phana Cr. Papill. Exot. 4, Tab. 365.*
vucanus Jem. Cr. Papill. Exot. 3, Tab. 245.*
vulpina Oenid. Fldr. Reise Novara Lep. 3, Tab. 72.*


xantholeuca Dalla Plötz, Exot. Schmett. 29 Hesperid. Tab. 816.*
xantholeuca Pot. Mab. le Naturaliste 1888, p. 242.*
xantosiesta Tir. Plötz, Exot. Schmett. 29, Hesperid. Tab. 562.*


zalates Fig. G. u. S. Biol. Centr.-Amer. Rhop. 2, p. 541.*
zeppe Cop. Plötz, Exot. Schmett. 29, Hesperid. Tab. 1397.*
Additions to Vol. V.

Papilionidae.

Having transferred the newly described forms since the publication of the work to the supplementary numbers, we add here some statements about the Papilio which have been dealt with on p. 12 to 44 of this volume.

_P. ascarius_ (p. 12). The larva is blackish-brown, powdered with grey, which is on the dorsum condensed into fine markings. The fleshy cones are very dark red, some (in front and behind on the larva) pale yellow. It takes the species from its oviform state 3 to 4 months to develop into the imago. (Ferreira d’Almeida).

_P. perhebas damocrates_ (p. 13). Larva stout, dark earth-coloured brown, the fleshy cones changing from yellow to red-brown; some of these cones, as well as an oblique band extending from the foremost ventral feet towards the dorsum, bone-coloured. On Aristolochiae, Asarum etc. Pupa with a widened abdominal part, an obtusely bituberculate head, green. I very frequently captured the imagines at the end of January and in February on blue-blossoming bushes in the Agricultural Park of Palermo near Buenos Ayres.

_P. agaeus_ (p. 13). According to Ferreira d’Almeida, the dull or lighter purple eggs are deposited on the leaves of Aristolochia rumifolia; larva in its adult stage similar to that of _nepholion_, reddish-brown finely dusted with a yellowish ash-brown, so that irregular markings across the dorsum are produced; with numerous red-brown, on the 2nd, 7th and 10th rings yellow fleshy cones across the dorsum and similar ones laterally, of which those on the 1st, 6th and 10th rings are yellow. A yellow lateral band ends at the dorsal cone of the 7th ring. Pupa green with a grey (ventrum) or yellow (dorsum) tint. The imago, though living in the forests, frequents also gardens on account of the food-plant; it flies singly all the year round, but near Rio it is of frequent occurrence especially from November till January and from May till September.

_P. quadratus_ (p. 14; _♂_ t. 2 b). In the meantime the _♂_ has also been communicated by A. H. Fassl. The length of the forewings is 33 mm, and thus it is one of the largest _♀_ of the _aeneus_ group. The white square spot is about twice as large in both the specimens taken, as in the _♂_. The upper surface of the _♂_ is much darker than in the _♀_ of the form _spoliatus_ Stgr.; the distal half of the forewing somewhat lighter, the black veins in it well visible; along the costa of the forewing beneath runs a greyish-white longitudinal patch extending almost into the apex. Hindwing with a roundish, undivided, yellowish-white discal spot about twice as large as in the _♀_. Red oval spots of the dorsal side of the hindwing likewise present, somewhat lighter red and larger than in the _♀_; the same is the case with the red collar and the red spots, beneath on the chest and ankles. — Also all the _♀_ captured quite constantly exhibit the square angular spot of the forewing, to which the species owes its denomination.

_unimacula._

_P. childrenae unimacula_ J. & T. This form originates from Ecuador. From the typical _childrenae_ the _♂_ differs by a reduction of the green cellular stripe on the forewing; on the hindwing the red longitudinal spot is shorter and ends more remote from the margin. The _♀_ forewing exhibits a single light spot behind the middle of the submedian space. On the hindwing the red colour is very much reduced.

_dilatus._

_P. catarina dilutus_ J. & T. From Ecuador is based upon a _♂_ which is of a smaller than normal size and has shorter spots on the hindwing, the distal spot being pale pink.

_P. nepholion_ (p. 18). The orange eggs are deposited on Aristolochia brasiliensis; the imagines fly in Southern Brazil particularly from January till May and from the end of August till December. (Ferreira D’Almeida).

_P. zacynthos_ (p. 19). Larva dark brown, covered with grey, the light colouring being arranged into longitudinal strokes. The fleshy cones are anteriorly and posteriorly light yellow, on the middle rings mostly reddish-brown. The species, according to Ferreira d’Almeida, has up to 5 generations a year near Rio. Pupa similar to that of _P. agaeus_; the eggs are singly deposited on Aristolochia rumifolia oblonga.

_P. polyplomas_ (p. 20) flies all the year round in South Brazil, but more frequently in May and October till December; the eggs are not singly deposited, but mostly some at one place or near Aristolochia brasiliensis. (Ferreira D’Almeida).

_P. polystictus_ (p. 21). According to Ferreira d’Almeida the larva of the form _janira_ is grey, tinted yellowish, the fleshy cones are red, tinted dark; it flies more on grassy plains, not on marshy soil, as most of the other lepidoptera feeding on Aristolochiae.
P. lyceidus. Specimens from Ecuador, in which the bone-coloured subcostal spot of the hindwing is joined by a series of some more minute internerval spots, were named adiatus Niep. — A corresponding form of belus, exhibiting such small internerval spots of an orange colour, the occurrence of which is mentioned already by Jordan on p. 21, is named chrysomaculatus Niep. Ecuador. — Another belus-form is: ingenanus Dyar from Mexico.

P. zelionon (p. 24). The larva may look almost exactly like that of machaon; but the black colour of the bands may also flow together in such a way that the green disappears almost entirely and that the larva then shows the thick red dots on an entirely black ground, like in Parasa. apollo.

P. lypephoron v. delunensis is a form denominated by Niepelt, in which the submarginal lunae of the hindwings are still more reduced than in hippocrepis Fdr. Brazil.

P. androgous (p. 26). Fassl bred on the Rio Xingu from larvae having been taken down from orange-trees, after a 100 days' pupal stage androgous, similar to those of epipara G. & S., which, however, did not show any trace of the yellow spot in the forewing; whereas Niepelt describes them mira Fassl.

P. ancisiades (p. 28). The larva in its juvenile stage lives gregariously and only later on forms the well-known „mirrors“ of numerous larvae being crowded together on the trunks of orange-trees. In their adult stage they are greenish-brown with numerous chased-like, intertwined markings on the dorsum. Papuca brown, in front and behind often tinted greenish. According to Ferreira d'Almeida, the pupa in Southern Brazil often rests for 4 months, during the whole winter. — According to Fruhstorfer (Entomol. Rundschau, 1915, p. 70), specimens from Trinidad (the island) exhibit enlarged white spots on the forewings, as large as in chiasides (10 d), though removed more protracted. Fruhstorfer introduces for it the name philastrius.

P. hectorides (p. 29). Larva in its adult stage brownish with yellowish-brown and blackish markings and whitish, irregular lines and strokes; on the sides of the thorax a light lateral band tinged yellowish or pink; in the shape similar to the larva of thos (Ferreira d'Almeida). The imagines are particularly common near Rio in April and May and in August and September. Specimens from Paraguay (= agoridus Fruhst.), show in the Z larger yellow crescents on the hindwing, whilst the 9 has narrowed red crescents on the hindwing and a coherent white band on the forewing. — lyreto Fruhst., are specimens from Rio Grande do Sul and Sa. Catharina with a broader, mostly hued yellowish band on the 9 forewing; in the hindwing also the white spots are smaller.

P. zygurus (p. 31). Specimens from Pozuzo in Peru, according to Fruhstorfer, differ from typical specimens from Colombia and Venezuela by the median spots being also in the costal part of the wing orange, not light yellow; the antennal marginal spots are larger and lighter yellow (= chrysoxanthus Fruhst.).

P. bactus belsazare Niep. 1 9 from Cuscarí in Ecuador. From bactus typicus chiefly different by the yellow spots filling up the radial spaces on the forewing being parted by dark embeddings, and by the hindwing showing an orange band in front of the black marginal band.

P. neyi Niep. resembles zygurus (11 c), but it has rounder forewings, in the apical half of which the neyi. bone-coloured spots are much smaller than in zygurus; in the hindwing the dark spots being situated around the lower cell-wall are combined to a black cloud. Ecuador.

As the 9 of P. trapeza R. & J. Niepelt describes a specimen of this species from Ecuador, which, however, shows entirely male wing-contents (on the figure in „Lepidoptera Niepeliana“ tab. XII) and according to Jocox and Talbot is also in fact a 9 in which the light forewing and the red spot of the hindwing are somewhat reduced. The 9 of trapeza being unknown to me is presumably on the contrary more variegated than the 9. — concoloratus J. & T. are specimens from Balzanamba in Ecuador, in which both sexes are without the spot of the forewing.

P. bitias. As v. marcus Niep. a form is described with a more deeply dentate margin and a broader band of the hindwing beneath; from Pozuzo (Peru).

P. cacicus peruiana J. & T. approximates the form ines R. & J., but the reddish (in the nominal peruiana. form bone-coloured) discal band shows the spots in the cell 2 and 3 prolonged as far as the cell. Of the post-discal spots only the lower ones form 5 small crescents, whilst the upper ones are only oblong, not sharply defined. It replaces the form zulchachi in Peru. Described according to 9 from La Merced.

P. zynias xiathus Niep. The 9 shows the red spot of the hindwing proximally prolonged; from zinathus. Ecuador. Niepelt figures as the 9 of this form quite a similar lepidopteron with decidedly male wing-contents, in which the red spot of the hindwing is reduced to a faint trace at the proximal margin above the anal angle; this is presumably likewise a 9.

P. euryleon. A 9 from Ecuador is described flying together with the form anatius R. & J., which scarcely differs from it; the margin of the hindwing is strongly dentate, behind the cell 3 red spots, before the margin a row of narrow white spots. The greyish-green colour of the forewing is extensive. Niepelt deno- minates this form punctata.

Niepelt figures the 9 of harmodius zeinales Hev. with longer red spots of the hindwings, being otherwise similar to the 9 of androna (13 d). — As jarbas Niep. a 9 is described with a large postmedian white discoidal spot of the forewing; from Ecuador.
**Pieridae.**

**Neophasia menapia suffusa** Wr. is a more intensely marked form from the western coast of North America; especially the hindwing beneath shows broader markings of the veins and reddish marginal spots.

As to the most interesting biology of *Eucheria socialis* Westw. (18 a, 194 a) the following is known. „The small, bluish-white eggs are of an oblong shape and are deposited on the leaves of Madrono (Arctostaphylos); it has also been observed that the eggs were deposited within the larval nest, but this is only the case if the insects, for reasons explained further below, could not find their way out of the nest. The larva is of a dark coffee-brown colour and clad with longitudinal rows of short soft hairs of white colour, which, however, are not nettle-hairs. The larva attains a length of 25 to 30 mm. Of the twelve not strongly marked segments the first thoracic ring and the anal segment are mostly somewhat darker. The head is black. The larvae feed at night and, like the processional caterpillar, they come in the evening in long rows, one behind the other (not in double rows), out from their nest into which they return again towards the morning and where they spend the whole day. „The nest is a solid web, not unlike thick parchment which it resembles also in the colouring. It is about 20 cm long, of a somewhat oval shape, narrow at the apex which forms something like a neck and is fastened on a thin branch, without being able to swing to and fro, because it is built at the junction of two branches running along the neck of the nest. On the whole, this nest very much resembles those of French wasps, e.g. the wasp Chartaria. On making a longitudinal incision from the bottom of the nest, a peculiar sight is offered by no less than a hundred pupae being fastened at its interior upper surface on the upper half of the nest, as well as by the lower part of the branch passing through the neck of the nest. The size of the nest and the number of larvae and pupae therein are very variable. One may find small colonies of 4 to 6 specimens and then in all sizes with up to 100 occupants and more. The ingress is always at the deepest place of the nest towards the soil. This is of the greatest importance for the hygienic conditions of the colonies, since on the one hand the dead insects and excrements can easily fall out of the nest, and on the other hand dampness and rain cannot enter, so that in this way the mildew diseases spreading havoc among the larvae are avoided. There are often also bags found with two entrances.

Humboldt denotes these larval nests of *Euechiera socialis* as „natural paper, and they have indeed also been used by the Aztecs as paper before the Spanish Conquest.

One question had not been cleared up to the present day: in what way the developed imago is able to get out through the narrow opening of the nest. Some asserted that the imago emerges when its wings are still soft, whilst others advance the opinion that the copula and oviposition takes place in the interior of the nest and the imago would not at all fly in the open air, and others again thought the imago to be able to get out owing to the wings being specially shaped. It has, for instance, been observed that from among those that had been bagged not one imago came out into the open air, and that, on opening the nest, it was found filled with developed imagines which were partly already in copula (Rob. Müller, Mexico). The same is also the case in nature. A bag having been brought home after the flying-time of the imago, after having been opened showed quite a number of fully developed imagines lying dead on the ground of the nest, whilst a much greater multitude — judging from the number of pupae crept out — must have got into the open air.
Certainly the imago does not leave the nest, when its wings are still soft. It is only the insect being ready to fly that goes out of the bag. The oblong, peculiarly narrow shape and the somewhat proximally indented costal margin of the forewing enable the imago to appress the wings lengthwise close to the body and in this way to pass even narrow openings. Nevertheless a great number of imagines cannot get out of the comparatively narrow holes of the extremely tenacious nests. But now we must consider that, at the beginning of the flying-time of the *Eucheira* in the month of May, the rainy period sets in with heavy showers, so that the larval web is turned by the water into a most flexible and ductile state, and the imago is in this way able to leave its prison. That this theory is correct is manifested in a great number of the bags by the outlets of the nests having been enlarged from inside, which was only possible by way of dampness. From bags not having been moistened only single imagines will be able to get out, and in this case the eggs are deposited in the nest and only the small larvae pass out into the open air, as has likewise been observed. The whole structure of the wings shows that the imago is but a very incomplete and lazy flier.

Of great interest were also the experiments with imagines having been bred to test their flying-power. The insects, on having been set free in the garden, exhibited a wearsome, unsteady and tottering flight of short duration and had evidently great pains to reach by and by the height of the garden-wall near by (R. Müller).

In May 1911 P. Bénard, on the Carboncillo Mine near Zacualpan in the State of Mexico, made the surprising discovery that *Eucheira socialis* regularly came to the electric arc-lamps of the mine at night (between 8 and 10 p. m.). We must remark thereby, that these lamps were in the immediate neighbourhood of extensive stocks of Madroño which always bear a great lot of bags of *Eucheira*. Bénard himself never observed lepidoptera in this district in daytime, as at any rate these specimens taken by him at night are the first flying *Eucheira* observed in nature, of which the entomologists and collectors known to me here are aware of. In my entomological practice I have often been able to observe Rhopalocera on electric arc-lamps at night, which is here in Mexico especially the case with Hesperidts, but they were always only single insects having been scared up, which appears to be out of the question with the *Eucheira*. At any rate this nocturnal flight explains the remarkable absence of the insect in daytime, and we find in this most interesting diurnal lepidopteron the fact being quite unique for a Pierid, that both the larva and imago exhibit entirely the habits of a nocturnal lepidopteron, so that we must regard this insect to number among the most interesting features of the copious and multiform lepidopteral fauna of Mexico and even of the whole world. That the local (Mexican) collectors have not noticed this nocturnal flight before, may be chiefly due to the fact that the arc-lamps were too far away from the woods and food-trees as to be reached by the *Eucheira* with their limited flying-power, and that here in the Valle de Mexico, as in many other districts, the lepidoptera have disappeared in the immediate neighbourhood of the settlements, since the pupae are eagerly collected by the native Indians and eaten as a delicacy."

(Carlos Hoffmann.)

As the figure on t. 18 a has been reproduced according to an old, faded specimen (fresh specimens were not to be obtained at that time), we produce the figure of a ♀ from a fresh specimen. In the structure of the veins of this species there occur extensive variations, in the subcostal and discocellular veins, which, however, are not confined to the single sexes, but are also found in one and the same specimen. Carlos Hoffmann also has ascertained an intense variability in the white marking, thus there occur ♀♀ with almost black hindwings, whereas the 5 ♀ ♀ ♀ ♀ ♀ exhibit slight differences in this respect.

*T. macrodice* Stgr. (18 c, d) is declared by Pedro Jørgensen who edited a monography on the Pierids of Argentina and the neighbouring districts to be a separate species different from *microdice* Bich. (p. 56), but owing to the lack of material the latter could not be figured. — *macrodice* also occurs in Argentina.

*T. orthodice* Weym. (18 e). Of this species Pedro Jørgensen also figured the ♀. It has a broad black margin of the forewing, into which the white border of the black sagittiform spots extends; the white veins of the hindwings are above and beneath rather broadly bordered with black, in a similar way as in *pyrrhoma* (18 d ; the forewing beneath exhibits no other marking but the fine black scaling of the veins. It also occurs in Argentina (Salta, Calammarca).

*T. demodice* Bich. has been found again by Pedro Jørgensen in South Patagonia and Fuegia. The figured specimens (194 a) are from Patagonia (Chubut).

*T. sagittata* Röb. (18 e) has been declared by Pedro Jørgensen to be a distinct species.

*T. joergensi* sp. nov. (194 a) from Ecuador (Bairs) is before me in a ♀. It resembles *sagittata* (18 e), *joergensi*, but it has much fainter markings on the forewing above, and the hindwing is not marked except a fine black marginal line and insignificant black scaling of the veins; the yellow lines feebly show through from beneath. The palpi are below in *sagittata* yellow and black, whilst in *joergensi* they are only black-haired, the antennae
in the latter being more intensely white-ringed than in the former, and in joergenseni the first two subcostal veins branch off at a greater distance from the end of the discocellular than in sugitata.

distincta.

**T. distincta** Jörg. (194 a) has been discovered by the author in the Aeznunija Mountains (Argentina). The upper surface of the 2 forewing is similar to that of maculicole (18 c), the upper surface of the hindwing is like that of the 2; the forewing beneath shows a submarginal row of black hook-shaped spots.

T. stagnudes Stgr. (194 a) was declared to be a distinct species by Pedro Jörgensen. The figured specimens which I owe to his kindness, are from Esquina Grande; the species flies in November and March, thus in 2 generations. — *immaculata* Rob. (18 c), according to Pedro Jörgensen, also occurs in Bolivia. — *punctoria* ab. *punctata* Jörg. differs from *immaculata* by the forewing being purely white and the hindwing slightly cream-coloured; the veins of the hindwing exhibit similar markings as the apex of the forewing, the yellow stripes of the under surface showing through; the black discal spot of the forewing is comma-shaped as in *orthodice* (18 e), but a little more bent, all the veins being fine black, in the apex there are triangular, black spots.

**marmorata**

P. monuste ab. *marmorata* Jörg. has yellow colouring at the apex of the forewing beneath, and beside the blackish colouring at this place of the wing also the same at the apex of the hindwing beneath. This race forms a transition to *orseis* in which, particularly in the female, there is mostly much dark marking on a yellowish or white ground.

**P. itaticayue** Foett. (19 d), according to P. Jörgensen, has likewise been found in Argentina. According to Zikan’s statement, it is merely a form of the extraordinarily variable *monuste* (p. 57).

gargara.

P. bunius *gargara* Frhbst. „A relatively small race much more approximating the forms of the Lower Amazon than its Brazilian allies. It may therefore be rather inserted in *phaloe*. There are now 22 before me with a much receding black border of the forewing and but insignificant grey dusting on the hindwing above, so that I presume that only the „dry season“ form is lying before me. The Boomerang of the forewing is rather narrow. A 2 is above almost white, another one almost entirely yellow. Patría: Matto Grosso. Under surface of hindwing yellow with a strongly parted discal brown band. Also here we must insert two more forms from the Coll. Stauber: *artaxata* subsp. nov. being allied to *phaloe* and *gargara*, but still smaller, beneath still paler than the Obidos-race, and the brown discal transverse bands of the hindwing beneath remarkably narrowed.

gerosa. It is questionable whether it is also a dry season form: Patría: Venezuela. (Type Coll. Stauber). — *gerosa* subsp. nov. 2 differs from that of *phaloe* from Obidos by the purely white discal region of the hindwing beneath and the more than twice as extensive and jet-black instead of brown transverse bands of the median and costal region of the hindwing. Patría: Amazon from Itaituba upwards. — *masinissa* subsp. nov. 2; Above with a broader black apex than the form figured by Grose-Smith and the Ecuador form. 2; beneath throughout pale straw-coloured with remarkably broad black circumcellular spots which are distally united like a band and extend up to the subbasal band. Patría: Bolivia, Garleff leg. Type in the Coll. Stauber.“

**pallida**

F. *pallida* Scudd., according to Wright’s figure, is a form (of *napi*) entirely unmarked in the male, whilst the female is only above very little marked. Western coast of North America.

**flava**

F. *flava* Wrc. from the western coast of North America, is a form of *sisymbrii* (19 c) being above and beneath light yellow.

**nelseni.**

F. *nelseni* Wrc. from the same region, according to the figure, seems to be a *beckeri* (19 c) exhibiting on the hindwing above black-hued veins and beneath submarginal dentate marking.

**calycr**

F. *calycr* Edw. is presumably a small, intensely marked form of *occidentalis* (19 c); from the western coast of North America.

**bryonae.**

F. *bryonae* Wrc. is a very much lighter form of the palearctic *napi bryonae* (Vol. I, t. 21 c). Western coast.

**castoria.**

F. *castoria* Reak. is a very light form of *napi* (vol. I, t. 21 b); western coast of North America.

**marginalis.**

F. *marginalis* Scudd. is apparently a small, but little marked form of *rapae* (19 b). Western coast. P. palliida Rob. (p. 61). This name having already been disposed of in this genus, I nominate this

**leucania.** subordinate species *leucania.*

P. pylotis Godt. (19 d) also occurs in Argentina (Corrientes) and *menacete* Bd. (19 b) in Buenos Ayres. About *P. lacte* Burn. from Argentina I am sorry not to be able to make any statements.

**dipaegana.**

Leptopholbia *dipaegana* Jörg. (194 b) from Argentina (Prov. of Catamarca, 1640 m) flies in April and May and in November and December on the blossoms of Oxalis and other insignificant plants. It is closely allied to *elone* (20 c); beneath less yellow than the latter, the marginal dots of the hindwing beneath scarcely noticeable, at the base no yellow spot, the anterior dot at the end of the discocellular only traceable.
Of *Perrhybris* _breva* Hew. (20 f) A. H. Fassl captured a neuter on the bank of the Rio Estanzuelo (East Colombia, near the small town of Villavicencio). The female (right) half differs from typical $\varphi$ by the median band being yellow in the distal half and by the subapical band being dusted with red; the red median band of the hindwing shows an admixture of yellow scales.

P. _pyrrha_ F. (p. 64), according to BURMEISTER, also occurs in Argentina (Missiones). Presumably one of the southern forms is meant by it.

_Pereute swainsoni_ $\varphi$ form. _albosignata_ Niep. The description runs as follows: the transverse band of _albosignata_, the forewing above and beneath of a pure white, basal spots of hindwing beneath white, the costal-marginal spot, being otherwise yellow, is here also white and basally shortened. Length of forewings: 32 mm. Brazil (São Joao).

_Archenias critius rubrosponsa_ Stich, from Ecuador (Macas) is a subspecies being almost monotonously _rubrosponsa_ black in both sexes; the hindwing above shows 3 small red discal spots and the under surface beside these 7 yellow marginal spots. — _regillus Fruhst._ (p. 67) has been withdrawn again by its author.

_Charonias eurytele aurantiaca_ Fruhst. „Smaller than _eurytele_ Hew. (21 c), the spot at the cell-apex and _aurantiaca_, the small transsculptural stripes reddish instead of yellow and almost extinct. _Patria_: Ecuador, exact habitat not stated, but presumably from the Pacific part of the Andes.""
Cat. cerberus G. & S. from Costa Rica which has remained unknown to me, has been described as follows: "♂ wings sooty, the usual white band (on the forewing broken up into spots) proceeds from the costal margin of the forewing behind the discal cell and extends to the proximal margin of the hindwing, almost disappearing fine (white) spots at the discal cell of the forewing, the usual row of submarginal and on the hindwing also marginal white spots; forewing beneath almost as above, the submarginal spots larger, with 5 yellow marginal lines, the discal bands of the hindwings running across the discal cell, parted by the veins, the other submarginal band distally deeply serrate, also parted by the veins, at the margin itself triangular and at the base of the wing white spots, between the veins small lines, that in the discal cell prolonged, the latter saffron-coloured like the marginal spots. ♀ hitherto unknown. We have but 1 ♀ of this species, differing from all the others known to us. It may be the most closely allied to tonymis Fldr. (22 f), but a comparison of the figures clearly exhibits the differences."

Cat. pinava (22 b), according to LATHY & ROSENBERG, is said to be boliviana Btlr.

Cat. vapina (p. 70), according to LATHY & ROSENBERG, is said to be synonymous with incerta Dogn.

Cat. philone (p. 71) which we figure on t. 194 c, is by no means identical with colia (22 b), as LATHY & ROSENBERG pretend.

Cat. hopfferi (22 c), according to LATHY & ROSENBERG, is said to be identical with pinava Dbl., but they do not state what they think the insect to be figured on t. 22 b as pinava; also in this case, if the said authors are correct, the description is insufficient; the description, however, does by no means agree in every respect with hopfferi, for which reason the denomination of this species as hopfferi will have to be adhered to.

Cat. modesta (22 c) is said not to agree with the type and the latter to resemble pinava Dbl.; LATHY & ROSENBERG would have set a meritorious example by figuring the species which have been insufficiently described or not figured, since these species cannot be cleared up without any figures of the types. — The species figured on t. 22 c as modesta is said to be strioposa Btlr. (p. 72), but the description of the under surface does in no way fit the species figured by us as modesta. BUTLER compares it with etemene (22 c), the correct determination of which has not been contested by LATHY & ROSENBERG.

Cat. affinis (22 d), according to LATHY & ROSENBERG, is said to be identical with philone Fldr.; the latter is said to occur in Venezuela and Ecuador, whereas affinis has been established from Colombian specimens, presumably there are nevertheless differences between both; a comparison with the type is not possible, since the latter is in England.

Cat. albina L. & R. (= zebra Frukst.) (194 b) is presumably a conspicuous local form of hebra (22 d);

zebrella, the under surface is lighter, and the light stripes of the forewing are more yellow. Bolivia. — zebrella Frukst.

scurr. Cat. scurr Stgr. i. l. (194 c) differs above and beneath to such an extent from maneo (194 c) that it must be considered as a separate species. From the Upper Amazon (Peru).

bithyn. Cat. bithyna Stgr. i. l. ? (194 c) differs above very much from all the other species, as the figure shows, whilst the under surface is very much like that of pinava. Colombia.

philone.

Cat. philone Fldr. (194 c). We figure the two species lying before us, which presumably belong to this species. The descriptions by the authors Felder are mostly of such a kind that the species described cannot be ascertained from them. The specimens figured vary a little from each other above and beneath, though not to such an extent that they would have to be considered as the representatives of different species. Habitat: Colombia (Cauca Valley?).

philais, philone, potamea. Cat. philais Fldr., philone Fldr., and potamea Fldr. What we have said of the philone, also refers to the original descriptions of these species. There are no specimens before us that might correspond with these species, not even in a questionable way. Patria: of philais and philone: Colombia; of potamea: Venezuela.

pieridioides. Cat. pieridioides Fldr. is presumably the somewhat darkened form of Pieris (22 a), the patria of which is Colombia (as stated Bogotá).

kibner. Cat. kibneri L. & R. (194 c) from Southern Brazil (Leopoldina and São Paulo) is a smaller form with narrowed white markings of bithys (22 d). The habitat stated by the authors, "Peru", is presumably incorrect.

flavonaculata. Cat. flavonaculata L. & R. is the southern form (from Costa Rica) of tentilla (22 g), differing beneath by orange instead of yellow markings. We cannot ascertain whether the following form differs sufficiently from it. — zenda Frukst. "♀ considerably smaller than tentilla Dbl. (22 g) from Mexico, with a much narrower whitish median band above on both wings. The ♀, however, has a broader orange median zone. habitat: Costa Rica."

troene. Cat. troene Fldr. according to the author's figure, is a species with a yellow upper surface, somewhat like marcapita (22 g), smaller, with small, yellow apical spots of the forewings, a distinct yellow patch in the cell of the forewing, hindwing with a black margin as in paradoxa (22 g), distinct yellow marginal spots and
black submarginal spots coherent with the black margin in the anterior part; under surface somewhat lighter, hindwing with black cullate spots at the distal margin on a yellow ground and a black dentate median band. Colombia. Lathy & Rosenberg denote Felder's figure to be extraordinarily marked, and put stress upon the great resemblance of this species with *troczenides* (22 d) and positively assert both the subspecies to be one and the same species.

*Cat. zande* Eblr. (p. 73 as synonym to *cora*) has, according to the material of the British and Paris *zande. Museums, been recognized by Lathy & Rosenberg (Trans. Ent. Soc. Lond. 1911, p. 521) to be synonymus with *cora Luc. and paradoxa* (22 d) likewise synonymous with this species. The said authors state that *cora* has hitherto not been correctly identified by anybody, what is due to the insufficient description. But as our figure of *paradoxa* corresponds with the description of *cora Luc*., it has to be regarded as the typical one, and the name *cora* has to be cancelled and replaced by the name *paradoxa* the description of which is accompanied by a correct figure.

*Cat. manco* Dhl. has likewise been mistaken hitherto. Lathy & Rosenberg have described and figured the ♀ at the place cited above; we reproduce the figure (194 c). South Peru, 7000 ft. (Lathy & Rosenberg); Bolivia, 3000 m (A. H. Fassl). The species figured by us on t, 22 a as *manco* is, according to the aforesaid authors, *incerta Dogn.* The work in which this species is figured (Lep. Loja II) is not accessible to us.

*Cat. ochracea* Bat., according to Lathy & Rosenberg, is the Guatemala-form of *nimbio* (22 b); we could not obtain any specimens of it; it is presumably little different.

*Cat. amastris* Hcc. is said to be the ♀ of *niobe* (22 d); *amastris* is unknown to us.

*Cat. apaturina* (22 f). Lathy & Rosenberg remark that the specimen figured by us does not correspond with the type (in the British Museum), because the latter exhibits a white band of the hindwing, and that it apparently corresponds more with *truncata* having been described by the said authors. Our specimen originates from Ecuador, the habitat of the *apaturina* Blr., *truncata*, however, from Venezuela. In our specimen the band of the hindwing is still darker yellow than in our figure, but still lighter than in the figure of *truncata*; the under surface of our specimen differs considerably from that of *truncata*: whilst the forewing does not show great differences beside its darker ground-colouring, the hindwing exhibits both in the distal and basal areas a light bluish shine and at the costal margin a white stripe which is only in the middle narrowly interrupted by black, and at the end of the discal cell there are 2 yellow dots. In case this specimen should belong to a separate species, it may be denominated: *xanthotaenia*.

*Cat. tolina* Fassl., "Allied to *C. incerta*, but the ♀ much more golden yellow with lighter marginal triangles on both wings; beneath still lighter, especially in the hindwing. The insect makes the impression of a *C. manco* (194 c) having turned entirely orange, but all the dark parts, also the base of the wing, the cell and the black-tinted veins are much less dusted dark. The ♀ presumably belonging to it is very much like that of *manco*, but all the marginal wedge-shaped spots are more pointed and those of the forewing more distinct, and the whole ground-colour is of a purer white, too. "Monte Tolima in the Colombian Central Cordilleras at an altitude of 3200 m.

*Cat. socorensis* Fassl., "Size, colouring and marking above very much like that of *C. semiramis* (22 d); but the yellowish-white oblique band passing through the middle of the hindwing is almost entirely absent. The costal margin of the forewing is still more indented; the hindwings are more sharply dentate. Quite different is the under surface which recalls the most that of *C. niobe* (22 d) but is still more distinctly marked. The yellow radiate rays thereby become much more distinct, so that they are, just like the median oblique band of the hindwing, situate on a bluish-grey ground (not light yellow as in *niobe*). The dense hairing of the head, thorus, and bases of the wings is of a lustrous black and much darker than in *niobe*. This new, charming *Catasia* is a decidedly alpine insect of which I only captured a single specimen on the summit of Mount Socorro in the Colombian Western Cordilleras, at an altitude of almost 4000 m, where it was drinking in the company of the red *C. tricolor* in a snug, picturesque gorge at the bank of an icy brook. It probably replaces the *C. niobe* of Peru and Bolivia in Colombia."

*Cat. modesta* Luc. (22 c) ♀ ab. *rubricata* Fassl., "A form with a rosy instead of sulphur-yellow spot *rubricea* of the forewing, which also shows through beneath though somewhat paler. The insect looks above very much like *Archonia pharnacia* Fras. (21 c), but beneath it has the typical marking of *Cat. modesta.*" Colombian Western Cordilleras, at an altitude of 2300 m.

*Cat. apollinari* Fassl., "is a form of *modesta*, in which all the markings above are whitish-grey; not *apollinari,* olive-yellow as in the type. It forms the transition between *modesta* and *troczen* (p. 103) and probably replaces these forms on the eastern slope of the Colombian Eastern Cordilleras; whilst farther to the south in Peru and Bolivia the *modesta*-forms are replaced by the still whiter, thus certainly closely allied *C. hebrea* (22 d)." Rio Negro, Colombia, Eastern Cordilleras, 800 m.

*Cat. lubentina* Fassl., "approximates the red *tricolor* (p. 73), in the company of which I also captured *lubentina,* it on the Quindiu Pass in the Colombian Central Cordilleras, at an altitude of 3800 m. The forewing shows..."
purely white markings in the shape of a large discal spot parted by the veins and an irregular submarginal band being in the \( \phi \) but indistinct and consisting of dots and longitudinal streaks. The hindwing shows the very same fiery red marking as *C. uricocheae* (22 f), but the marginal triangles are particularly in the \( \phi \) much broader and distally bordered with snow-white. The under surface is very much like that of *C. uricocheae*; the white spot of the forewing shows through beneath; the yellow radiate streaks are more incisive and somewhat longer. The insect flies in the forehead in the sunshine on blossoming shrubs, especially on the extreme tops, where it is difficult to capture. I often waited for days in these high and cold regions eternally hidden in fogs for a glimpse of sunshine; sometimes the morning was so cold that even at noon all was still covered with frost in the shade, and I often had but quite short sunny moments during the day, immediately followed by rain intermixed with sleet and snow.” (Fassl).

**dextata.**

*Cat. dextata* L. & R. (194 d) from Southern Peru (Acopampa), at an altitude of 11500 ft., in February and March. According to the authors' opinions it is the Peruvian form of *amastris* (= niobe, 22 d).

**albofasciata.**

*Cat. albofasciata* L. & R. from Colombia (Maganja), 9000 ft., February. It entirely resembles above our figure (22 f) signed with „uricocheae“, but the dull grey-dusted spots in the discal area of the forewing are here almost purely white.

**seitzi.**

*Cat. seitzi* L. & R. (194 d) from West Colombia (Guabina on the Rio Cauca), January.

**watkinsi.**

*Cat. watkinsi* L. & R. from Southern Peru (Uruhuasi), 7000 ft., March, April. Almost exactly like *seitzi*, but the basal part of the hindwing, especially in the cell darkened with brown.

**distincta.**

*Cat. distincta* L. & R., Peru (Rio Colorado) 2500 ft. (La Merced), North East Peru (Huancabamba), August. Larger than the preceding, but otherwise above similar to them, the basal half of the wing darker, the submarginal spots of the hindwing larger. Beneath the marking is more uniform, the ground lighter, the brown postmedian band broader and more distinctly defined.

**leucophaea.**

*Cat. leucophaea* L. & R. (194 d), - Peru (Uruhuasi, 7000 feet), North East Peru (Huancabamba), 3 to 10 000 ft., March.

**lanceolata.**

*Cat. lanceolata* L. & R. (194 e), West Colombia (Torne in the Cauca Valley), August.

**minor.**

*Cat. minor* L. & R. Peru (San Ramon, 3000 ft., Rio Colorado, 2500 ft.), March, April. Very much like *watkinsi* and *distincta*, from the latter slightly different by the ground-colour above being more uniformly greyish-brown, the base of the forewing not so very sooty blackish; beneath the base of the forewing is yellow, without the extensive blackish-brown dusting of *distincta*, and the brown postmedian band is narrower.

**subflava.**

*Cat. subflava* L. & R. (194 e), North East Peru (Huancabamba) 3 to 10 000 ft.

**punctata.**

*Cat. punctata* L. & R. Southern Peru (Uruhuasi), 7000 ft., Cuzco, March, April. Above almost exactly like *subflava* (194 e), but beneath the distal part of the wing is browner, especially the dark postmedian band broader and less interrupted.

**aureomaculata.**

*Cat. aureomaculata* L. & R. Southern Peru, 7000 ft., March, April. Above somewhat like *suasa* (22 e), but the light parts more ochreous than sooty brown; beneath similar to *phile* (194 f), but the yellow spot in the cell-end of the forewing much larger, the small spots of the median band in the hindwing smaller, but whiter, the light, small marginal spots of the hindwing more distinct.

**suasa.**

*Cat. suasa* L. & R. (194 f), North East Peru (Huancabamba), 3 to 10 000 ft.

**superba.**

*Cat. superba* L. & R. (194 f). Southern Peru (Uruhuasi), 7000 ft., February till May.

**similis.**

*Cat. similis* L. & R. Southern Peru, 7000 ft., April, May. Above similar to *subflava* (194 e), but the hindwing beneath a bright and pure yellow, reticulated with blackish-brown like in *manco* (194 e).

**intermedia.**

*Cat. intermedia* L. & R., \( \phi \) very similar to *innuba* Röb. (p. 70), but larger and lighter, the marking on the hindwing beneath much yellower. Southern Peru (Uruhuasi), 7000 ft., March till May. An intermediate form of *innuba* and *pieris* (22 a).

**suprema.**

*Cat. suprema* Fassl. \( \phi \), „The largest of the red Catasticta-forms and probably allied to *C. vulnerata* (p. 73) being unknown to me. All the median bands, also those of the forewings, brownish-red and only near the costal margin of the forewing turning somewhat orange. The submarginal dots of both wings and the small marginal spots of the hindwing sulphur-coloured; fringes narrow and white. Beneath similar to *uricocheae*, but the red of the forewing, especially in the lower part, showing through; the yellow radiate streaks of the hindwing beneath very narrow, almost hardly traceable. Body densely haired black. A single \( \phi \) from the Quindiu Pass, Colombian Central Cordilleras, 3800 m, where it was drinking from the blossom of a lilac-like shrub."

**susiana.**

Of *Cat. susiana* Hpfj. (= collina Stgr. i. l., calanga Stgr. i. l.) (194 e) we reproduce the figure of the under surface. (Peru).
Cat. philothina Stgr. i. l. (194 e) is above much darker than mateo (194 c) and beneath quite differently philothina. marked and coloured. Ecuador. — incertina subsp. nov. (194 d) from Colombia resembles philothina (194 c) incertina. above, but it is marked more grey, whereas the under surface is very different.

Cat. phile Stgr. i. l. (194 f) seems to be allied to pinarea hopi fferi (22 c), but the upper surface is less phile. marked yellow and the under surface very different. Peru (Chanchamayo).

Cat. zanclides Stgr. has formerly been in the market by the name of philonarche. As the figures exhibit, zanclides. it differs considerably from the latter. Colombia (Cauca and Aguacu Valleys).

Cat. zancloides Stgr. (194 f) differs from zanclides more above than beneath; the under surface is zancloides. not so distinctly and less marked white, and on the discal band of the hindwing it shows less violet colouring. Peru. Similar to watkinsi.

Cat. suborta sp. nov. (194 f) is before us in a female specimen. It is above entirely different from suborta. toca (22 f), but beneath similar, though it is without the conspicuous yellow spot at the end of the discal cell of the hindwing. Venezuela (Merida). It also resembles seitsi (194 d).

Cat. scura Stgr. i. l. (194 c) from Peru resembles leucaephaea (194 d), but it is much darker, also in scura. the marking, especially beneath, it is very different.

Cat. chelidonides sp. nov. (194 g). Of this species 1 ♂ from Peru (Chanchamayo) and 1 ♀ from Venezuela (Merida) is before us. We have figured the upper surface of the ♀ and the under surface of the ♂. In the ♂ the light markings above are more intensely yellow, also the marginal and submarginal spots more distinct; in the ♀ the markings beneath are more blurred and the colouring is paler than in the ♂.

Cat. variabilis sp. nov. (194 g) varies considerably in the extent of the greyish yellow colouring above, variabilis. and also beneath the markings, particularly the yellow marginal spots, differ in size. Colombia.

Cat. latiplaga sp. nov. (194 g). Two ♀♂ of it are before us; the specimen figured from beneath has a much narrower and very light yellow basal area of the hindwing; this difference is also present beneath. Colombia (Pacho, Eastern Cordilleras — the yellow specimen; the other specimen from Colombia without the exact habitat being mentioned).

Cat. pallens sp. nov. (194 g) resembles zancloides (194 f) above, but the yellow discal spots of the pallens. forewings are shorter, arranged in the shape of a uniform band, the submarginal spots are smaller and in the posterior two areas absent, the hindwing also with a uniformly broad discal band, the marginal and submarginal spots only traceable. Beneath different from all the species known by the pale colouring. Peru.

Presumably some of the species above mentioned as new species are identical with such that have been described in an irrecognizable way by older authors. As we have now figured them, it will no more be difficult to recognize them from the "types" that may yet be extant.

Daptonoura daguana Fussal ♂. "A large florinda-form (23 b) with an expanse of 64 mm and a broader black border of all the wings; the hindwing towards the anal margin passing from the bright orange colouring over into an intense chrome-colour. Beneath with a much broader black cell-end spot of the sulphur-coloured forewings. Hindwing beneath intensely chrome-coloured (not sulphur-coloured as in the typical form). In the 2 mm broad black distal margin two, likewise deep yellow, long streak-shaped spots," San José (150 m above the sea-level) on the Rio Dagua in West Colombia, thus very close at the shore of the Pacific Ocean.

Dapto. caesarea Franhst. "A distinguished species, allied to florinda Bltr. from Central America and to inaequalis Bltr. from Peru, above magnificently light yellow with a very narrow black cell-end. Under surface of forewing sulphur-coloured, of hindwing orange. Cell-end broadly encircled with black, distal margin relatively narrow and as in polyhymnia Flhr. covered with small, yellowish maculae. West Colombia (Rio Magdalena). — Scarcely different from polyhymnia (23 b).

Dapto. vectiusa Bltr. = Appias drusilla Or. (21 f) — according to Kirby, Catal. Diurn. Lepid.

Dapto. flippanta F. is according to Kirby’s Catal. Diurn. Lepid. = limonaria Godt. (p. 75). flippanta.

Dapto. lycimnia narmia Franhst. "Upper surface purely white, by the apical spotting allied to macotis narmia. Franhst. from Peru. The under surface, however, is absolutely identical with pantoporia Hbn. from Espiritu Santo and Minas Geraes. Another form, by the distal margin of the hindwing being covered with small white dots, somewhat resembles phazania Franhst. from Bahia and forma dauia Franhst. from Colombia, only the margin is like in pantoporia very narrow, but covered with white not with yellow as in pantoporia (forma othoca nov.)." Patria? = semiofuscata Weym. from Ecuador (Macas) has very broad black marking above and beneath; the larger distal half of the hindwing beneath is dark brown, the proximal bordering of this marking very irregular and faded. — lycimnia is said also to occur in Argentina (Missiones).

Dapto. florinda ab. discocellularis Strand. The original description runs as follows: "A ♂ without the patria being stated, distinguished by the forewing, according to the figure in Biologia Centrali-Americana, exhibiting also a black discocellular band, which, according to the original description, is in the typical
form the case only in the ♀ (Röber in Seitz mentions this band of the forewing above neither in the ♀)." — We remark here that it was not necessary to state this difference from the ♂ in this species specially, because it is a general character of the ♀♂ of this genus; to my knowledge only regnidas (23 c) does not exhibit a discocellular band, but this is presumably an aberrative form, whereas the normal ♀♂ probably have such a band.

dapt. palaestra Hppf. (p. 76) has of late been regarded as a distinct species, for which reason we have figured it (194 g). — equadorica Strand from Ecuador (Sarayacu) has been described as follows: „Distinguished from the two types (♀♂) of the species lying before me by its larger size (expanse of wings: 57, length of forewings: 34, length of body: 22 mm), a broader marginal band (at the apex of the forewing 11 mm, along the vein 3 in the forewing 4 mm, in the hindwing 11½ mm broad) which is besides not proximally bordered undulately in the hindwing; besides by the whitish under surface and the narrower (in f. pr. triangular) discocellular spot.

loranthi.

Mathania loranthi Jörg. (194 g) is much smaller than leucothea (23 b) and easily discernible by the much more taperingly extended hindwings. The indistinct marking beneath is entirely like that of leucothea. Common in the valleys of the Andalgala at altitudes of 150 to 250 m, in February and May. Larva on Loranthus engenioïdes Kth., of the usual Pierid shape; pupa remarkably bent.

carrizoi.

M. carrizoi Giač. „Most closely allied to M. leucothea, but quite different; wings uni-coloured white with a faint greenish hue, less than in leucothea; more yellowish; this comparatively more on the upper surface of the wings. Forewing of carrizoi with a slightly yellowish or greenish apex which in leucothea is of a deep and very pure light green colour, and on the ground there is a row of small greenish clouds, forming a semicircle round the margins of the wings, concentrical to them. This varies greatly in my 4 specimens, so that in one it is hardly visible, whilst in the others it is more distinctly marked; a yellow, faint, little visible dot is the dot, in the space of the two veins forming the disc of the hindwing; body hairied, in one specimen at the base of the eyes a small dot as in leucothea. Antennae similar as in leucothea. Size variable, expanse: 44 to 58 mm. Catamarca (Sa. Cruz and El Saladillo, La Rioja, Tucuman) and Bolivia."'
very pale yellowish-white, without any markings except a distinct discal spot and some blackish dusting on the distal margin of the forewing.

Col. euxanthe nigerrima Fassl is the dark (sooty) form occurring in both sexes, but transitions to nigerrima, the normal form are more frequent. La Paz Bolivia, 3600 to 4000 m; Cuzco, Peru, 4000 to 4200 m. Very rare among the typical forms.

Col. tololina Fassl. „Similar to dimera (27 h) from the Eastern Cordilleras; forewing more rounded off, tololina.

Seitz, Macrolep. t. 27 g), but the forewing appears to be less tapering and its border more distinctly convex in its whole length (in dimora it is in the middle straight), the hindwing is more elongate with a still more convex resp. in the middle very bulgingly projecting border (the hindwing in this case being also slightly shorter [by 2 1/2 mm] than the forewing). The discocellular spot of the forewing is larger and more rounded off. The dark marginal band extends to the anal angle, being in front about 7 mm broad, the proximal margin being proximally quite blurred by dark dusting, in the posterior half, however, proximally more distinctly defined, and only the veins there being dusted with black, along the vein 4 being 4 mm broad, along vein 2 about 2 1/2 mm; the band encloses seven yellow spots, of which the four situate between the costal margin and vein 4 are a little larger and only parted by the veins, whilst that in area 3 is the smallest, and that in the anal angle indistinctly defined and sometimes not at all recognizable as an isolated spot. The ground-colour of both wings above is like in C. dimora ♂ (cf. op. cit. t. 27 h). Hindwing at the apex (in the areas 6 and 7) with a dark, about 2 mm broad marginal spot which, however, is almost removed by a lighter, enclosed spot. Besides there is an indistinctly lighter, scarcely recognizable marginal band of 3 1/2 mm width. The fringes on the forewing are rosy-redish in the anterior half, yellowish like the surface of the wing in the posterior half, whilst on the hindwing they are uni-coloured rosy-reddish. Forewing beneath in the ground as above, in the costal area dusted darker, in the marginal area the markings from above show through; in the areas 5 and 7 there is at 3 resp. 4 1/2 mm distance from the margin one small brown spot each, and the discocellular spot appears as a small, black transverse ellipse. Hindwing beneath dusted with a dark greenish-yellow, being the lightest in the marginal area, with markings as in dimora, the seven subluninal spots, however, are darker and smaller, the discocellular spot is likewise darker and distally pointed in the shape of a wedge and enclosing a snow-white, oblong punctiform spot. Expanse of wings: 33, length of forewings: 19 mm. The ♂ slightly differs from the ♂, and is somewhat smaller: length of forewings 18, expanse of wings 31 mm, the ground-colour above being of a brighter yellow. The marginal band of the forewing deeper black, more distinctly marked, extending uninterruptedly and in the same distinctness to the anal angle, and enclosing before the middle three yellow spots which are quite distinct but still smaller than in the ♂, whereas the posterior half of the band shows only traces of three yellow spots. Both wings in the basal area, the hindwing besides in the dorsal area densely dusted with a pure black; the hindwing shows the same, though more distinctly marked marginal marking as the ♂. The under surface is likewise more profusely coloured yellow than in the ♂ and with more distinct markings, except the discal spot of the forewing, which is entirely absent."

Col. strandi sp. nov. (192 d only the first figure) of which 1 ♂ is before me from Lake Titicaca, seems strandi.

to differ from weberbaueri. The under surface on the hindwing and on the apex of the forewing is much darker than in euxanthe-♂, thus considerably different from dimera-♂, the colouring of the other part of the forewing beneath, however, not yellowish as in euxanthe-♂ but dingy white with grey scaling, especially on the veins; the red-brown spots on the forewing and hindwing are much smaller, and on the forewing there are but 2 of them, one at the costal margin and the other subapically, in the three following areas of the wing there is one minute spot each scarcely recognizable with the naked eye. It was denominated in honour of Prof. Dr. Embrik Strand.

Col. dimora ♂-f. semperi Reuk. is the white ♂ form which, however, seems to be more common semperi than the ♂-like ♂♂.

Col. blameyi Jörg. (194 d, second figure, as strandi) occurs in the Argentine Mountains (Aconquya) blameyi, at altitudes of 3200 to 3750 m and flies at the end of April on the blossoms of various Compositae, Verbenaeeae and Malvaceae together with Phulius aconquyae and species of Tutochila. The under surface of the imago shows the same scheme of markings as in euxanthe (27 h), but in the ground-colouring it is much paler (yellowish-grey), and the discal brownish spots of the hindwing form a complete row; also the forewing shows 4 such spots.

Col. emilia Edle. is probably the Pacific form of eriphyle (27 e), somewhat smaller and paler and with emilia.

narrower black distal margins.
**MEGANOSTOMA BERNArdino Edw.** (p. 94), according to WRIGHT’s figure, is a form of *eurydice* (26 f) with amorphae. black distal margins of the hindwings. The ♀ does not differ from that of *eurydice*. — amorphae W.r. is a form of *eurydice*-♀ marked blackish.

**citrina.** M. helena ab. *citrina* Jörg. does not exhibit the orange colouring of the hindwing, but it is lemon-coloured; it is common in the Province of Tucuman from May till August.

**coliaides.** Nathalis plana ♀ ab. *coliaides* Fassl is the ♀-like ♀ form; not rarely there occur transitions to the usual form. Bogotá, Colombian Eastern Cordilleras, 2600 to 3200 m. The insects are fond of drinking on a common, yellow blossom of Hieracium especially in sunny districts.

**deserti.** Anthocaris deserti W.r. from the western coast of North America is a small form of *celtura* (28 b) with scanty markings and colours.

**flora.** A. *flora* W.r. from the same region is a robust and more profusely marked form of *reakirtii* (28 a); the ♀ is above and beneath pale yellow; in *mollis* W.r. the subapical marking of the forewing above is reduced.

**reediti.** Of Philia *nymphaEA* Blt. (28 c) GIACOMELLI has discovered a new form in Argentina (in the Andes of Mendoza) and denominated it *reediti*. At present I do not know any further particulars.

**limbalis.** Pseudopieris *limbalis* sp. nov. (192 d) was discovered by Mr. A. H. FASSL, who had the kindness to send us the figured specimen; in January near Altamira on the Rio Huing. The under surface is uni-coloured white except the yellow basal spot. If *penia* (28 e) would have to be considered as a separate species, this would also have to be considered in *limbalis*.

**citrinella.** Of Disn. *citrinella* Flr. (192 d) we are now able to reproduce figures of the ♀; the ♀ is still unknown to us. According to FIELDER, this species occurs in Venezuela (Prov. of Merida) and in the Cordilleras of Bogotá (Colombia); before me are specimens from Western Colombia (Rio Magdalena) and Bolivia. D. *citrinella* is presumably a species scarcely different from *melite* (28 h).

**core.** D. *core* Flr. is still unknown to me. The description says: „Wings above blackish, the inner-marginal band anteriorly broader with a discal, shortened oblique band of 4 yellow submarginal spots; hindwing yellow, the whole distal margin proximally above sinuate (or curved), blackish; beneath the marginal spots between the veins are of a deeper yellow, in a brown margin; the hindwing on the whole intensely brown, the basal part of the costa, 2 larger basal spots, and a broad, irregular discal band traverse the veins, mother-of-pearl white, in some places with an intense yellow tint, a circular subcostal macula, another one proximally and other thick maculae at the margin intensely yellow. Venezuela, in the Province of Caracas; also from Granada (Colombia). Allied to D. *medora* (29 b), but larger. The Colombian specimen shows the band of the forewing much broader and connected with the proximal band.“

**albinacula.** D. *albinacula* sp. nov. (192 c) from West Colombia (Rio Magdalena) resembles *medora* (29 b), but it is smaller, the yellow inner-marginal spot of the forewing larger, the yellow subapical spots are absent, but there is a large, white subapical spot situated further posteriorly. The under surface, especially of the hindwings, as the figure shows, is likewise considerably different. I possess *medora* from the same habitat.

**leuji.** D. *leuji* Flr. The ♀ which was discovered by A. H. FASSL in Corico, Bolivia, 1400 m, resembles the ♀ of *leuji* (29 e) above, for the black distal margin of the hindwing is much eft. The under surface corresponds to that of the ♀, but the yellow spots are larger.

Of D. *schansii* Dyn. (p. 101) we subsequently reproduce the upper surfaces of both sexes, of the ♀ also the under surface (192 e). The ♀ beneath black hindwings, in the centre is a whitish spot, at the base there are 3 rather large red spots, and the costal margin is dusted with a sulphur-colour. The forewing is white with a black apical part in which there are 3 whitish-yellow subapical and 2 similar submarginal spots; the costal margin is also black. The figured specimens are from Peru (Pozuzo).

**tolimensis.** D. *crilotenia*-♀ *tolimensis* Fassl are the ♀ of *crilotenia* (29 f) from the eastern slope of the Central Cordilleras of Colombia (Cañon del Monte Tolima, 1200 to 1700 m), not showing white, but yellow ground-colouring above.
D. buchtieni Fassl. ♀, "A Bolivian form of arcaedia; expans.: 55 mm, somewhat smaller than the Colombian ♀ of arcaedia. All the yellow marking above, particularly the oblique median band of the forewing narrower, as well as the horizontal band of the hindwing narrower and interrupted at the veins. The main difference, however, is that the median band of the forewing is also above not sulphur-coloured, but of a magnificent orange-red, together with the yellow wedge-shaped streak extending along the median towards the base. Beneath analogously to the upper surface with a narrower marking, a very prominent red median band of the forewing, but less prominent silvery dots of the hindwing, the ground-colour of the hindwing not being bright yellow as in the type, but more silvery grey, against which the silvery dots stand out distinctly." Coroico, Bolivia, 1400 m; taken in the dense forests of the mountains, "where the diurial lepidoptera are at any rate rare."

Of D. byosura Hew. (192 e, p. 101) we have subsequently figured the ♂; the ♂ is unknown to us.
— ecuadorensis Niep. The description runs as follows: "Different from the figure as follows above. The white discal spot of the forewing is larger than in the type, and in the middle of the costal margin is a small, white, oblong, round spot. The white colouring of the hindwing is likewise more extensive and at the cell-end there are two white spots. Under surface lighter than in the figure of the type, particularly on the hindwing the light markings are much more extensive and whiter, in the anterior part of the distal margin yellow-speckled patches between the veins. Length of forewings: 28 mm. One ♂ from Oriental Ecuador."

D. macasana Strand from Ecuador (Maenas), described according to a ♀, the author takes to be a separate species. The specimen differs from leonora ♀ (29 e) by its narrower wings, the discal spot being coherent with the marginal marking, and a somewhat broader black distal margin of the forewing; the under surface has more black and yellow marking than the two ♀ before me from Santa Inez (Ecuador).

D. niepelti Weym. ♀ (♂ p. 101) is above white with a broad black apical part of the forewing, in which there are 4 white spots; also the costal margin is broadly black as far as the longitudinal middle of the discal cell, in this black stripe there is a small white longitudinal stripe and before this (at the end of the discal cell) there are 2 small white spots. The hindwing has a broad black apical margin and its posterior half is of the same colour. The under surface corresponds to the upper surface, but is of a more fallow colouring, at the base of the hindwing is a yellowish spot enameting in rays.

D. ela Weym., described according to a ♀ from Colombia, makes the impression of a gigantic ♀ of pinela thaeus, but the yellow band of the hindwing is very broad, sharply defined and greenish; the red band of the hindwing beneath is very distinct.

D. spio Godt. (30 a, ♂). The ♂ has a paler (reddish-yellow) marking and the hindwing exhibits a broad, equally coloured median band, which is also anteriorly bordered with a broad black; the subapical spot of the forewing is parted.

D. astynome paulistana Fruhst. According to the author, the main difference is exhibited by the ♀ showing a much narrower reddish-yellow cellular stripe of the forewing and a longer subapical band of yellowish spots and being beneath of a paler greyish-yellow colour. Of the ♀ there exist two forms, one being above chiefly spotted reddish-yellow, as they also occur in Bahia, Espirito Santo and Rio de Janeiro, and a rare aberration with a yellowish median area of the forewing and a yellowish circumcellular region of the hindwing (♀ form donia form. nov.). Patra: Casa Branca, Sao Paulo."

D. astyocha Hbn. (p. 103). FRUHSTORFER regards it to be a species separated from astychnome Dalm. (30 e). We have therefore had it subsequently (192 f).

D. mercenaria versicolora Fruhst. "♀ above of a peculiar yellow hue with pink. ♀ either whistible-yellow or light flesh-coloured (carnosa form. nov.). Under surface faded reddish-yellow with two broad brown transverse bands. Patra: Pernambuco (Brazil)."

D. dolorita Fassl. Only the ♀ is known. It differs from lewyi-♀ (= nasua Flhr, 29 e) by its smaller size, almost entirely black hindwings only showing a white stripe in the costal part, the forewing exhibiting a narrower, very irregularly defined black margin. The under surface is much darker, the large, somewhat dull silvery spots are reduced to the three foremost, the bright yellow wedge-shaped spot extends in a long point towards the base, but about 5 mm before the base it disappears in the dark ground-colour; 3 yellow basal spots are present as in lewyi; the other marking of the hindwing beneath is intensely darker and more indistinct than in lewyi. The author reports: like all the allied species also dolorita is a timid insect flying high up in the mountains and being fond to settle down on projecting twigs in the primeval forests, at sunny places where it bask in the sun with its wings spread out. Colombia, Western Cordilleras, at altitudes of 1800 to 2000 m.

D. idae Fassl. Above the ♀ (only this is known) resembles that of melora (29 b), but the yellow median band of the forewing is narrower and also at the anal margin there is between the first median vein and the submedian a band of the same colour; the black distal-marginal band of the hindwing does not extend to the apex. Much more different is the under surface by the horizontal dark shades which, being connected by the veins, form single yellow ovals and somewhat recall the much smaller theugenis (28 h) from Bolivia. Alto de las Cruces, a little beneath the ridge of the Colombian West Cordilleras. In the beginning of January.
negrita.  
D. mirandula (29 a) ab. negrita Fassl. This form has been established according to a ♀ having been captured during a thunder-storm [on the 3rd of October 1908]; this specimen shows a monotonously black upper surface of the forewing (St. Antonio, Colombia, at an altitude of 1800 m).

altis.  
D. altis Fassl is in both sexes similar to mirandula (29 a), but somewhat smaller. In the ♀ only the light (white) spots on the anterior part of the forewing are distinct, the others are dusted with dark, in the ♂ the black distal margin of the hindwing is uniformly broad. The under surface shows dull mother-of-pearl spots. Colombia, Western Cordilleras, at an altitude of 2400 m.

manuelita.  
D. manuelita Fassl is allied to lygdanis (29 f), both in the size and marking beneath which resembles that of the Cattalidia-species. Upper surface white with broad black distal margins, also the discal cell in the ♀ forewing almost entirely filled up with black, in the ♂ with such a stripe along the subcostal; in the apex of the forewing 3 white spots. The under surface exhibits almost the same black marking, and is very much like that of lygdanis (29 f). Colombia, Western Cordilleras, at an altitude of 1800 to 2000 m.

D. dejone Hew. ♂ (192 f). The figured specimen is presumably a ♀ of this species. The under surface is blackish-brown with the same marking as above, on the hindwing, however, the brown colouring is much more diffuse. The antennae are coloured like in the ♂. Chiriquí.

jurua.  
D. jurua sp. nov. (192 g). It is not certain whether the specimens figured represent the sexes of one and the same species. The ♂ is very much like that of tricolor (30 b), of which neither the ♀ nor the patria are known. The under surface is in both specimens marked and coloured corresponding to the upper surface, though paler, in the ♂ forewing with the modification effected by the scent-organs; both sexes exhibit a series of white spots on the distal margin of the hindwing. From the Rio Jurua.

mechanitna.  
D. mechanitna sp. nov. (192 g). Before me is 1 ♀ from Matto Grosso (Rio Machados) which may belong to another species of which only the male was described. The under surface is like the upper surface, but paler, at the distal margin of the hindwing there is a row of rather large white spots. Antennae very light, in the distal part at the anterior side white, the club yellow.

xanthon.  
D. xanthon sp. nov. (192 h)., the patria of which is unknown, is in the female similar to mechanitna; in both sexes the under surface is entirely like the upper surface, but the colours are duller and all the wings exhibit at the distal margin a row of white spots.

D. laia Godt. we subsequently figure the ♀ (192 g); it originates from Cayenne.

pellucida.  
D. pellucida sp. nov. (192 g) from Jurna may be a species not different from erythro (30 f); the under surface does not show any essential differences. Presumably also batesi (30 f) of which a ♀ has been figured belongs to this species; the ♂ lying before me exhibits a complete yellow band of the forewing, but very narrow yellow band of the hindwing, and besides on the hindwing markings similar to erythro, but before the yellow band black, band-like scaling.

proxima.  
D. pinthaeus (?) proxima form. nov. (192 h), captured by Mr. A. H. Fassl in January near Teffé (Ega) on the Amazon River, exhibits a somewhat different shape of the bands on the forewings; the under surface has not a yellow, but white ground-colour, the black median band of the forewing extends uninterupted from the costal margin to the distal margin, and the submarginal band is not red as in pinthaeus, but yellow like the ground-colour. According to a ♀.

Danaidæ.

1st Subfamily: Danaidæ.

Hereto we must only add that the American D. archippus F. (= plexippus L.) has uninterruptedly penetrated in Eastern Asia since the family has been dealt with in this volume. On the Marshall Islands it has now become the most common lepidopteron.

Of D. criippus Cr. the larva is black, with broader or finer yellow belts, the thread-appendages black. On Asclepiadaceae. The total development from the egg to the imago, according to Ferreira d'Almeida, lasts for about 1 month.

D. gilippus Cr. Larva likewise of a black ground-colour, in the adult stage with bright yellow belts. On Asclepias. Pupa different from that of archippus by the absence of the small golden tips in front at the thorax.

2nd Subfamily: Lycoreinæ.

Lycorea halia. Larva whitish-yellow, with numerous brownish-yellow transverse belts; the appendages on the metathorax (3rd ring) are kept in constant commotion by the insect; it was also observed on Carica papaya.
3rd Subfamily: Ithomiinae.

The Ithomiinae in Tropical America are entirely subject to the laws governing all the groups of insects which do not like to fly or are bad flyers in this woody region: almost every greater part of a forest, the river-basin of almost every little river has a special mode of marking from which the members flying there and taken at exactly the same locality differ to a remarkably little extent. One may often travel for miles and miles without finding a certain species of *Ithomia* or *Pteronymia*, which may then be suddenly swarming in a surprisingly great number of specimens at an entirely circumspect place. Thus I once saw on a bush only 2 in high near Santos more than 20 specimens of *Melinaea paraisya* of which I had before not discovered a single specimen in spite of having been roaming about for many days. Scarcely any specimen of this species flew away from the bush, until all of them were captured; such a behaviour is only met with in well-protected lepidoptera crowded together on confined habitats (in Europe in the genus *Zygaena*). The incredible laziness of these diurnal lepidoptera from the subfamily of the Ithomiinae may be concluded from a remark of Ferreira d'Almeida in his very nice and biologically most interesting book: „Études sur les Lépidoptères du Brésil“ (Mélange lépidoptérologiques) on p. 71, according to which the imagines resting on the blossoms or tips of the branches may be simply taken away with one's fingers; an observation which I can substantiate for a great number of species of the group. A necessary consequence of this character is the so-called formation of colonies or subordinate races, as by the very rapidly succeeding generations (each generation mostly does not need more than a month for its development) a certain pattern of marking is quickly fixed at a habitat to such a degree that even minute deviations from it number among the very greatest rarities. We may then find at the next habitat of the species a somewhat different colouring, though it shows here the same constancy as the former at the other habitat. I have considered it incorrect to denominate these mostly insignificant though constant deviations, as it has been done by others in other cases (such as in the *Erycinidae*). This method if being consistently performed, would have to increase to an infinite amount, and in composing this chapter on p. 116 to 165 the compiler was also led to confuse the denomination to notoriously zoographical races and to avoid the denomination of subordinate races. The compiler has carried this out very meritoriously, and it seems that up to this day this excellent example has also prevented later describers to corrupt his succinct delineations by hair-splitting processes. May this chapter be also in future exempt from the denomination of transitory forms effecting the exact boundaries, without checking the admittance of really maintainable races and species with the impending opening up of South America *

*Mechanitis lysimnia* F. (34 b). Larva on Solanum arrebenta; anteriorly very much narrowed with a small head; adult larva 31 mm long, of a bright yellow, across the dorsum 2 greyish-blue or greyish-green longitudinal bands; head black.

*Pseudoscada*. For the form *Ps. adasa* Hew. p. p. (41 c) Ferreira d'Almeida introduces the name *diversivoaca* and places the species to *Dismenitis*. — For the other figure of *adasa* by Hewitson (Exot. Butt. Vol. 4) the same author establishes the species *pseudodiversivoaca*; smaller, the forewing more pointed, the demi-band and marginal band straighter; the upper discocellular is absent, the lower more curved. Southern Brazil.

*Ceratinia cyanura* (35 b). Larva on Datura arborea, in the adult stage up to 3 cm long, with a yellowish-brown head, the body with bright transverse stripes, ventrum deep green; pupa yellowish-brown, the wing-cases of a dingy white, marbled with dark, the pupa itself with numerous small dark spots and markings. Ferreira d'Almeida bases a new genus on this species: *Placidula*.

For *Cerat. dactylus* Bsd. the same author introduces the genus *Mansuetia*. The q lays the eggs singly on Solanum argenteum. The adult larva is 23 mm long, above of a dingy greenish or bluish grey, beneath whitish, on the sides with a yellowish stripe-like colouring, across the dorsum transverse wrinkles of a deeper colouring, particularly the anterior part of the larva very much wrinkled.

With the newly established genus *Rhadinoptera* Ferr. d'Alm., its author combines a number of species that were before ranged in various genera to which they had been placed according to the neuration, such as *Ceratinia*, *Ithomia*, *Hypoleria*, *Heteroxais*, *Pteronymia* etc. The first form of this series is:

*Cerat. eupompe* Hbn. (35 d). Larva on a Solanea; in the adult stage 25 mm, above greyish-green, on both its ends whitish, with transverse wrinkles, thoracic segments spotted dark, ventrum ligther. — Pupa green with small metallic spots.

*) A similar behaviour as we have ascertained for the insularly confined habitats of the neotropical wooded districts for many resident or weak-winged species of lepidoptera, occurs in mountainous species at such places where the alpine habitats are isolated by interposed valleys impassable to the alpine inhabitants, as for instance in the *Parnassia* everywhere where these dwellers of mountains are. The one species *P. apollo* was provided with more than 100 names, more than 80 of them with the statement of geographically defined habitats. If the denomination is not checked in analogous cases, certain groups in South America will be loaded with a ballast of names that renders the orientation difficult instead of facilitating it.
**Napeogenes ellariformis** Strd. is quite similar to *Ithomia ellara* Hew. (37 c) but the median hyaline band of the hindwing extends into the cell, the veins separating the hyaline spots are not so thick black, the white marginal band spots are larger. From Peru.

**Nap. antecilla** Strd. is almost like *Ceratinia antea* Hew. (35 d), but somewhat smaller, the blackish marginal band relatively somewhat broader, more blackish-brown than jet-black, the small white spots embedded there in larger and increased in number, as there is another one in the anal angle of the forewing; the marginal band of the forewing forms a small tooth at the veins 3 and 4. Described according to 1 g from South East Peru.

**Nap. hemisistica** Schs. from Costa Rica forms an exact imitation of the Costa Rica form of *Hyposca adelpkina* (38 c), exhibiting on the forewing likewise 2 red-brown basal spots and several rows yellowish-white spots in the distal half of the wing; it thereby also resembles *Ithom. plagiota* (37 b), *Nap. amara* (35 d), *Cerat. callispila* (35 a) and some more lepidoptera from Costa Rica in the company of which it flies there.

*Ithomia drymo* Hbn. (37 g). Larva likewise on Solaneae, in 2 forms, with a red-brown or metallic lustrous bluish-green ground-colour. Pupa light green, at the wing-cases lighter with but 2 small golden spots at the sides of the capsule of the head. (Ferreira d'Almeida).

**Ithom. bolivari** Schs. is very much like *patilla* (37 f), but the black wedge-shaped spot in the centre of the forewing has such a broad base that it occupies a whole third of the costal margin. Costa Rica.

*Hypolerio oraes* Weym. (41 a). Larva on Solaneae, in its juvenile stage white, in its adult stage 22 to 23 mm, with a somewhat flat body, of a pure yellowish-green with a fine dorsal line, laterally lighter, on the ventrum whithis; head green, on each side with a short, curved longitudinal row of black granulations. Pupa green, very much like that of *Ith. drymo*.

**Heterosais edessa** Hew. (41 g). Larva dull bluish-white, with a somewhat flat body; on the sides of the dorsal rows of darker or blackish-spots; across the dorsal darker transverse wrinkles. Pupa uni-coloured green, at the head golden dents with a blackish tip; larva on Solaneae.

**Leucothrys peruicola** Strd. Like *Leucoth. solida* Weym. (38 g), but the hyaline band of the hindwing not expanded towards the anal margin, equally 5 mm broad, the marginal band only showing traces of 1 small white dot. The light spots are mostly somewhat larger; in the apical part of the forewing 3 small white spots. *completea* Hisch. differs from it by the white dots in the black marginal part being distinct there. South East Peru.

**Pteronymia enrieta** Cr. (40 d). Larva on various Solaneae, of a pure green, with a yellow lateral stripe, across the dorsal many black transverse lines. Pupa like that of *Episcada clausina* (39 d), of a lustrous yellowish-green, across the dorsal silvery transverse spots with a golden lustre, sometimes there are brownish markings exhibited; pupal stage lasting for about 10 days.

**Pteronymia syblo* Hbn. Larva above greyish-green wish dark, oblong transverse spots, ventrum yellowish-white, dorsal and lateral line yellow; some specimens also exhibit out the dorsal darker transverse markings. Pupa brownish, of a green lustre, with small metallic spots. On Solanum argenteum and allied plants.

**Pteron. fumida** Schs. Colouring and markings something like in *Pt. laura* (40 d), but very much larger, about the size of *denticulata* (40 b), easily discernible also by the absence of the jet-black cell end spot of the forewing which is distinct in *laura*; the transverse vein is only situate in a dark shade. Thereby the species becomes similar to numerous other species flying at the same place, such as *Callithomia hydra* Fdr., *Direzennu klugii* 3 (36 c) though more in its form *chirigueensis* Hisch. etc. From Carillo in Costa Rica.

**Pteron. godmani** Schs. According to W. SCHAUS the two figures of *simplic* *Salv*. 40 b are not the different sexes of one species, but the form figured as a g with the narrow, comma-like bent cell-end stripe is a different species and is therefore denominated *godmani* Schs. Common in Costa Rica at altitudes of more than 3000 ft.

**Episcada clausina** Hew. (39 d). The larva spins together some leaves of its food-plants (Solaneae) and in this cover it also uses to puate. In its adult stage it is 16 to 17 mm long, above greyish-green, laterally tinted yellow; lateral stripe whitish, interrupted by small yellow spots; head blackish, dorum with transverse wrinkles. Larva sometimes with a blackish lateral band. Pupa green or red-brown with silvery wing-cases.

**Episcada hypenoea** Prittw. (39 e) ab. *nebula* Ferr. d'Alm. On the subcostal and beneath the lower cell-wall a rusty yellow longitudinal ray. — ab. *stratonicis* Ferr. d'Alm. The yellow ray below the costa is present, but that below the median is absent. — Larva of *hypenoea* (39 e) 22 to 24 mm long, above greenish-grey with a white lateral stripe, which is interrupted by small yellowish spots, above it a blackish longitudinal shade, the transverse wrinkles dark green; on Solaneae. Pupal stage 10 days. The imagines fly in Southern Brazil particularly in winter.

**Umbriacola.** (Rhadinoptera) *umbriacola* Ferr. d'Alm. Colouring and marking of *Heterosais nepehe edessa* Hew. (41 g), but the demi-band at the cell-end of the forewing wedge-shaped, the white spot behind it distinct, the mar-
ginal band of all the wings dotted whitish. Beneath this marginal band is rust-coloured, bordered with black. Described according to 1♀ from Rio taken in April. — For this species the group *Pigritia* was introduced by the author Ferreira d’Almeida. — *genytillis* Ferr. d’Alm., for which the author has likewise established a group (*Lagnida*), is entirely like *unbraticola*, but somewhat smaller, the white marginal spots of the forewing well visible, but those of the hindwing indistinct. One ♀ taken in November in the State of Rio.

**Satyrilae.**

Antirrhoeae ulei Strol. is a species from Roraima in Venezuela, with an expanse of 90 mm, with a dark band of the forewing extending through the cell, behind which there are 6 dirty white spots in a greyish band.

*Taygetis weymeri* Sch. (193 d) from Costa Rica somewhat recalls beneath T. *ubinata* (45 b), but it is easily discernible by the straight, not angled margin of the forewing, which extends like in the smaller *blanda* (45 d). As in *blanda* also in *weymeri* ♀ the postmedian transverse line is distally bordered with whitish, though bent in an obtuse angle, whereas in *blanda* it is almost straight.

*Tayg. odin. As f. magna Ferr. d’Alm.* a large form is described beneath resembling *cleopatra* (45 c), approximating the form *haeuseki* (45 b), according to a ♀ which probably originates from the State of Rio in Brazil; the exact habitat is not stated.

*Tayg. fulginia* Ferr. d’Alm. has the size and approximate shape of T. *rettifascia* (45 a), but the under surface is not so monotonously brown, but with more abundant and brighter markings. Established according to a single ♀ taken in October at a swampy place in the State of Rio.

*Euptychia agnata* Schs. (193 d) from Costa Rica, resembles *juani* (49 a), but it is much larger. The ground-colour beneath is more yellowish-brown, the discal bands are connected before the posterior margin of the hindwing, above the large eye between the median veins there is a bean-shaped spot.

*Eupt. drymo* Schs. (193 a) is easily recognizable by the yellowish-red lighter part in the disc of the forewing. The two large eye-spots of the hindwing beneath are proximally bordered by two dark arcuate stripes. Costa Rica.

*Eupt. hesione* Sulz. (46 d). Eggs black, globular. Larva on Gramineae, in its adult stage about 30 mm long, green, with white granulations and pinkish-red anal apices; the 3 first rings on the dorsum brownish. Pupa yellowish-green, yielding the imago after 12 days.

*Eupt. bygus* Gott. Egg globular, whitish. Larva on grasses, whitish green with a more distinctly green median line, on the dorsum with transverse wrinkles and covered with whitish granulations. Pupa 13 mm long, on the thorax with a keeled hunch, greenish white with a slight blase reflection. — *bimaculata* Ferr. d’Alm. is a female form of this species exhibiting beneath a yellow costal spot on the forewing, yellow instead of white apical dots, in the hindwing only extinct undulate streaks, but instead of it a white, dirty discal spot; described according to 1 ♀ (aberrative). Costa Rica.

*Eupt. pavunae* Ferr. d’Alm. approximates *harmonia* (48 b), but beneath it is darker brown, at least in the basal half, the two dark marginal lines slightly undulate. Forewing with 4, hindwing with 5 brown dots, the discal transverse lines straighter. Rio, in swampy places near the ocean, at some places not rare.

Of *Eupt. herse* Cr. (49 e) a form is described: *bellatula* Ferr. d’Alm. from a swampy district of the State of Rio, the diagnose of which also fits normal specimens and is apparently only distinguished by a bright violet reflection above. This form as well as the type exhibit a remarkable harmony with certain species of the Erynnid genus *Ensilia*.

*Eupt. armata* priamis Ferr. d’Alm. is a form from the State of Rio, in which the very bright lustrous blue of the hindwing passes over to the forewing across the proximal margin of it. Beneath the distal transverse line is slightly angular at the 1st median vein.

*Eupt. suivaless* Dyar (193 f) is apparently not particularly similar to any other *Euptychia*; in its size and exterior it is somewhat like *calixta* (48 c), but the under surface is differently marked, in the anal part of the marginal area discoloured ruddle-red, the ocelli scarcely recognizable except 2 at and above the middle of the margin, the transverse line of the hindwing coarsely denticate. Mexico.

*Eupt. pertepida* Dyar (193 f). Above and beneath suffused with a dull purple brown; above there are only before the middle of the margin on the hindwing 2 small black punctiform spots, beneath there are besides 2 larger dentate transverse lines through the disc. Mexico.

*Chionobas osleri* Skinn. is a newly described variety from the altae-group of Ch. *targeata*.

*Catargynnis macasica* Strol. is very much like *pholoe* (57 d) and only differs by the orange spots of the forewing above being larger and the under surface being somewhat more variegated, especially decorated with larger silvery spots.

*Catarg. dryadina* Schs. (193 e) from Costa Rica is a little like *gigas* (57 c) or *loxo* (57 d), but the hindwing above has no orange margin, and beneath the ocelli are larger, more variegated, especially also on the forewing.
Erycinidae.

To the „Additions“ on p. 726 to 728 we add yet Eucomia sanarita (113 B e) which was in the meantime described by W. Schaas, having been discovered in the Brazilian Province of Minasgeraes and figured according to a specimen sent by Mr. Zikan. Under surface like above.

To Lymania thygeteria we have to remark that Fassl took it in copula with a typical $\varnothing$ corresponding with our figure 131 h a similar lepidopteron (113 B e) as was hitherto ranged with the genus Estemopsis as being allied to inaria.

Nymphalidae.

Genus Colaenis.

Col. enchroia. The names of the forms telesiphe Hec. (p. 400, line 7 from below) and titraustes Salev. (line 5 from below) have been mixed up with each other both in the text and the table belonging to it (84 d).

Genus Melitaea.

M. chara Edw. (88 f) Cockerell considers to be the eastern form of the subalpine or boreal minuta which flies at much greater altitudes.

M. tanura fulvia Edw. forms a transition to writeilii; the hindwings are beneath whitish-yellow instead of tan-coloured. The form is mentioned by Cockerell from New Mexico.

Genus Phyciodes.

Ph. dora Schs. from Costa Rica entirely resembles levana (88 h) above, but on the hindwing a chain of ochreous rings extends between the ochreous-yellow median band and the margin.

Ph. coeli Drc. As the $\varnothing$ of this species, the figure (91 c) and description (p. 444) of which seems to represent a $\varnothing$, W. Schaas figures a lepidopteron from Costa Rica, almost all the specimens of which exactly resemble the $\varnothing$ of sesta (90 g) except the brownish-yellow transverse band of the hindwing being a little broader and of a more fiery colour.

Ph. phlegias G. & S. The $\varnothing$ of this species, the $\varnothing$ of which we have figured 99 b by the name of platytaenia, is somewhat larger, the spots and bands are broader and bone-coloured, so that it approximately resembles the upper surface of fulcia-$\varnothing$ (90 c).

Ph. metharmoideae Fassl (102 C a as metharmoideae) from Teffé (Ega) on the Amazon River, is one of the largest species of this genus. The under surface corresponds to the upper surface, but on the foregoing the colours are duller, and the hindwing shows a series of white marginal spots.

Ph. pseudocelemina Strd. in its shape and marking is very much like itharmoideae (90 k); the marking of the forewing is almost the same, but it is without the yellowish-brown inner-marginal stripe, whereas the hindwing above is almost without markings. Colombia.

Ph. sticta Schs. (192 h) is the exact image of Napoegenes hemisticta with which it flies together in Costa Rica. It approaches Ph. nigripennis (90 l), but it has the shape of the wings of sestia etc. The distal half of the forewing more intensely and abundantly spotted whitish, of the hindwing only the anal half is yellow.

Genus Nessaea.

Nessaea obrinus fuentia Frauke. $\varnothing$. Above on the forewing with a green oblique band narrowed and rounded off both costalwards and analwards. The yellow area of the hindwing, however, is much more extensive than in specimens from Surinam. Under surface much paler green with quite unnoticeable brown longitudinal bands the distal (submarginal) one of which is altogether absent. Patria: Matto Grosso.
Callithrea boyi (102 C d). This new species was discovered by Mr. Carlos Boy in September 1922 near Mujo (Lower Amazon); before me was a ♀ which has been figured. It is allied to batesii (99 f); the differences above are to be seen from the figures, the under surface of the hindwing, however, is not verdigris as in markii, but of a delicate grey which is lighter in the larger distal half; yellow colouring is only noticeable in a spot at the base of the wing and in a stripe not coherent with the basal spot, at the proximal margin; the four rows of black spots consist of almost equally large spots, the proximal three rows being composed of smaller spots than in batesii, whereas the submarginal spots are larger and distinctly crescentiform. The under surface of the forewing resembles that of markii (99 f), but the basal yellow colouring occupies a larger space, the distal half is brightened up in the centre, and there are only 3 black spots, the anterior one of which is very small, whilst the posterior one is only indicated by some scales.

Callithrea batesi munduruna Fassl. „An extremely eastern form of batesi. Mr. Otto Michael, already years ago near Itaituba, took 3 ♀♀ of it which Dr. Staudinger, owing to the absence of the ♀♀ belonging to them, determined to be questionable ♀♀ of markii, until I succeeded 2 years ago in capturing also ♀♀ at several places of the right and left banks of the Tapajoz. They are almost invariably one third smaller than those of the batesi-type from Teffé. Above much more reddish-violet; the verdigris margin on both wings is narrower, but more prominent and proximally more distinctly defined than in batesi, at the costal margin of the forewing extended more proximally. The yellow basal spot on the forewing above is bent more proximally, but in the hindwing it only fills up the base of the cell, whereas in batesi it almost occupies the proximal half of it. The violet hue on the yellow spot is less intense than in batesi, whereas the white fringes of both wings are much stronger. Distal half of the under surface lighter silvery, almost invariably the distal 4 marginal dots in the apex of the forewing well developed, particularly the lowest, whereas in batesi they are almost invisible and almost entirely covered by the verdigris tint. ♀♀: ground-colour above black, without any trace of a greenish reflection (in batesi ♀♀ always with it); the verdigris distal margins above and the under surface of a purer and lighter silvery lustre; body, particularly ventrum beneath almost purely white (in batesi grey; the other differences like in the ♀♀). — Itaituba, Mirirituba, Cachoera I, Concession and Monte Christo on the Rio Tapajoz, in single specimens and rare; the ♀♀ extremely rare and always flying high up. Both sexes do not react upon any bait. „This Callithrea is a double of the Phalcidion-form Agrias ananayoras likewise occurring on the Tapajoz“.

— aimeean Fassl. „♂ mostly smaller than batesi, aimeean, but invariably larger than munduruna-♀. Above similar to the latter, but the green marginal bands of both wings much narrower and more extinct, and the uppermost 3 submarginal ocelli in the apical part of the forewing showing through above from beneath, and the extreme apex of the wing shaded with black from outside. ♀ like that of batesi, but at once discernible from it by the double row of black submarginal ocelli of the forewing beneath. Manicore on the Rio Madeira, captured in small numbers; the ♀ is very rare.“ (Fassl.)

Genus Catagramma.

C. discoidalis Guen. (p. 494) = bromer Bed. (101 B b).

C. viena Stgr. (p. 494). The original description entirely fits aegina Fldr. (101 B c). We were unable to ascertain whether it is a local form, because there are no specimens from Peru (Chanchamayo) at our disposal. — lamprolenis subsp. nov., from Bolivia (Rio Songo, 750 m, discovered by A. H. Fassl) is somewhat larger than specimens from Ecuador (Macas), has a somewhat narrower yellow band of the forewing and a smaller blue spot on the hindwing exhibiting also a duller and deeper lustre. — In bella subsp. nov. bella. from Eastern Colombia (Villa Vicencio, 400 m, A. H. Fassl) the blue spot on the hindwing is still smaller and the veins crossing it are remarkably sealed black. The ♀ has a rounder shape of the wings, the ground-colouring is duller, and the yellow band of the forewing is broader and lighter than in the ♀

C. transversa sp. nov. (102 C c) is before me in a ♀ from „Bolivia“. The marking above is to be transversa, seen from the figure. The forewing beneath is like in lyca (101 B c) except the different shape of the yellow band, whilst the hindwing beneath is conspicuous for the great extent of the black colouring; all the yellow bands are narrower than in the allied species, particularly the otherwise very broad second band (counting from the margin) is very narrow and scarcely half as broad as the other yellow bands; the yellow marginal band is in the posterior half replaced by a greenish (not blue) one; the bluish-white median spots are very small, the anterior group containing two, the posterior group three spots, whereas the fourth (at the proximal margin) is replaced by a small blue dot.

C. hystostes F. is on p. 494 misprinted into hystoptes.

C. platytaenia Rob. (102 C b) is considerably different from all the other species of this genus by the shape of the yellow band of the forewing; the under surface resembles that of demina (101 B b). Western Colombia (Rio Dagua).
Cat. hyllanus Gd., (p. 496) we have subsequently figured (102 C a). About the ♀ of C. excelsior michei Str. A. H. Fassl, writes: "The extremely rare ♀ of michei of which I only took 2 specimens is very much like C. excels. maunensis ♀ described above, except the yellow bow of the forewing being exactly as shortened and blunted off like a club as in the ♀. The forewing is without a reflection, the hindwing of a lustrous sky-blue colour." — The said author presumes that the red-banded forms of this species form a separate group the occurrence of which is confined to the northern bank of the Amazon River. — coruscans Röb. (102 C c) differs from the other forms of it by the magnificent blue lustre of the whole upper surface and by the shape of the yellow band of the forewing. Matte Grosso (Carunbas). — interior Btr. from Peru is quite similar to speciosa (p. 495), but the band of the forewing does not begin at the base of the wing, but the basal part of the forewing remains black. — maunensis Fassl. "The new excelsior-form from the Rio Maus has in both sexes a much narrower yellow bow notched by the veins. The magnificent blue lustre with a more violet tint is intensified in the distal margin of the hindwing, without being proximally distinctly defined to a light blue spot. The somewhat lighter ♀ with a black forewing without a reflection differs very much from excelsior-♀ by the hindwing being sky-blue and lustrous as far as the base and being finely interrupted by the black veins like a net. The magnificent blue colouring intensifies towards the distal margin. Several couples from Maués and Massauary; a rare and most beautiful insect."

C. ariramboe Ducke *) from the Campos do Ariramba (to the east of the Central Trombetas), from an altitude of about 280 m, is "not rare in the little forests of the banks of larger brooks". The ♀ on the black upper surface shows a deep blue reflection, the ♀ does not. The under surface of the forewing corresponds to the upper surface, but the colours are duller, and there is a blue submarginal line; the under surface of the hindwing is similar to that of excelsissima (101 B f), but the yellow bands are narrower; the white subapical spots are larger than in this and so near to each other that they almost form a band. — albifasciata subsp. nov. (102 C c), discovered by Mr. A. H. Fassl near Manaus, differs by the white subapical spots being confluent and forming a complete band only parted by the black veins.

C. sorana splendida Röb. shows a more intense blue lustre above, and the red markings are more reduced; the band of the forewing is narrower, the red basal part shorter, on the hindwing stunted to a small spot parted by the black veins; the under surface corresponds to the upper surface. Bolivia (Rio Songo, 750 m).

C. strympli Fassl. "This new form belonging to the texa-lepta group is above most similar to the Central Colombian C. texa Her. (101 B g), but the red discs of both wings are distally surrounded by a light blue reflecting zone, whereby it entirely resembles a miniature Agrias claudia michei from the same habitat. The under surface is at once and conspicuously discernible from texa by the red spot of the upper surface appearing beneath light orange, and by the rows of blue dots and the central ocelli being very distinctly visible in the black filling and much larger and of a light sky-blue colour." Habitat: on the right bank of the Tapajoz, above Monte Christo, a day's trip below Itaituba. — "On my Hingu-expedition I took, 30 km below Alta Mira, a ♀ of Catagramma which I might regard to belong to strympli-♀. All the red above is orange, the subapical band white; the disc of the hindwing is only indicated by an oblong discal spot of yellowish-brown scales. The under surface entirely corresponds to that of the ♀ described above, but it is in all its parts less intensely coloured and in all its light places much paler."

preta. — preta Fassl ♀ ♀. "This aberration occurring amidst the types is very conspicuous by all the three blue ocelli parted by the radial yellow median streak on the hindwing beneath being entirely absent, whereby the insect looks beneath quite strange. 1 couple from Obidos, Amazon." — obidensis Fassl ♀. "Another conspicuous aberration which has a quite normal under surface except the entire absence of the yellow horizontal median stripe separating the 3 central ocelli of the hindwing from each other. I take also this form of which I took 2 equal specimens near Obidos only to be an individual aberration of C. astarte."

C. peristera coeligeria Fassl ♀. "This insect looking like an aberration of a cold climate" has all the blue dots and the blue submarginal border of the hindwing beneath flown together, so that a large sky-blue disc is produced almost covering the whole hindwing, by which the insect looks very singular." Discovered near Santarem — Taperinha.

*) Mr. H. Stichel, at Berlin, comments (in: Neue Beiträge zur Insektenkunde Vol. 1, No. 2, p. 15, of June 30th 1916) upon my having left out this species in dealing with this genus on p. 193 seq., although it has been published 2 years before the edition of the elaboration of this genus..." (July 1915). At that time this description was indeed still unknown to me, but it seems that also Mr. Stichel only knew it after the 1st of January 1916, or else he would have already expressed his criticism in the No. 1 of his afore-mentioned journal, which was published on that day. — Mr. Stichel besides reproves the absence of Catagramma brunickii Oberth., although it is mentioned on p. 502 as Catagramma brunickii and also figured on t. 102 B. Mr. Stichel only did not recognize the generic position of this species, or else he would not have missed it in the genus Catagramma.
C. texa-texotitania Strand. The author says: "A \( A \) from South East Peru to a certain degree forms the transition from C. texa Hew. to titanio Satv. Above like texa as it is figured in Seitz' work, except the red basal area being in the costal half of the wing less far extended towards the apex, so that the costal margin of the area is here only about 9 mm long, whereas in texa-figure 101 B g in Seitz it is about 13 mm long; moreover, the red area is besides diminished by a black dorsal-marginal band almost touching the anal angle. In the hindwing there are near the anal angle two minute, light blue subminal spots. — The under surface agrees better with C. titanio; but from the figure in Seitz it differs by the read area reaching the anal angle and a light costal band of the forewing being only present in the basal quarter and only linear, whereas in the hindwing of my specimen the metallic markings are more bluish, the yellow subminal band more distinct, the following yellow band distally not interrupted midway and being there almost contiguous with the oblique median transverse band. — It is rather a form of texa than of titanio, since the contours of the wings are like in texa. Perhaps a distinct species."

C. hyalaspes aiaces Frusht. \( A \) above very closely allied to hyalaspes delmas Frusht. (p. 599) from Paraguay. The red band of the forewing, however, is broader, the blue area of the hindwing still more reduced. Under surface: the yellow preapical band of the forewing broader than in hyalaspes from Espiritu Santo. The yellow parts of the hindwing still a little more extensive than in specimens from Paraguay, the black spots and bands accordingly reduced. The four pupils in the black median area of the hindwing predominantly yellow instead of blue. Patria: Rio Grande do Sul, to the north distributed as far as São Paulo in Brazil."

C. pithes pallescens Frusht. \( A \) the red spots on the hindwing above longer, the oblique band of the forewing narrower than in C. pithes Latr. (102 A b), the \( A \) besides with a distinct, yellowish preapical band of the forewing, which is absent in pithes from Colombia. The black ocelli of the hindwing as a rule smaller than in pithes. Patria: Venezuela."

C. codomonus paulistanus Frusht. \( A \) and \( \varphi \) very closely allied to selina Guen. (p. 494) from Minas Gerais, from which, however, it is at once discernible by the still more reduced red colour on the hindwing above and the almost disappearing reddish-yellow preapical spot of the forewing. The under surface is more different, e.g. the yellow preapical spot of the forewing is scarcely half as broad as in selina, the yellow submarginal band of the hindwing is reduced to about a third of the extent of selina, accordingly the black band is widened and the discal spots are contiguous. Patria: São Paulo."

C. lyca maroma Frusht. \( A \) differs from lyca as Dus Leb. and Seitz-Röber figure it (101 B e) by a longer, more uniformly broad and more conspicuous orange band on the forewing above the blue reflection of the hindwing, however, is considerably reduced. The under surface is most similar to lyca aerios Guen. (p. 598), . . . but the bluish-white pupils of the black discal area of the hindwing are larger. Patria: Colombia, no exact habitat mentioned." — exultans Frusht. \( A \) Above most closely allied to aerina Flkr. (101 B c) from Ecuador with a much broader orange band of the forewing and a more extensive blue reflection on the hindwing above. The black submarginal band of the hindwing beneath narrower than in aerina, as Felder figures it. Patria: Bolivia."

C. eunomia triteia Frusht. \( A \) Distinguished from C. eunomia Hew. (101 B h) from "Quito" by the narrowed red area of the forewing being confined to a vertical band of a finger's breadth, since a black basal zone advances as far as the middle of the cell. Patria: Ecuador, Hazienda Anna María, Quevedo."

C. pygma catharinensis Strand. On the hindwing beneath the black postmedian band which otherwise exhibits blue median spots, is in the centre yellow like the ground-colour, at the proximal margin at most very slightly bluish. — ab. sublimialis Strat. in the hindwing above does not show any bluish-white subminal spots, the length of the forewing is only 22 to 23 mm, and the light subapical marking of the forewing is very much reduced. Santa Catharina.

C. pyracmon Gott. E. Strand, in dealing with a \( \varphi \) of this species from an unknown habitat which he connects with the figure on table 101 B h having been done according to a \( \varphi \), proposes the eventual name pyracmonides. The specimen the upper surface of which has been figured originates from Surinam.

C. aphidnae aphidnella Strat. According to a \( \varphi \) from Peru showing slight differences from the original description, the author introduced this eventual name.

C. zephyria Burm. Of this species I have neither seen a specimen nor obtained a description; it is presumably synonymous with another species; in Kirby's Catalogue of the Diurnal Lepidoptera and its Supplement it is not mentioned. Mr. H. Stichel in a letter assumes it to be a subspecies of spora.

Genus Perisama.

Peris. insignis sp. nov. (102 C a) from West Colombia (Rio Dagua, 2000 m, A. H. Fassl) is distinguished by the broad golden green area of the forewing above. The hindwing beneath resembles that of humboldtii (102 A c), but the yellow is much paler and the black dots are arranged in a straight line: the under surface
of the forewing is greyish-black, the basal half of the discal cell greyish-yellow, the apex of the wing yellow like the hindwing; at the costal margin in the centre of the black area a white, long-extended spot, and between this and the yellow discocellular spot a small blue stripe. Also similar to *tryphenia* (102 A f), particularly above, but the under surface has no blue markings and on the hindwing the distal black line is much less dentate and stronger, and the centre shows 3 intense black dots.

P. *eminens* Olth., on p. 498, was considered to be an aberration of *opplei*; in the meantime it was found out to be a distinct species and we therefore figure it (102 C b). The species occurs in Northern and Central Peru.

**P. lebasi Guér.** The form figured 102 A g has been denominated by Embrik Strand *psuedolebasi*; the author presumes it to be a species different from *lebasi*. This would be correct, if — what is not proved — Hewitson's figure represents a typical specimen. — Moreover, E. Strand established the aberration of *lebasi*; *derufata* which he describes as follows: „The specimen before me differs from Hewitson's figure, by the following marks; the band of the forewing is narrower (about 2 mm broad), on vein 2 narrowly interrupted, and the anterior proximal angle is extended towards the basal longitudinal streak which, however, it does not touch; on the hindwing beneath the red costal-marginal streak reaches to the distal transverse line; the forewing beneath is not marked red, but the terminal half of the cell is blue and separated from the greyish-whitish basal part merely by a small dark diffuse patch, the other blue markings of this under surface being similar as in the figure cited, though less distinctly defined.“ Colombia. — *dividens subsp. nov.* from Western Colombia (Rio Magdalena) has a very narrow magnificient band being broken up into single spots, and a broad marginal band of the hindwing.

**P. diotina zyxata Fruhst.** „Peru, Pozuzo. 5 of a larger habitus and above with much larger, greenish-blue intramedian spots than *diotina* (102 B a). Under surface darker, the neat red submarginal line of the hindwing is brighter. — *zurita* Fruhst. Ecuador. An excellent form, recognizable by an ultracellular, supplementary blue intramedian spot of the forewing which is united with the bluish-grey cellular streak. Under surface: the red cellular spot of the forewing is smaller than in the Peruvian and Bolivian forms, sometimes almost extinct, but invariably faded. Forewing besides characterized by another white costal spot and two greyish-brown blurred intramedian maculae. — *demata* Fruhst. Ecuador, Macas. Whilst *zexata* most probably originates from the Pacific part of the Cordilleras of Ecuador, *demata* is a vicarious form from the Amazon part of the Andes of Ecuador. It originates from the Rio Upano, a source of the Amazon. The blue spots above as in *zurita*, but smaller, darker. The large cellular spot on the forewing beneath, however, again very large, equaling that of *zyxata Fruhst*. from Peru. The white preapical spot still more prominent than in *zurita*, the hindwing above, however, with a blured marking.“

**P. cecidias Hew.** (102 B a), according to Fruhstorfer; is a species different from *diotina* (102 B a).

P. *cecidias cecidina Fruhst.** „Peru, Cuzco. It differs from *cecidias* Hew. (102 B a) from Ecuador by larger blue intramedian spots of the forewing and an almost twice as broad light silvery grey instead of blue distal margin of the hindwing.” — *yurapa* Fruhst. „Peru, Pozuzo. It differs from *ceciditas* Hew. of Seitz figure (102 B a) and from *cecidina* by the presence of a bluish-green complementary spot beyond the cell of the forewing, so that this species exhibits the same peculiarity as *P. diotina* from Peru.“

**P. morona xynites Fruhst.** „Peru, Pozuzo. Much larger than *morona* Hew. (102 A d) from Bolivia, the green longitudinal band of the forewing narrower, the greyish-blue marginal zone of the hindwing much more extensive.“

**P. euricela plistia Fruhst.** „Peru, Pozuzo. 5 identical with *euricela* Hew. var. (Exot. Butt. IV t. 17 f. 90, 91); and different from the figure Röber-Seitz (102 A h) by the green band of the forewing being parted in *plisia*. The greenish border of the hindwing in *plisia* narrower than in *euricela* from Colombia.“

**P. hilara Sale.** (102 C c) from Peru (Chanchamayo) is allied to *cabinia* (102 A d, c). Above it differs from it by the shape of the median band of the forewing and the marginal band of the hindwing, as is to be seen from the figures. Beneath the apex of the forewing is of a pure silvery white, in the black digestive there is a blue band broken up into minute spots, and on the hindwing the proximal line almost extends to the proximal margin; between the two lines there are 4 black dots.

**P. clara sp. n.** (102 C d) from Eastern Colombia (Upper Rio Negro, 800 m. A. H. Fassl) resembles *yeba* (102 A h). The upper surface exhibits at the end of the discal cell of the forewing a more stangulated and narrower marginal band. The differences beneath are exhibited in the figure.

**P. marianna sp. (?) nov.** (102 C b) from Western Colombia deviates above from *illa* (102 A h) by the absence of the submarginal spots of the forewing, a more complete median and a narrower marginal band of the hindwing. The under surface shows the differences to be seen from the figures.

**P. cabinia thyroessa Fruhst.** „Peru, Chanchamayo, Pozuzo. An excellent form; the green basal ray of the forewing is not as in *cabinia* Hew. (102 A d e) from Bolivia, united with the coherent and much broader submarginal band. The light green zone of the hindwing consists of single, proximally pointed spots.
The red zone of the forewing beneath is reduced to a relatively small spot before the apex of the cell — the black area thus covering the whole median space of the forewing.

**P. vaninca philatria** Fruhst., „Bolivia, La Paz, Chulumani, Peru, philatria. Chanchamayo. A well distinguished race figured already by Röber-Seitz (102 A g h) and differing from vaninca Hew. from Colombia by the broader blue zone on the hindwing above. — volara Hew., from Venezuela, is not a species as Hewitson and Röber consider it to be, but surely only a territorial race of vaninca Hew. — gonalia Fruhst. gonalia. Venezuela. It is said to be another territorial race excelling volara in the size and extent of the bluish-green bands on the forewing and particularly also on the hindwing. In gonalia the black dotting on the hindwing beneath is also more prominent. It is not certain whether it is a form of volara from the rainy season or from the mountains.”

**P. alicia paralia** Fruhst., „Peru. Of a larger habitus and of rounder wing-contours than alicia Hew. (comp. ibia 102 A h). The bluish-green band of the forewing is much more extensive, the submarginal band of the hindwing, however, scarcely half as broad. Under surface of hindwing with much thinner black lines and extremely small dots. It may be a form from the mountains or the rainy season.”

**P. oppellii aiscus** Fruhst., „Ecuador. The upper surface differs from oppellii Latr. (102 A e f) by an extremely reduced, sometimes only thread-like submarginal band on the hindwing above.” — angustiscaletia subs. n. from Eastern Colombia (Upper Rio Negro, 800 m) has a very narrow marginal band of the hindwing and the yellow basal area of the forewing beneath is very much strangulated.

**P. humboldti vestina** Fruhst., „Venezuela. Above recognizable by stunted greenish spots and bands on both wings and thereby forming a transition from humboldti Guér. (102 A e) to humboldti tringa Guér. (102 C b, c) from Peru. Under surface of forewing much more like tringa Guér. than Colombian specimens.” — exuberans Fruhst. „Above differs from humboldti Guér. by the carmine discal spot being broadly diffused as in tringa Guér. on the forewing beneath. This is the form figured as humboldti by Röber-Seitz on t. 102 A. Patria: Colombia.” — We remark hereeto that humboldti varies so very much in the size of the red spot on the forewing beneath that it seems not to be justified to denominate the different forms. — fasciata subs. nov. from Bolivia (Rio Songo, 750 m, A. H. Fassl) has a narrow, coherent magnificent band traversing the whole wing, but the equally coloured basal ray does not flow together with it. The red basal area of the forewing beneath is much larger, the black lines of the hindwing beneath are much closer together. The small insect is also smaller and makes the impression of a separate species. — tenuifasciata subs. n. from Peru (Chanchamayo) has a still narrower magnificent band on the forewing above than the preceding, the basal ray is likewise isolated; the red area on the under surface is less developed than in humboldti.

**P. tringa testacea** subs. n. from Venezuela has a brownish under surface of the hindwing; the same colouring is exhibited on the light parts of the forewing beneath. — tringa (p. 497) has been figured on t. 102 C b.

**P. guerini aureilimba** subs. n. from West Colombia (Rio Magdalena) has a narrower and broken-up magnificent band of the forewing and lustrous golden marginal band of the hindwing.

**P. dealbata** sp. nov. is presumably a subspecies of compestre (103 a), much smaller (about the size of diotima 102 B a); beneath very much like carduses (102 B b), but the red markings of the forewings are coherent. Patria?

Peris: camellita Hew. (p. 498), moronina Röb. (p. 498), and jurinei Guér. (p. 499) we reproduce subsequently.

**Genus Callicore.**

**C. consdrina Guér.** (102 C a). We have figured specimens corresponding with Guénée’s description. Western Colombia.

**C. gabaza stenotaenia** subs. n. from East Colombia (Upper Rio Negro, 800 m, A. H. Fassl) has a narrower band of the forewing, but a longer and much broader marginal band of the hindwing.

**C. seropina** sp. n. (?) (102 C a) has been discovered by Mr. A. H. Fassl near Alta Mira on the Rio Xingu, in January. Without a blue reflection; in the ? the band of the forewing is much narrower and somewhat shorter, in the ? the black spots in the „eights“ of the hindwing beneath are separated.

**C. elymena ab. patriotica Strd.** „A ? , unfortunately without the habitat being stated, distinguished by a broad green band of the hindwing being midway 2 mm, at the end about 1 1/2 mm broad, and a slightly broader (about 2 1/2 mm) bluish-green band of the forewing, which is more regularly defined and more coherent than in the figure of Seitz’ work (102 B c), thus somewhat like in Cramer’s figure, except that it is excised on the proximal side in area 3 and forming otherwise proximally 2 or 3 small teeth. The marking on the forewing beneath as in Seitz, that of the hindwing, however, more like in Cramer’s figure, since the black markings are of a deeper black and broader, and besides the light triangular area in an apical direction from the two „eights“ is, like in Cramer’s figure, almost reduced to a puntiform spot: of the two spots of the anterior eight the anterior one is large and circular, whereas the posterior (proximal) spot is almost entirely confluent.
with it and about the shape of a comma; of the two white sublimbal bands of the hindwing the distal one is only half as broad as the proximal one. Expanse of wings: 39, length of forewing 22½ mm.” — The aberration figured 102 B e has been denominated by EMBRiK SBRAND: roberia.

**C. bifasciata** Weym. seems to coincide with phlogea (102 B d). The specimen described (also from Colombia) only seems to differ from phlogea by a more intensely green-scaled base of the forewing; it is therefore an aberrative form of phlogea.

**C. ditenaeniata nom. nov. (= bifasciata Frust. [nom. praecoc.]).** “Above most closely allied to euclides Latr., the magnificent band of the forewing, however, slightly narrower and proximally with that magnificent azure reflection by which euclina Hew. and eupepla Godin. are distinguished, although it is not as extensive as in these forms. Hindwing with a submarginal band removed far proximally, of about the extent as we observe in euclides Röber (Seitz t. 102 B e). Distally to this euclides-band we find yet another antemarginal stripe of a dull light blue, about of the extent as in neglecta (102 B e) Röber in Seitz. The under surface in almost all the essential marks corresponds with euclides (102 B e) Röber-Seitz. Patria: Colombia.”

**C. coelinuda Guén. (p. 503).** FRUHSTORFER declares it to be merely an insignificant local race of euclina Hew. (102 B e).

According to FRUHSTORFER, C. carmen Guén. (p. 504) is „an absolute synonym of C. carmen Godt. (102 B g), whereas the much smaller race from Rio Grande do Sul may be denominated without hesitation (teana Frust. i. 1).“ This form may be identical with that figured as candrena on t. 102 B g. But as carmen, according to the material before us, exhibits differences and may be a distinct species, we have subsequently figured it (113 B e).

**C. wernickei Niep.** „An intermediary between gabaza (102 B f) and eupepla (102 B f). Upper surface as in gabaza, but without a blue reflection. The metallic transverse band of the forewing is green as in eupepla, but towards the posterior margin broader and without the ray to the base. The metallic spot of the hindwing as in eupepla, but smaller and more lustrous blue. The metallic band at the distal margin is absent, the fringes are hardly noticeably white. Under surface as in gabaza; in the forewing the distal part is broader black, the white apical part lighter. The costal margin at the apex more feebly margined with black. The middle black line traversing the apex in its length with a fine white median streak. Hindwing as in gabaza, but somewhat lighter. Length of forewing: 23 mm. 1 5/8 from Colombia.”

**C. ceryx Hew. (193 f) (p. 502) of which we could not yet obtain a specimen and which we reservedly declared to be an aberration of euclides (102 B c), is declared to be a distinct species by DOGNIN, as well as by E. STRAND according to a 5/8 from Llanos in Ecuador not quite agreeing with the original figure and description. We therefore reproduce the original figure.

**C. gabaza plumbilimba subsp. nov.** from East Colombia (Upper Rio Negro, 800 m, A. H. FASSI) is distinguished by a leaden-blue marginal band of the hindwing (11½ to 2 mm). Similar specimens also occur in Venezuela.

### Genus Dynamine.

**D. motacilla** sp. n. (102 C d) from West Colombia is above similar to pieridoïdes (101 A b) and anubis (101 A b c), but at the costal margin of the forewing it has a much more lustrous blue colouring; the broad dark distal margin of the hindwing is conspicuous. The hindwing beneath also exhibits the same broad dark margin which, however, is brightened up by the limbal lustrous blue line and by a submarginal whitish band ending anteriorly and posteriorly into a lustrous blue line; the hindwing being otherwise white shows a sub basal blackish-brown band. The forewing beneath resembles that of pieridoïdes, but it does not exhibit a yellowish, but blackish-brown marking and a much more lustrous blue reflection. According to a 5/8.

**D. luisiana Fassl.** “This new Dynamine is one of the most splendid surprises of our whole Amazon expedition up till now. The insect forms the intermediary between gisella Hew. (101 A i) and zenobia Bat. (101 A i). Both wings above predominantly jet-black. In the basal angle of the forewing there is a large spot as in zenobia, but of a more light steel-blue colouring; besides the forewing only exhibits a submarginal band being above parallel to the apex proximally indented, 2 mm broad, reaching to the costal margin as well as downward to the posterior margin of the forewing. The hindwing being otherwise quite black is solely decorated by a submarginally placed long reniform spot extending from the anal margin to beyond the distal half of the hindwing. These submarginal bands of both wings are of a dark violet colour (similar to the blue in gisella), thus much darker than the more greenish-blue (zenobia-like) basal spot of the forewing. The under surface resembles that of gisella and of zenobia, but it exhibits the orange-brown spot in the basal angle of the forewing which is absent in zenobia.” Patria: Manicoré on the Rio Madeira and Tefé on the Rio Solimoens.
Genus **Chlorippae.**

*Chlorippae burmeisteri* G. & S. (p. 546, t. 110 B a, icients. For a ♂ being figured 102 C e I am indebted to the kindness of Mr. P. Jørgensen. It differs to such an extent from the ♀ of *cyane* that the presumption of *burmeisteri* and *cyane* being separate species is thereby more substantiated.

Genus **Agrias.**

(By A. H. Fassl 1

Since 1916 when the genus was treated upon in Vol. V, p. 566, by the late H. Fruchtstörfer, a considerable number of new forms have been discovered in the districts of the Lower and Middle Amazon River and its affluents having before been little known to entomologists, so that also the systematic division and natural position of many forms can now be arranged according to these results and the much more copious material from much different points of view.

Although our present knowledge of the genus can by no means be regarded as exhaustive, the surprising result is deduced that the Amazon River and the Rio Negro divide the whole enormous range of the genus to the east of the Cordilleras with respect to its forms into two well separated regions; still vast important districts are up to this day entirely unknown with respect to their *Agrias* - races, above all the whole of Venezuela and the enormous plains of the Llanos of East Colombia, as well as the easternmost and central parts of Brazil.

*Agrias claudia.* The northern forms, thus the races homed in the Guianas and to the north of the Amazon and Rio Negro differ from all those occurring to the south of the Amazon by their smaller size and more unicoloured grey under surface, particularly in the band in which the row of eye-spots is situate. Most of the subordinate forms of *claudia* described often occur as aberrations at the same place and time, which fact will be affirmed by every collector of series of *claudia* from well explored habitats, such as the Maroni River in Cayenne, Obidos and Manaos. Both typical *claudia* and all its transitions as far as *amazona* exhibiting the least red color, as well as those with a proximally notched red bow of the forewing (♀ *sahlkei*) are found together at either of the 3 habitats, just like the same forms with a more or less bluish-violet decoration of the fore- and hindwing (*resta-forms*). Specimens with an intense preapical blue lustre of the forewing have in the meantime been described as *imperialis Lathy,* and an otherwise typical *claudia* (from Manaos and Obidos) the large red spot of the hindwing of which is situate in a still larger bluish-violet spot, thus being the most variegated of all the northern *claudia*-forms, we have denominated: *tuscania form. nov.*

Most interesting are the forms of *claudia* to the west. From Manaos no *Agrias* had hitherto been known; Dr. Hahnke merely once saw the supposed *sardanapalus* flying, and Otto Mielke obtained an entirely desolate specimen from a settler, which was said to have been taken near Manaos. Among the 40 red *Agrias* I captured near Manaos there is no *sardanapalus*; all of them are forms of *claudia,* of which all the ♀♀ and most of the ♂♂ exhibit rich blue decoration which often entirely removes all the black tints above, whilst the red disc of the hindwing is rather much reduced or entirely absent. Thereby a *claudia*-form is produced near Manaos especially resembling a *sardanapalus,* distinguished from its southern double *sardanapalus* by its remarkably small size and a duller lighter blue of the hindwing being distally bordered by a uniformly broad (almost 1 cm) black edge; the preapical blue spot of the forewing is much more metallic and lustrous sky-blue; the under surface is duller blue but with a more whitish margin than in *sardanapalus;* we denote the interesting new insect **minus form. nov.** A form quite similar to it, likewise without a red disc on the hindwing, resembling also *sahlkei,* occurs near Manaos, with a deeply indented red bow on the forewing, of which 4 couples are before us, which are quite constantly coloured and marked and which we denote *claudia biedermannii form. nov. (t. 113 B a ♀ and ♂) in honour of Mr. Rod. Biedermann,* the well-known collector at Winterthur, since the same name having before been applied to a form of *perides* becomes vacant for reasons, to be discussed hereafter. This magnificent new form of *Agrias* in the ♀ already shows distinct attempts of the red band being distally broken up, where it is partly crossed by the black veins.

We now come to the forms occurring to the south of the Amazon River. We do not wish to discuss the question whether *sardanapalus* is justified to be regarded as a distinct species, still we must state the fact that all the forms from the Southern Amazon District that were formerly placed to *claudia* combine certain common marks which are absent in the genuine races of *claudia* from the Northern Amazon District and the Guianas. Beside the larger size, the rounder shape of the wings and the much brighter ochreous-yellow under surface we miss here above all every approach to the aberration *sahlkei* being of such frequent occurrence in the north with the basally angular excision of the red bow of the forewing. The different forms denominated are much more bound to the locality; the discovery of a genuine *sardanapalus* on the Rio Madeira with a large red disc of the hindwing proves the complete gradual transition of the most abundantly red eastern
form _crosus_ into the entirely constant form _sardanapalus_ of the lowlands of the Central Amazon District. The row of transitional forms from Pará to the Rio Xingu is at present so complete that a separation of _crosus_ and its similar forms from the northern _claudia_ is no more possible.

I took the typical form _crosus_ in very fine and large specimens on the Rio Xingu as well as with a somewhat shortened red disc of the hindwing on the Rio Tocantins, from where also the figured form _vulcanus_ (113 B a 3) originates with a blue reflection towards the base and anal part on the hindwing. This is already a transitional form to _A. claudina_ (Rio de Janeiro to Bahia), and still more so is a smaller and more insignificant form from Alcobaca, the first of the rapidts of the Tocantins, in which the quite transcellular red spot receding towards the apex of the hindwing, encompassing yet the cell, extends in fine red lines along the veins into the disc of the wing; _loki_ form. nov. On the Rio Xingu I captured in numbers only the typical form _crosus_ Stgr., the legitimate 3 of which does not exhibit any blue bordering of the red colouring. On the Rio Tapajoz, however, there occurs already a form with a _sardanapalus_-blue anal edging of the red disc on the hindwing and sometimes also blue colour in front of the red bow of the forewing which was placed by STAUDINGER as a 3 to RIFFART'S genuine 0 of _crosus_ from Chaves (Island of Marajo). I denominated this form of _crosus_ decorated with blue of which I possess beside several _g_0 also the very rare, likewise analwards blue 0 from the Tapajoz, according to its discoverer: _A. michaeli_.

Cachoeira I, the first of the rapids of the Tapajoz, already has a form with a very small and along the veins dissolved red spot of the hindwing, which is situated in a larger bluish-violet spot (_godmanides_ Fassl). On the Rio Maués we find a somewhat smaller, very constant local race with carmine magnificent spots hued with violet without a blue bordering, which is more oval in the hindwing and distally less dentate than in _crosus_: _pulcherrima_ Fassl.

From the next large tributary of the Amazon, Rio Madeira, finally comes the typical _sardanapalus_; but besides there occur specimens poor in colours, in which the blue in the forewing is entirely absent. My collector H. STRYMPHEL, however, also succeeded in capturing here 2 genuine 0 of _sardanapalus_ which in the midst of the blue disc of the hindwing exhibits yet the large red disc of _crosus_. I denominated the magnificent new form completing an unexpected transition from the east from _crosus_ over _michaeli_, from the south from _godmani_ to the genuine _sardanapalus, as _belazar_ form. nov. (113 B a 3).

Among the greatest number of the dom of _sardanapalus_ lying before me I denote the form with a uni-coloured greyish-black hindwing without any trace of blue; since it had been observed by collectors already before, but not captured. _rubrmediana_ I denominated 0 with red-hued medians of the hindwings; 0-ab. _purpurea_ those in which these lines are condensed to a red discal spot of the hindwing; 0-ab. _brunhilda_ those specimens where the red in the hindwing is replaced by a blue disc, sometimes yet with a blue distal bordering of the red bow of the forewing; thus a retroggression to the colouring of the 0. Finally I denominated ab. _suprema_ (113 B b 0) an extraordinarily variegated 0 from Tefe exhibiting in the blue _brunhilda_-spot of the hindwing yet the red spot of the form _purpurea_. Two 0 in which the apex of the forewing is ferruginous which occurs in no other _Agrias_-form above known to me, I described as 0-ab. _coccinata_.

As to the Andine forms of _sardanapalus_, we may supplementarily add after a consultation with H. LATHY, that his form _hades_ Lathy has black hindwings without any blue, so that _decyana_, which was later on described by NIEPELT (p. 570), is to be cancelled as the synonym of it. Moreover, we must insert yet in _Fruhstorfer_ description of the races of _sardanapalus_ on p. 570 the form _intermedius_ Fassl (from the Eastern Cordilleras of Colombia) which was before described by me; it is the northermost and most scantily coloured form of _sardanapalus_ at any rate, with a dull upper surface as in _Agrias_ _aedon_ to which, however, it does by no means form a transition.

_A. narcissus_ does not range as in the previous work of _Fruhstorfer_ between _phedonon_ and _howtonius_ but directly after _aedon_ to which it is very closely allied and perhaps connected with it by transition in hitherto unexplored districts (Venezuela ?). The type occurring to the north of the Amazon invariably shows a red band almost rectangularly touching the costal margin. On the western frontier of its range known hitherto, to the north of Manaos, I discovered to my surprise only 0 with a magnificent ochreous-yellow instead of purple-red band, whilst the 0 were normal; 0-var. _chrysotenaenia_ (t. 113 B b).

A still greater surprise on my Amazon exploration was the discovery of a most magnificent, considerably different race of _narcissus_ in the southern Amazon form varies so much at the same place and time that the extreme forms, on their upper surface, do no more resemble in the least the exterior of _narcissus_. All the representatives of this new southern race are considerably distinguishable from the type by the red bow of the
forewing never touching the costal margin in a right angle but extending in a flat bow along the costa into the base of the wing, and by the blue colour of the hindwing extending to the distal margin; besides all the southern *narcissus* are much larger, and often the cornflower-blue also covers the red areas which produces a coloristic effect excelling even that of the most variegated *sardanapalus*; all the following coloristic varieties (except the yellow form) are common to both sexes; the under surface of all the forms is marked and coloured as the typical *narcissus*. — The form *tapajozus Fassl* (113 B b $\varphi$) is the southern race being the most closely allied to the type. In the form *dubiosa* (113 B b $\varphi$) — which I took to be a form of *claudia* according to the quite old specimen taken first on the Tapajoz — the red bow is downwards widened as far as the submedian. A couple of *dubiosa* from the Rio Xingu besides exhibits a red pupil in the hindwing in the shape of a carmine transcellular spot. The form *porphyrios Fassl* (113 B e) represents the transition for which I have long been searching to the most variegated form *narcissus illustrissimus Fassl* (113 B d $\varphi$) which almost entirely resembles above a *claudia michaeli*, whilst another specimen resembles *sardanapalus belsazar*. On the Rio Maurés I finally captured beside the typical *narcissus tapajozus- $\varphi$ also a magnificent aberration with a golden yellow band of the forewing — *ab. ictericus* Fassl being in the colouring analogous to the northern form *chrysotaenia* from which, however, the Maués-insect differs considerably by exhibiting the characteristics of the southern races, the flat bow of the forewing and the blue colour being spread across the whole surface of the hindwing.

Of the forms of *A. amyelon* the following are to be ranged in the species *pericles* as they have in common with it a rust-coloured yellow or red body, a similar state of the hindwing and the inclination to a blue preapical embrid on the forewing which blue colour is in variegated specimens like the blue of the hindwing distally besides bordered with green festoons. Therefore the *pericles-group* differs from the purely Andine forms of *amyelon* in which these marks are always absent; the races of *pericles* are besides almost invariably much smaller, the very long apical strigan of the forewing always show through above also in the $\varphi$ as 2 or 3 very large yellowish-white dots.

In case my present expedition *) should be successfully completed, probably all the non-Andine forms having hitherto been combined with *amyelon* will have to be rearranged in *pericles* by the discovery of the very rare variegated transitions to the latter species, so that the eastern foot of the Cordilleras would then form the natural frontier between the range of *A. amyelon and pericles*, as is also the case with many other closely allied species of lepidoptera, e. g. *Papilio harmodius* and *aria, the* range of which is divided by the same line.

It has hitherto been proved for certain that the northern forms *A. aurantiaca* and *trajanus* belong to *pericles*, the former representing merely a coloristic variety of the latter, since both forms fly at the same time and place near Obidos as well as to the north of Manaos. Beside a $\varphi$ of *trajanus* from Obidos with a faint dark blue preapical reflection of the forewing, I possess a $\varphi$ of *aurantiaca* from Manaos with a blue embid at the same place but also already a dark blue disc of the hindwing. Still more than these specimens do, the figured form *praxiletes* (113 B c $\varphi$) proves the relationship to *pericles*, representing nothing else but a $\varphi$ of *trajanus*, in which the preapical spot of the forewing already exhibits a tendency to a green bordering as in *pericles*; I took the insect near Manaos.

The typical *trajanus* shows the same orange-red colour as the figured *praxiletes*. By Frischtofer speaking in his description of *trajanus* on p. 573 of a purple spot of the forewing and dark red powdering on the hindwing it happened that I described *trajanus* once more as *pericles biedermannii* which name has now to be placed as synonymous to *trajanus*, since also Mr. Lathy (Paris) has indisputably identified the types of *trajanus* in an English collection. The white wedge-shaped streaks of the hindwing on which Frischtofer in his diagnose lays such great stress, are moreover sometimes absent in specimens from Obidos, almost invariably in those from Manaos.

Of the *pericles-forms* from the South Amazon the Rio Tapajoz unites the most shades at the same place. Here we meet with variegated red-banded specimens allied to the typical *pericles* of the Solimões, and in which the distal bordering of the blue areas exhibits bright green festoons, as well as all the transitions to quite scantily coloured specimens showing but minute traces of blue and green; the very samegradation is exhibited by the cell-banded forms there (*xanthippus Stgr.*), in one of the specimens I captured there we even notice no trace whatever of blue and green, and this plain blackish-yellow specimen recalling the $\varphi$-colouring is at any rate and presumably the most poorly coloured of all the $\varphi$ of *Agrias*, which I denominate *pericles $\varphi$ ab. trisitis*.

Whereas formerly only a $\varphi$-form of *pericles* being similarly coloured like this was known, I succeeded in taking besides several $\varphi$ being alike, in which the black preapical zone of the forewing is profusely strewn with golden green scales; sometimes the veins traversing this green area are besides hued dark blue — $\varphi$ ab. *chlorotaenia Fassl*. Still more singular is a $\varphi$ which I at first mistook for *phalidon-anaxagoras*. Before I knew the legitimate $\varphi$ of the latter, which, however, certainly also only represents a variegated $\varphi$ form of *pericles*; *mirabilis Fassl* (113 B d $\varphi$); it exhibits a subapical embid similar to *chlorotaenia*, though of a blue colour in which on the contrary the veins are hued green. In the hindwing the orange-powdered base is followed

*) The author of these lines, A. H. Fassl, has unfortunately died in the meantime at Manaos.
by a black discal area, then comes a broad, dull dark blue submarginal border distally defined by a fine equally broad green silvery line; the most peculiar feature, however, in this insect is the strangely shortened yellow bow of the forewing, almost looking like a transition to the basal spot of *anaxigonus-hewitsonius*.

The Rio Maués yielded a much more constant race of *pericles* — *mauensis Fassl* — in which there is no green festoon at all, the fore-and hindwing being profusely violetish-blue; the magnificent bow of the forewing may be purple-red, or orange or yellow. The ♀ is without decorations like the normal one of the Tapajoz-forms, but it invariably has a dark metallic green reflection in the hindwing at the place where the strigae are in the northern forms. Only a single ♀ from Maués is more variegated with a similar though much duller blue decoration than the ♀ and a light orange-red band; I denominated it ♀ ab. *coronata*.

The Rio Madeira has by no means supplied a transition from *mauensis* to the typical *pericles*, but a very peculiar lepidopteran one which might almost take to be the ♀ of *pericles mirabilis*; it looks above and beneath very much like the figured *hewitsonius fourti-oker* from the same habitat, and has likewise an orange basal spot of the forewing not extending beyond the cell; then follows a dark blue zone ending in a narrow green border at the distal margin; just as dark blue with a fine green bordering which, however, is more intense analwards, are the hindwings. Particularly the latter circumstance, besides the remarkably long apical strigae beneath showing through towards the apex of the forewing as 3 purely white dots, the rust-coloured yellow base of the hindwing above and no less the small size of the insect are certain proofs that it belongs to *pericles*. I name this new form *ahasverus*; it has been discovered by my collector A. LÜZ STREMPEL, and it is the only representative of *pericles* known hitherto from Madeira. Its great resemblance to a form of *hewitsonius* flying at the same habitat is by no means a sporadic occurrence in the variations of well separated insects of the same genus; I only mention as similar examples: *Heliconius melpomene* and *cesta viculata* near Santarem, *Morpho-becuba* and *mettius* near Obidos, *Morpho cisseis* and *perseus crameri* near Parintins ete.

That also *A. ferdinandi Fruhst.*, and its recently described variegated form *gloriosa LATHY* — with a profuse blue preapical embedment in the forewing — are nothing else but southern forms of *A. pericles* resp. of its Mattro Grosso forms, is easily to be made out from the aforementioned common marks of the races of *pericles*. But also *tryphon Fruhst.* and *amydyonius STRY.*, of which we have at present too little material, seem to belong to *pericles*. On p. 576 we have to insert in A. *mapiri* in the 8th line from above after the word „*Agrias*” the word „*pericles*”.

**A. phalidion.** I must premise that the range of this species as well as of the close allies and of the *hewitsonius* being connected by transitions, is probably only confined to the Southern Amazon District in spite of some contrarious statements. Both myself and my collectors were for a long time active at different places to the north of the Amazon and Rio Negro without ever beholding a blue *Agrias*. An entirely typical ♀ in the Paris Museum, which merely exhibits a somewhat greyer scent-pencil and is labelled as „*Obidos*”, I most positively consider not to originate from there.

Two geographical forms are also known from the east of Itaituba on the Tapajoz, both of which invariably exhibit as the principal mark red basal marking on the hindwing beneath. *xinguenis Fassl* (102 C f), which is besides somewhat more bluish steel-green, exhibiting smaller ocelli beneath and mostly a large metallic lustrous steel-green spot in the distal half of the forewing beneath, was discovered by me on the Rio Xingu, whereas *rubrosalis Fassl* forming the transition to the typical form occurs on the northern frontier of the Amazon District from the mouth of the Xingu upwards as far as Santarem and from here the right bank of the Tapajoz upwards as far as Monte Christo.

In the blue *phalidion*-form *paulus*, on p. 576, we must remark that the specimen taken by Dr. HAHNEL near Parintins is not a ♀ but a ♀. I took the very singular ♀ probably belonging to *paulus* on the Tapajoz in a single specimen (113 B d ♀).

The type of *phalidion anaxagorum*, according to its discoverer H. OTTO MICHAEL who also furnished us with a drawing, by no means exhibits almost entirely black hindwings as FRUSCHNER writes on p. 576, but analogous to my two more ♀ taken near Itaituba it is like a normal *phalidion ♀* also in the hindwing profusely decorated with blue and green. The ♀ of *anaaxagorum* (113 B d ♀) having hitherto been unknown, which I took on the Tapajoz in 2 rather similar specimens, is very much like the ♀ of *A. hewitsonius* (113 B d). We likewise figure here ♀ of the genuine *A. hewitsonius* (113 B d) from Teffé, which was hitherto unknown; all the specimens I captured are entirely constant. The figure of *hewitsonius ♀* beneath on t. 114 e is of a somewhat too bright green colour; besides the ♀ above mostly exhibits a much more extensive green marginal line almost invariably reaching the posterior margin of the forewing and being in some ♀ even rudimentarily continued in the apex of the hindwing.
Although my prior presumption that _A. phaloidon_ and _hewitsonius_ are merely local races of the same species had been very strongly opposed, the discovery of an extremely magnificent intermediate form on the Rio Madeira, _A. fournieri_ Fassl (103 C f?) must be considered as a confirmation of my opinion. The blue colour above is of a still more magnificent and lighter metallic lustre than in the genuine _hewitsonius_; a narrow, green border only occurs in the figured specimen; in 4 other _fournieri_ it is entirely absent; a rather broad black distal margin likewise recalls _hewitsonius_. Beneath there is no trace whatever of a green colouring or of a basal bordering; instead of it the yellow colour is spread across the whole light tints of the under surface, which is not the same in any other of the _phaloidon- and hewitsonius_-races known hitherto. _A. fournierae_ has 2 different forms; the typical most magnificent form on both wings resembles the _f_; it is by one third larger, the blue is lighter, metallic light violet and without any trace of green. The other very different form is _calliste_ — is somewhat smaller and less variegated, it only has a duller blue before the orange spot, turning soft steel-green towards the apex and costa; the hindwing likewise only shows a dull discol blue decoration.

At the same time and place I also took 2 quite constantly aberrant _viola_ of _fournierae_ in which the orange basal spot of the forewing is reduced to a narrow longitudinal stripe dissolving towards the lower cell-margin into fine yellow atoms in the blue ground-colour: form _viola_ Fassl (113 B).

Whilst _A. fournierae_ looks like an enlarged form of _Callithoe batesi mineeana_ from the same habitat, the form _viola_ involuntarily reminds us of the magnificent _Catagramma excelsior michaeli_ Stgr. occurring at the same place.

Although we may be in doubt whether the new magnificent insect is to be placed to _phaloidon_ or _hewitsonius_, probably already the nearest future will yield some more interesting intermediate forms connecting _phaloidon_ with _hewitsonius_ also with respect to their very different under surfaces.

**Genus Siderone.**

_Sider. marthesia_ Cr. (p. 577) has been found again by Mr. A. H. Fassl near Itaituba on the Tapajoz; we had 1 _f_ from Fassl's collection figured (102 C f); the under surface corresponds to that of _confluens_ (116 a), but the forewing shows a yellow ground-colour.

**Genus Anaea.**

_A. suprema_ Scks. (= zikani Rbl.) (102 C e) is one of the most remarkable and most magnificent _suprema_ species of this genus and has only recently discovered by Mr. J. F. Zikan near Facenda dos Campos near Passa Quatro in the southern Minas Geraes at an altitude of 1600 m, the small insect in the male has about the shape and size of _jaceata_ (120 D e), but the body is less robust; the upper surface is bluish-black with a slight reflection and has a broad, almost golden red costal-marginal band, but the costal margin itself is bluish-black beginning from the middle of the discal cell, the distal margin of the forewing is, like the apex of the wing, somewhat broader and reddish; the hindwing has a somewhat paler red distal-marginal band of about 3 mm width. The under surface resembles that of _tyrannithina_ (118 c). The _f_ forewing above shows a ground-colour similar to that of the _f_ of _Chrysophonas virginueae_ (Vol. 1, t. 76 a), the costal margin is black, in the centre a broad black band growing broader in front towards the rear and with unequal margins, being particularly distally sharply dentate in the areas of the wing; in this black band there are three large spots of the ground-colour; the hindwing is black with large, yellow, coherent spots and with an antemedian row of equally coloured, sharply defined spots. The under surface shows a more distinct black marking than in the _f_, at the end of the discal cell of the forewing there is a black spot. As to the early stages, F. Zikan has published the following account *): „The globular egg, being somewhat flattened at its upper pole, is feebly coroded, of a lustrous greenish-white, and has a diameter of scarcely 1 mm. It is singly deposited on the underside of leaves of a tree-like species of Croton (according to Dr. Rechinger Croton gossypiiolium H. R. K., called „Sanga di Drago“ by the natives), mostly at a considerable height. The total amount of eggs of a _f_ is about 200. The small larva leaves the eggs 11 days after the ovipositing. It is then 3 mm long, dingy green, with a dark brown, black spotted head and one subdorsal and one lateral row each of scanty bristles. After about 2 weeks the first casting of the skin takes place. After this the small larva is about 10 mm long, dingy green, with the characteristic, quadrangular, red-brown spots (of the _Anaea_-larva, of which the saddle-spot is the most conspicuous. Below the stigmata the larva is coloured yellowish. Its skin is densely covered with low, yellow tubercles with short black bristles, the head showing a crown of spines. After the second skinning the ground-colour of the larva has turned cinnamon-red. The red-brown, interrupted dorsal line and the lateral spots of the same colour already correspond with the adult larva, and so do the spinning and colour of the head, whereas the integument (the skin) exhibits the former state.

After the third skinning the larva shows the same exterior. The adult larva (after the fourth skinning) is 50 to 55 mm long and exhibits a pink ground-colour turning lilac on the dorsum. The first four segments are slightly covered with spine-like, small yellow tubercles on a greenish ground, arranged in longitudinal rows, whereas on the other segments, particularly on the sides, they are but scantily arranged, so that the ground-colour is visible there in rectangular lustrous spots. The head exhibits a three-coloured demi-crown of dingy green spines with yellow tips, the two middle ones which are the largest and singly forked. The dark frons with two pink lateral stripes. Before the puation the larva turns green. The young larva begins to feed on the apex of the leaf which it proceeds by a web mixed with clods of dirt, which it only leaves during the first two stages of skinning in order to feed. After the second skinning the larva makes itself a bag by rolling up the edge of the leaf which is also on the inside clad with a web. The larva in day-time sits in the bag with its head turned towards the opening and mostly only leaves it at night for feeding. The third and fourth skinning takes place in the bag which is several times made larger on a new leaf. In spite of the bag the larvae are sometimes infested with parasites (Tachinidae, Microgaster). The worst enemies, however, are birds which pick open the sides of the bags. The puation takes place in a leaf being joined together, but mostly not on the food-plant. The immovable pupa is short and compact, 18 mm long, 13 mm broad, green, with a silvery white (sometimes orange-reddish) longitudinal line on both sides of the dorsal carina and such lateral oblique stripes as far as the proximal margins of the wings. The ventral side of the pupa is uni-coloured green. The discoloration of the pupa takes place 6 to 8 days before the imago is yielded and shortly before it already shows the sex in the transparent marking of the wings. The pupal stage of the summer generation lasts for 30 days (November to December), that of the spring generation hibernating as a pupa for 60 to 94 days (May to July-August, exceptionally to September). The generation of the hibernating pupa needs, in order to develop well, dampness and cold temperature (sometimes as much as 5 degrees below zero)."}

_A. xenocrates_ Wein.  O., "The ♀ is but slightly larger than the ♂ of the species (120 D d) and of rather the same shape of wings, thus also without tails. All the steel-green spots of the ♂ are in the ♀ golden ochreous, whereby the female assumes quite a different appearance. The finely watered under surface does not exhibit, as in the ♂, a slate-coloured greyish-blue, but ochreous-brown ground-colour. According to several rather similar ♂♂ from Tefé (Ega) and to the north of Manaos." (Fassl.)

_A. xenocrates demaculata_ subsp. nov. was discovered by Fassl in August in Manicoré (Amazon River). It is smaller than _xenocrates typica_ (120 D d), the blue spots of the forewing are reduced to 4 being scarcely half the size of those in _xenocrates_, the marginal band of the hindwing consists of small isolated spots, and the ground-colour beneath is lighter.

_A. porphyrio_ Bat. (119 a). We had subsequently also the ♀ figured (102 C e). This species does not only occur near Pará (on p. 585 missprinted into „Peru”), but probably also on the whole Lower Amazon River; it flies from July to September.

Of _A. cribotes_ F. (p. 585) we figure a ♀ (102 C d) having been taken by Mr. A. H. Fassl near Manaos. Perhaps it forms with _porphyrio_ (119 a) and _testacea_ (119 a) a single species occurring in various shapes.

_polyxena._

_A. polyxoa polyxena_ subsp. nov., captured by A. H. Fassl in some ♂♂ near Manicoré on the Rio Madeira in August, is remarkably smaller than typical _polyxoa_ (120 D a b), the markings are not verdigris, but blue with a purple reflection and the marginal band of the hindwing is not sharply defined, but it gradually turns proximal, and only extends from the proximal angle to the anterior radial.

_acepa._

_A. aniceps_ sp. nov.? (102 C d e). Mr. A. H. Fassl, in January 1922, captured some ♂♂ of it near Manaos (Lower Amazon) and presumes them to belong to a species the ♂ of which has not yet become known. But it is neither impossible that they belong to a species from the _glauca_-group, may-be _felderi_ (119 d), the under surface of which is similar to that of _aniceps_.

_A. basilia_ Cr. (p. 589, 193 c). Of this species Mr. A. H. Fassl has discovered the ♀ near Manés (102 C f as _basilis_). The under surface is grey with blackish and whitish speckles, two white, black-pupilled spots near the base of the tail-appendage, a black median stripe across both wings, which, however, neither reaches to the costal margin of the forewing nor to the proximal margin of the hindwing, and black spots at the costal margin of the forewing, particularly a large spot at the end of the discal cell.

_rosea caucana._

_J. & T._ from the Cauca Valley (West Colombia). "Forewing with rather small subapical spots, as they are reduced towards the base, and the bands correspondingly indistinct. Fringes of a bright brown and slightly dusted with the same colour. Hindwing with traces of a bluish costal spot. Distal margin of a bright brown, which colour gradually disappears in the ground-colour. Under surface with reduced white markings and the spot in cell 7 of the hindwing fainter."

_A. discophora_ sp. nov. (102 C c) from Peru (Pozuzo) is remarkable by a large, very scantily scaled and therefore semi-transparent spot of the forewing occupying almost the whole distal half and only leaving free
the proximal angle and a stripe at the proximal margin; it might be taken as a scent-scale spot, if such formations would not be uncommon in this genus. The under surface resembles that of _pleures_ (120 A c), but the ground-colour is darker and the light band of the forewing is complete and extends into the apex of the wing, expanding near the proximal angle into a light triangle.

**Lycaenidae.**

The „Check-List” having in the meantime been published by Wm. Barnes and Mc. Dunough, as well as personal reports by Mr. W. T. M. Forbes, Istaha, N. Y., to whom we are greatly indebted, necessitates some alterations in the elaboration of the North American _Lycaenidae._

_Th. publicly_ Rob. is very much like the ♀ of _paphia_, but it has narrower wings; the black distal _publicly_. margin of the forewing is narrower and turns proximad on the veins in a dentate shape; the tail-appendage on the 1st median vein is broader and at the borders broadly covered with green lustrous scales. Beneath on the forewing the green marginal scaling is reduced, the black median band of the hindwing is narrower, irregularly defined, in the middle broader than in front, not sharply angled, but softly bent, the distal parallel band is absent, but instead there are two black submarginal circumscribed spots, behind them yellowish-greenish dusting. Abdomen beneath, grey-brown. According to 1 ♀ from West Colombia (Rio Magdalena). — This form is to be inserted on p. 746 behind _paphia_.

_Th. polios_ Cook & Ws. (p. 761) is not a synonym to _mossi_. The latter species is uniformly chocolate-brown above, whereas _polios_ is browner towards the margin on the hindwing. On the under surface the distal margin of the hindwing of _mossi_ is contrastingly red-brown with six or less distinctly visible, small interstitial spots, whereas the forewing has no marginal part contrasting by a different colour. In _polios_ the hindwing shows a broad light grey distal-marginal part, lighter than in _iris_, and the forewing exhibits a whitish, 1 mm broad margin before the fringes. _polios_ originates from Maine and Colorado, _mossi_ from the western half of the States and from Pennsylvania.

_Th. dumetorum_ Estl. (p. 763). The typical form in the ♀ exhibits a blackish grey upper surface, occasionally tinted with a faint brownish red, in the ♀ more distinct. Beneath the sexes are similar, with rows of white at least on the hindwing, in about 90 percent on the forewings and hindwings. Range: California. — _f. perplexa_ Barnes and Benjamin, a geographical race from San Diego (California), differs by the entire or almost entire absence of the small white spots beneath; the coppery grey area at the proximal margin of the forewing almost extends to the costal margin and parts a green basal area from the green apical area; the fringes are not quite pure white. It was usually mixed up with the Colorado-race of _apama_ and the _sheridanii_-race from Utah.

_C. affinis_ (p. 763) in both sexes shows a constant red-brown ground-colour above; the forewing exhibits beneath at the proximal margin only a slight darker shade. Fringes distally pure white.

_C. apama_ (p. 763) is in the typical race from Arizona above grey, often with an intense coppery tint, in the ♀ in the disc coppery red-brown, with fine black veins. The under surface in the colour resembles the race _perplexa_ of _dumetorum_, the white markings are still more prominent and usually bordered with a red-brown band. The white band of the hindwing consists of white, crescentiform confluent spots, in the centre very much distally angled, proximally bordered with black, behind it a red-brown band. Fringes quite dark, at the anal angle of the hindwing white. — _f. homoperplexa_ Barnes and Benjamin is the race from Colorado. Above the ♀♀ are redder than any other species or race except _affinis_ from which it is easily discernible by the coppery or red-brown spot on the forewing beneath extending from the proximal margin to the costal margin. Beneath the white markings bordered with black and brown are reduced to single small spots, and may occasionally disappear altogether.

_C. sheridanii_ in the typical form shows dark grey wings above and is beneath darker green than the other species; both wings are beneath crossed by bands of small white punctiform spots, on the forewing almost, on the hindwing entirely confluent, so that they are here no more discernible as single dots, proximally bordered by a distinct black line. Fringes pure white. Denver (Colorado). — _f. neoperplexa_ Barnes neoperplexa. _Barnes and Benjamin_ is the race from Utah which is above lighter grey and does not exhibit any purely white fringes. Beneath the white dots are reduced, on the forewing occasionally disappearing altogether, on the hindwing forming a thin line.

_C. zuni_ (= _blennia_) (p. 772), as well as _rhodope_, _laki_, _spinetorum_, _johnsoni_, _costalis_, _siva_ and _nelsoni_ ought to be placed with _daman_ (p. 798) together into the subordinate genus _Mitoura_; _siva_ Edw. must be eliminated as a synonym to _zuni_, the type is very closely allied to _nelsonii_ or its form _murrayi_, to which it may belong as a synonym according to _Barnes_ and _Benjamin_. _Costalis_ belongs to _daman_ and has the priority of its form _discooidalis_ _Skin_. (p. 798). We add another form to it: _r. patersonia_ Brehm, a seasonal _patersonia_ form, being dark sooty brown ♀♀.
Habrodais (not Habrodias) grannus Bd. (p. 773) is no real 'Theclina'; it has a forked apical vein and enlarged anterior tarsi like some allies of the African Lycaena.

Crysalis Edw. (p. 773) belongs into the genus Zephyrus.

Th. lorata Gt. & Rob. (p. 773) is an artificial produce; the diagnose is not correct; it is a typical specimen of calamus on the under surface of the wings of which a black subbasal line has been painted.

Th. ontario Edw. (p. 773) is the northern race of autolygus and to be ranged there (p. 774, line 1 from above). It is a small form without the small orange marginal spots. Very rare, also from New York and Massachusetts.

Th. auretorum Bd. (p. 774). We must insert here as synonym tacita Edw. (p. 772, line 10 from below) and tetra Behr (p. 774). — spadix Edw. (p. 773) is only a southern race of auretorum without the small orange anal spots; the $\mathcal{Q}$ is above broadly rust-coloured yellow in the disc. The under surface is more ochreous-yellowish with extinct markings.

Th. tacta Edw. (p. 783) from eastern habitats of North America is beneath greenish-grey, similar to quaderna (155 i) from Mexico.

According to clause 36 of the international nomenclatural rules, the species denominated damon on

smilacus. p. 798 would have to be called gryunus Hbn., damon becoming synonymous. — f. smilacis Bd. & Lec., mentioned as a synonym of this on p. 798, is the eastern form with a dark brown, almost monotonous upper surface (sec. Barnes and Benjamin), but according to the kind information by Mr. Forbes it is the long-tailed southern race. Beside the races castalis Edw. (= discoidalis Skinn.) and f. patersonia Brehm brehmi. (p. 1043) having been already mentioned before, we must yet insert: f. brehmi Barnes & Benjamin as the Texas-race of the form castalis Edw. with its under surface, but like smilacis with a darker upper surface.

immaculosus.

Th. titus (p. 811). Add to it: f. immaculosus Const. with an unsotted under surface.

Ch. del Sud Wright (p. 812) becomes synonymous to hermes Edw.

Th. mariposa Reak. (p. 813), according to Barnes and Mc. Dunough, is the synonym of zerecd Bd., nivialis Bd., however, with the synonym iantho Edw.

The form florus Edw. (p. 813) belongs to helioides, not to dorcas.

Th. fuliginoosa Edw. (p. 814) is no Lycaenid but a Theclina beside Callipsycha behri (p. 774).

Lycaena heteromera Bd. (p. 814) to which clara Edw. belongs as a form is no Lycaena, but it belongs to the Chrysophanus-species beside rubidus (p. 813) with which it is closely allied in spite of the blue $\mathcal{Q}$

L. icarioiides Bd. (p. 815). According to the latest investigations, the synonymy and forms are quite differently arranged; $\mathcal{Q}$ = maricopa Reak.; synonyma of it are: (= phileros Bd., fulla Edw. [of p. 814], mintha Edw.). The typical form flies in the Californian mountains. The forms are: ab. daedalus Behr (144 b, p. 815), f. helios Edw., f. erinus Bd. from South California, f. ardea Edw. from Nevada, Utah and Colorado, f. lycorea Edw. (= ralpahoe Reak.) of p. 814 from the Western Rocky Mountains and finally f. pensina Edw. from Manitoba and the northern Rocky Mountains to the south as far as Wyoming and Montana.

L. kilda Griens. is to be placed as a synonym to achaea Behr which comes as a form to saepiolus Bd. (line 19 from above), not as a synonym.

L. kodiak Edw. is to be placed as a form to scudder Edw. (p. 817). mela Streek. is to be eliminated and becomes a synonym to cygn Edw. (p. 819).

L. pardinus Bd. (= erynns Bd.) (p. 815) has nothing to do with icarioiides Bd., but belongs into a quite different group otherwise not at all represented in America, to Lycaena in its proper sense with arion as the most closely allied species. Above entirely like icarioiides, beneath on a deep brown ground with intense black spots with fine whitish rings. California. — The third synonym mentioned in icarioiides (p. 815), mintha Edw., most probably belongs to ardea Edw. (a form of icarioiides).

L. auticinis Bd. (p. 816) belongs as a form to xerxes (p. 815), as well as mortila Edw., whereas behrii Edw. belongs to lydianaus Ddldl. to which also comperii Grote is to be placed.

L. sogittigeras Fdrl. becomes a synonym; insert as the correct name: piasus Bd. of p. 818.

L. speciosa Edw. is not a Phaedrotodes, but it comes to Philotes beside soorenasis Fdrl.

L. podarca Fdrl. and rustica Edw. (p. 816) are to be placed as forms to aquilo Bd. (p. 816).

L. enoptes Bd. (p. 816). With respect to this group and battoiides the studies of Barnes and Mc. Dunough have resulted in entirely different opinions which we state in the following. Above all the species belong into the 5th subordinate genus: Philotes, and not to Rusticus. enoptes and battoiides have quite different genitals, whereas glaucus is not to be separated from battoiodes. Those being especially interested in these difficult questions may compare: Contr. Nat. Hist. Lep. N. Amer. Vol. III, NR. 2, p. 116; Vol. III, NR. 4, p. 213 seq., and Vol. IV, NR. 2, p. 77 seq.
The arrangement of the forms is accordingly as follows:

*P. battoides* Behr is an alpine form from altitudes of 7 to 11,000 ft. and characterized by intense quadrangular black spots beneath on a very light whitish ground which is very much strown with black, with a broad black marginal line on both wings and a broad, red submarginal band of the hindwing; the fringes of both wings distinctly speckled. Above the *f.* is very variable in the development of the orange-red spots on the hindwings, some specimens are without, others with a distinct band as beneath. A much smaller race: *f. bernardino* B. & McD. of about 20 mm expanse flies on low mountains in California (S. Bernardino Mts. and S. Diego) with a decidedly lighter ground-colour and less intense black markings beneath, particularly on the hindwings which are hardly strown with black. — Another race: *f. oregonensis* B. & McD., *oregonensis*. originates from Oregon and is characterized by a much broader black border on both wings above in the *f.* which may occasionally cover the whole half of the hindwing; beneath the space between the postmedian row of spots and the orange marginal band is in both sexes larger than in other forms, the spots are less quadrangular, the ground shows a slight greenish tint. — A third form, the under surface of which forms the transition to *enoptes*, is *f. intermedius* B. & McD. occurring in the valleys of the North and Central Californian mountains. The spots of the hindwing beneath are much smaller, the orange submarginal band divided into small lunae, the dark marginal line as fine as a hair. Above in the *f.* the black border is moderately broad, the fringes of the hindwings are white, not speckled, at the anal angle of the hindwing slight orange spotting. The *f.* have a much broader orange band than the very similar ones of *enoptes*. In the Rocky Mountains of Colorado and Utah there flies a similar race: *f. centralis* B. & McD., with a broader dark border of the wings above and intense orange spotting at the anal angle of the hindwing in the *f.* beneath the ground is browner, the spots are larger, distinctly ringed white, the orange band more coherent, at the anal angle of the forewing dark shading. According to the very latest investigations and after having discovered the type of *glaucon* Edw. the latter has now proved also to belong to *battoides* not, as was originally supposed, to *enoptes*; the genitals entirely agree with *battoides*; in the exterior the type is very much like *centralis* and *intermedia* by the intense black basal band of the fringes beneath.

The *enoptes*-form having hitherto been regarded as *glaucon* had therefore to be renamed: *ancilla* B. *ancilla*. & *McD.* which thus entirely resembles *glaucon* Edw. above; beneath the scaling is somewhat rougher, and the black marginal line of the hindwing is stronger; the *f.* exhibit above at the anal angle of the hindwing but traces of orange scaling. From *enoptes* the form differs by the coherent orange band on the hindwing beneath which in *enoptes* is invariably divided into spots; besides the black spots are more prominent. Utah and Colorado. Insert after it:

**Ph. spaldingi** B. & McD. very much resembles *ancilla* above, but the anal angle of the *f.* hindwing *spaldingi.* is very intensely spotted orange, the under surface is lighter, the black spots of the hindwing much smaller, whereas on the contrary those of the forewing remain large and intense; the forewing shows a broad orange submarginal band not reaching to the costal margin and growing narrower towards; on the hindwing this band is divided into small moon-spots by the veins and proximally very faintly, towards the costal margin at most, defined by blackish. The *f.* is dark brown, the orange marginal band of the hindwing is continued on half the forewing. The genital organs are very different from those of *enoptes*. Apparently rare and confined to but few mountainous districts of Utah.

**Ph. rita** B. & McD. is likewise closely allied to *enoptes*, but distinguished by its whiter ground-vo- *rita.* lour beneath with a broader orange band; the black spots are much stronger and the blue of the upper surface of a more violet tint. The genital organ is very different, but still most similar to *glaucon* from which it differs by a much longer terminal spine on the valves. Expanse of wings: 23 mm. South Arizona.

**L. minnehaha** Sodr. (p. 817) is not to be placed as a synonym of *shasta* Edw. (p. 817); it represents *minnehaha.* a good form different by much narrower black borders without orange, but with a white marginal line and distinct black marginal spots on the hindwing above. At greater altitudes in Colorado. To *scudder* (p. 817) add *aster* Edw. (p. 144 g, h) as the race from New Foundland. Two more forms of this species are: *acmella* Mead. (144 g) line 14 from below and *kodiak* p. 815 (144 c). The arrangement of forms of *acmon* Dbd. & Hec. is to be altered as follows: *acmon* remains with the synonym *antaeus* Bd. As the only form we add to it: *f. ocellata* Grinn. about which, however, we were at present not able to ascertain anything. — *monticola* Clar., *chlorina* Skinn., *enigiosis* Grinn. (= melimona Wright), *neuroma* Skinn. are all said to represent good species. We have to add hereto as another species: *lupini* Bd., about which we can at present not say anything and which is therefore to be eliminated as a synonym of *shasta* Edw.

**Genus Lycaenopsis** Fldr.

This name is to replace *Cyaniris* on p. 818. The species is not called *ladon*, but *pseudargiolius* Bd., with *violacea* as synonym.
Genus *Everes*.

Add to *E. comynas Gd.,* (p. 818, t. 144 i) as synonym: (= sissona Wright), and as its form: f. herrii Grin. which belongs hereto, not to *amynula*.

Genus *Hemiargus*.

Add to *H. gyus Edw.* (p. 819) as synonmys: (= astragalus Wr., florencia Clem.), and f. zachaeina Blr. & Drc. as the form from South Texas, Mexico and more to the south.

Add to *H. cyma Edw.* (p. 819) as synonym: (= mela Streck.).

*H. hango Stoll* (p. 819). Of the synonyma mentioned here hango Luc. and *artenides* Edw. are to be eliminated, both presumably belonging to a West Indian species which is at present not to be identified for certain and which is mentioned by HÜNNER as *hango* (Exot. Schneit. I, t. 98), though it has nothing to do with *hango Stoll* and much rather resembles *gyus Edw.*

**Hesperidae.**

The most difficult chapter of the diurnal lepidoptera has in the meantime gone through many far-reaching alterations which makes our whole work appear to require a revision.

Particularly the North American fauna has, by the indefatigable studies especially of Barnes, Mc. Dennisough, Benjamin and Lindsey so entirely been overthrown in contrast to the basis used in Dyar's Catalogue, that it has an entirely different aspect now. The types of many species have quite wrongly been determined. Thanks to the kind aid of the gentlemen mentioned above — especially Mr. Foster, H. Benjamin in a most disinterested way put at our disposal a great deal of literature and typewritten notes. — we are able to-day to supply a considerably better survey. Still we are aware that many, particularly of the tropical species, being but insufficiently known or described according to single specimens, have been wrongly ranged with us or are synonyma. For corrections that may serve for later supplementary data we shall always be obliged.

Genus *Pyrrhopyge.*

For *P. araxes Hew.* (p. 839, t. 162 e) together with arizonae G. & S. a new genus has been established by Lindsey: *Apyrothrix*, chiefly founded on the somewhat different shape of the wings.

Genus *Mimoniades.*

*clauchamayonis* Hew. (p. 846, t. 164 a). — The f. *clauchamayonis* Strd. has on the forewings somewhat broader, on the hindwing narrower light discal bands; both are anteriorly not connected. Near the margin of the hindwing 4 or 5 bluish sublimbal spots. From the Chauchamayo (Peru).

*A. paphalia* Blr. (p. 847, t. 164 g). — The form *mapirica* Strd. is distinguished by a narrower, unicoloured, bluish-black marginal band of the hindwing and more distinctly separated subapical spots of the forewing. From the Rio Mapiri.

Genus *Mysecul."

*M. rogersi* Kaye is to be inserted on p. 848 after *M. orthrus.* It forms the intermediary between *orthrus* Hew. and *phoroni* (165 a), being more allied to the latter from which it differs by white instead of yellow hyaline spots. The veins are scarcely marked, black, beneath the yellow scaling is strongly reduced; by a broad black band the lemon-coloured basal part is separated from the quite brown distal half. Expanse of wings: 87 mm. Trinidad.

*M. perissodora* Dyar is to be inserted after *M. pegasus* (p. 848, t. 165 b) near which it belongs. Above with a faint bronze lustre, dark red-brown, with black veins and 3 large hyaline spots through the disc, a large, quadrangular one in the cell, a somewhat larger, rectangular one below it, and a triangular submedian one. A subapical bent row of 5 small spots, below them two more. Hindwing with a darker median band. Hindwing beneath black, in the basal half light yellow, at the proximal margin with a black spot. Expanse of wings: 52 mm. Described from Mexico (Misantla, in June).
Genus **Phocides.**

*Ph. ilea Reak.* (p. 850, t. 165 d) is said to have been taken in 1 specimen in Texas.

To *Ph. batalano Luc.* (p. 851, t. 165 d) add as another synonym: (= okeechobee *Worth*).

Genus **Endamus.**

For this genus (p. 852 to 858 and t. 160, 161), according to the more modern conception of the rules of priority, the older name of the genus: *Goniurus* Hbn. ought to be placed, with the type *simplicius* Stoll, which the American authors only apply for the group of *proteus-dorantes-simplicius-eurycles.* — For the group of *albofasciatus-zilpa* Lindsey established the name of the genus *Chioides,* whereas *dorantes* beside *melon* is placed into the new genus *Codatracus* Lindsey (*Heteropia* nom. praecce. H. Carter [Sponges]).

*E. dorantes* Stoll (p. 853, t. 160 a). — *rauterbergi* (not *rautenbergi!*) is a small dark form from Texas *rauterbergi,* and Arizona.

*E. simplicius* Stoll (p. 855, t. 160 e) and *E. eurycles* Latr. (ibid.) are 2 separate species, *simplicius* with and *eurycles* without a costal fold.

Genus **Eparyreus.**

*E. titrus* F. (p. 860, t. 166 e). Add to it: ab. *obliteratus* Scldr. has instead of the discal band *obliteratus.* only 3 small roundish spots and only 1 subapical spot; beneath on the hindwing the silvery colour is more extensive.

*E. zestos* Hbn. (p. 861, t. 166 g). Hereto add as synonym: (= oberon *Worth*). The species flies in Florida in August and September.

Genus **Acolastus.**

The genus must be named *Polygonus* Hbn., since *Acolastus* is preoccupied (Coleoptera).

*A. amyntas* F. (p. 862, t. 166 g) occurs in the form *arizonensis* Skie., being above and beneath lighter *arizonensis.*

To the north as far as Texas and Arizona.

Genus **Telegonus.**

*T. elorus* Hew. (p. 863, t. 167 h). Here another synonym (= *subblasius* Stgr.) is to be added as well as another habitat: Argentina.

*T. kahneli* Stgr. (p. 863, t. 167 b, e) is also mentioned from North America (Arizona).

Genus **Protogenus.**

*P. extrusus* Fldr. (p. 865, t. 172 d). The species is to be eliminated in this volume. It is described from the Aru Islands and has been dealt with at large in Vol. IX. Maril.e's statement, mentioning the species from Colombia, is certainly a mistake.

Genus **Telemiades.**

*T. persee Mob. & B. (p. 868, t. 172 a).* Insert after this species:

*T. mnemon* Schs. Above dark brown, in the basal half with thick yellowish-brown hair, also near *mnemon.* the anal angle before the margin and behind the cell, in the discal area below the cell tinted bluish-black. Hylaine spots yellowish, a large distally concave one in the cell-end, below it a narrow one, a small one above it farther distally; 3 small subapical spots, below them before the margin 2 more. On the hindwing only the costal margin, a blurred postmedian macular band, and marginal spots remain dark brown, the rest is densely dusted and haired yellowish-brown. Beneath dull blackish-brown, at the proximal margin grey, hindwing dull yellowish-brown with a dark distal margin. Expanse of wings: 28 mm. Costa Rica.
Genus *Rhabdoides.*

*Rh. cellus* Bud. & Luc. (p. 871). According to the more modern conception *pseudocellus* Cool. is a distinct species.

*Rh. easia* H.-Schäff. (p. 871, t. 169 b). Add as synonym: (orestes Liun.)

Genus *Naseus.*

Insert after *N. phoeus* dianius (p. 873):

N. phintias Schs. Hereto belongs as the ♀ the insect figured as a variety of *phoeus* in the supplement of the „Biologia Centrali-Americana“_. Above dark brown, basal area and proximal margin dusted with orange-brown. Spots as in *phoeus*, though with another small one between the radial veins. Hindwing quite orange-brown, but at the costal margin and narrowly at the distal margin blackish-brown. Otherwise, also beneath, like *phoeus*. Expanse of wings: 55 mm. Costa Rica (Guapiles).

N. curivates Cr. (p. 873, t. 170 a) has recently also been reported from North America, the correct name of the species being hesus Ww. & Hew. (unc. Dbl.); curivates Cr. is very doubtful. As another questionable synonym add: dias Hew.

Genus *Murgaria.*

Insert after *M. albociliata* Mab. (p. 875, t. 170 c):

M. coyote Skinn. In the exterior hardly discernible from the preceding species; fringes of hindwings more or less intensely striped brown, in *albociliata* only at the apex and anal angle, in the centre they are always purely white. The genital organ, however, is quite different in both. Texas and Arizona.

Genus *Cogia.*

Insert between *C. hippalus* Edv. and *C. calchas* H.-Schäff. (p. 877, t. 170 e):

C. outis Skinn. Ground-colour dull brownish-black like in *hippalus*, the forewing usually with 2 postdiscal hyaline spots between and above the median veins and distinct subapical spots whereby the species differs from the otherwise very similar *calchas*. Texas in August.

Genus *Thorybes.*

nevada Sculdr. being on p. 880 placed as a synonym to *Th. mexicana* H.-Schäff. has of late been regarded as a distinct species with *aemila* Skinn. as synonym. In the exterior both are quite the same, but the genital organ is said to be constantly different. The valve of *mexicana* has a convex end and is only very feebly serrate, that of *nevada* has a concave end and is strongly dentate. Furthermore add after *mexicana*:

conflua.

Th. confusa Bell. resembles *pylades* Sculdr. so much that it is hardly discernible, and mixed up with it in most of the European collections; the ♀ is easily distinguished by the absent costal fold. The genital organ is very different by *conflua* having the bipartite uncus of the *pylades*-group and the penis of *Cogia* *calchas*, thus connecting the two genera to a certain extent.

Th. mystis Dyar (p. 880, t. 171 b, e) is also known from Arizona and is placed to the genus *Phaedinus* by Lindsey.

Th. pylades Sculdr. (171 b) being on p. 880 placed to the genus *Coceceus* belongs to *Thorybes*. Add *immaculata* hereto yet; ab. *immaculata* Skinn. in which the hyaline spots are almost extinct. Also the species following *pylades* (p. 880): *drusius* Edv. has of late been placed to the genus *Thorybes*.

Genus *Hydraenomia.*

nevulosa. H. nebulosa sp. n. (178 b) is to be inserted after *H. orcinus*, p. 881. Larger and with broader wings than *orcinus*, but in the anatomical marks well fitting to it. Light greyish-brown, covered with long olive hair-scales, rather thinly scaled, disc of the hindwing partly sem-transparent. Forewing almost with the same hyaline spots as *orcinus*, but the cellular spot is divided into 2 long parallel ones, the one behind it is ♀-shaped with very long, narrow sides. Beneath the same, but without the long hairing. The hindwing in the disc shows a large white, semi-transparent spot extending from the costal margin to the inner-marginal fold. 1 ♀ from the Songo (Coll. Fassl).
H. zelettes Hew. (178 b) has longer hindwings than orcinus with a large, creamywhite discal spot; zelettes. in the marginal area, being covered with long, greyish-yellow hair-scales, there are black submarginal spots. On the forewing the similarly arranged hyaline spots are almost three times as large as in orcinus. Brazil (São Paulo).

H. aberrans spec. nov. (178 b) is on the whole somewhat like zelettes, the discal spot of the hindwing aberrans. much smaller and rounded. On the forewing the cellular spot and the spot below it form a broad band, the inner-marginal spot is reduced to a dot; the other hyaline spots are quite similarly arranged. The abdomen is white-haired as in zelettes, as well as the proximal margin of the hindwing. Described according to 1 ęż from Teffé of the Coll. Seitz.

Genus Ate.

Insert after A. proxenus (173 g) on p. 889:
A. canace Schs. (189 a). Similar to proxenus; the blackish-brown wings exhibit only subcostally in canace. the middle one minute hyaline dot and 2 subapical ones, the lower of which is removed proximally. The distal margin of the hindwing is broad blue from the upper radial vein to the proximal margin; costal margin and apex dull blackish-brown; a similarly coloured arcuate stripe from the lower median vein to the anal angle. Expanse of wings: 23 mm. Carillo (Costa Rica).

Genus Pellicia.

Insert after P. dimidiata (174 c) on p. 892:
P. olinda Strdl. Distinguished from dimidiata by the palpi being also beneath dark and by quite olinda. black legs and tarsi. From Olinda (Brazil). It is doubtful whether it is a separate species.

Genus Cyclosaemia.

Insert between C. eleca and lathaea (174 i) on p. 895:
C. subcaelea Schs. is likewise allied to jacobs and eleca, easily recognizable by the upper surface subcaelea. showing metallic lustrous green costal margin, distal margin and veins in the apical part on a greyish-brown ground; marking as in jacobs, but without the 3 subapical spots; the discal eye-spot contains 2 bluish-white pupils. Beneath the forewing shows a green reflection, at the proximal margin it is grey. Hindwing of a bright blue, at the costal margin, apex and fringes brown. Expanse of wings: 31 mm. Costa Rica.

Genus Echelatus.

Insert after E. semipiternus (175 a) on p. 896:
E. depenicillus Strdl. is easily separated from semipiternus and varius by the anal part of the hind- wing beneath not being lighter. Described according to a ęż from Colombia. Probably the insect corresponds with robigus Plätz (175 a).
E. lucina Schs. (192 a) is easily separated from the other species by its metallic lustrous green head and lucina. collar. The blackish-brown forewing with a purple reflection exhibit dark antemedian and postmedian nebulous bands, the latter being bent above the lower radial and from there straight vertical to the proximal margin. Hindwing similar, but less reflecting purple, more intensely only in a stripe below the cell from the base to the distal margin. Beneath lighter brown with a whitish-grey base of the proximal margin. Expanse of wings: 37 mm. Guapiles (Costa Rica).

Genus Mylon.

Insert after M. lassia Hew. (175 c) on p. 897:
M. puncticornis Strdl. differs from the allied species by only 3 subapical dots. Ground-colour dingy white, dusted with grey and brown, only in the discal area of a purer white. Basal area black, with yellow hairs and scales, distinctly dentately defined with a black cell-end streak, behind it blackish with 2 or 3 quite blurred lighter maecular bands; in the cell with a small dark spot and below the transverse vein traces of a grey blurred band resting vertically on the proximal margin. Marginal area of hindwing 2 mm broad light greyish-brownish, with a darker marginal line and similar small submarginal spots, before them another darker, blurred, broken transverse band. In the middle besides 2 grey lines. Beneath white with fine dark transverse streaks corresponding with the markings above. Antennae black with light dots. Expanse of wings: 30 mm. According to 1 ęż from Colombia.
Genus **Xenophanes.**

*H. tryxus* Cr. (p. 898, t. 175c) has also been taken in Texas (Brownsville) in July.

Genus **Eantis.**

*E. thrao* Hbn. (p. 902, t. 176b). We add hereto as synonym: *tamenund* Edw. The species was also taken in Texas in May and July.

Genus **Staphyulus.**

*St. brenus* G. & S. (p. 905, t. 176f) is said to occur also in the southern part of North America.

*arizonensis.* — The form *arizonensis* Mab. & B. will probably be the northern form, but unfortunately no particulars about it were to be obtained.

Add to p. 905, line 8 from below:

*sodalis.*

*St. sodalis* Schs. (189a) is very closely allied to the preceding, it is smaller, also the spots are smaller, the distal ones in a dentate, oblique line. Expanse of wings: 29 mm. El Alto (Costa Rica).

Add to p. 906, line 19 from below:

*machuca.*

*St. machuca* Schs. (189i) seems to be allied to the preceding, but it has 3 small subapical dots; in the lighter distal margin of the forewing there are between the veins darker marginal spots. Beneath the costal margin is scaled iridescent green; basal half and proximal margin of hindwing strewn with whitish. Throat white. Anterior femora grey. Expanse of wings: 26 mm. Costa Rica.

Genus **Timochares.**

*T. trifasciatus* Hew. (p. 907, t. 177) also occurs in the southern part of North America.

Genus **Miltomiges.**

Add to the end of the genus on p. 911:

*verticalis.*

*M. verticalis* Plötz. Above brown with a broad chestnut-brown costal margin in the basal half and anterior body, fringes reddish-brown. On the forewing a strungulated cellular spot is fused with the postdiscal spot below it, farther distally above it 2 more spots. Beneath the apex of the forewing is broad red-brown like the hindwing; the latter is densely strewn with a like grey at the distal margin and in the basal half except the costal margin, so that a broad median band remains brown. Brazil.

*commodus.*

*M. commodus* Plötz is similar, the spots are smaller, the cellular spot is absent. Also beneath very similar, but much more variegated, of a brighter red and violet with the smaller spots. Brazil. Schaus in describing *Caryus subrufescens* (p. 981) states that the species is closely allied to *commodus*, both may therefore belong to *Caryus* or to this genus.

Genus **Pholisora.**

Add to *Ph. alpheus* Edw. (p. 913, t. 177i) as synonym: *oricus* Edw. — For *alpheus, libya* and its *lena* paler though intensely spotted form *lena* Edw. a separate genus was established by Dyar: *Hesperopsis.*
Genus **Chiomara.**

_C.h. gesta_ H.-Schäff. (p. 913, t. 178 a). As another synonym _llano Dodge_ is yet to be added. — This species is now placed to _Thanaos_, next to _lacausta_ (178 i) and _burgessi._

Genus **Heliopetes.**

_H. domicella_ Erichs. (p. 914, t. 178 c). Another synonym is to be added: _nearcuss Edw._

_H. nirella_ Mab. (p. 914, t. 178 d) also occurs in Texas where it flies in June.

_H. lceania_ Hec. (p. 915, t. 178 e) also flies in Texas in June and July. The genus _Heliopetes_ is, moreover, cancelled by Lindsay since there are no anatomical marks of distinction from _Hesperia_ F. (which has recently been named _Erynnis Schrk._). The species would therefore have to be combined by the latter name. — To _ericetorum_ Bsd. (178 f) add as synonym _alba Edw._ But _ericetorum_ itself is to be regarded as a distinct species.

Genus **Thanaos.**

Instead of this name the older name of the genus _Thymele_ F. would have to be placed.

In _Th. iclus_ (p. 916) the author's name _Lints._ is to be changed into _Seddr. & Burg._

_Th. somnus_ Lints. (p. 916, t. 178 g) is to be placed as a form to _brizo_ Bsd. & Lec. (178 i). — _callidus Grinn._ (part.) is the synonym of it. — Insert after _somnus:_

_Th. burgessi_ Skinn. is very similar to _lacausta_ Wright (p. 917, t. 178 j) which has to be ranged here, _burgessi._ it is on an average somewhat larger and has beneath at the apex of the forewing a light violet patch distinctly contrasting with the ground-colour and being absent in _lacausta._ The genitals are in both very different. Arizona, New Mexico.

_Th. lucius_ Lints. (p. 916, t. 178 g) is a form of _persius_ Seddr. (ibid.), as well as _africanus_ Lints. (ibid.) and _pernigra_ Grinnell nec Wr. (p. 917) being the very dark race of the Pacific coast. Insert after _pernigra._

_lucius:_

_Th. callidus_ Grinn. (= lilius Dyar) is in the female marked like _brizo_ (178 f), whereas the  ♂ shows _callidus._ a very small white discal spot, 3 small white subapical spots and a rather large white spot in the middle of the marginal area. The genital organ resembles that of _pacuvius._ Brit. Colombia, California.

P. 916, line 25 from above: place _anomalus_ as „aberrat.” to _zarucco_ (line 19 from below).

_Th. juvenalis_ F. (p. 916, t. 178 g). Add as another (doubtful) synonym: _plausus_ Seddr. & Burg.

_Th. propertius_ Lints. (p. 916, t. 178 h). Hereeto add as synonym: (= _tibellus_ Seddr. & Burg.); and besides: i. _borealis_ Cary as a dark race with very much reduced light spots, from the Mackenzie.

_Th. petronius_ Lints. (p. 916, t. 178 g) is to be placed as a synonym to the following _horatius_ Seddr. (178 h), and

_Th. naevius_ Lints. (p. 917, t. 178 h) belongs as a synonym to the preceding _terentius_ Seddr. (p. 916).

— Insert after _pacuvius_ Lints. (p. 917, t. 178 h):

_Th. scudderii_ Skinn. (= _pacuvius_ G. & S. nec Lints.) in its exterior is not discernible from _pacuvius_ Lints. The genital organ is very different: the right valve has outside an almost twice as long and broad appendage and on the inside there is only a very small projection, in _pacuvius_ a very long distally bent hook. From Texas and Arizona (July, August).

_Th. clitus_ Edw. (p. 917, t. 178 h). Add hereto as synonyms: _maestus_ G. & S. (p. 917) and _taterius_ Dyar nec Edw. — _taterius_ Edw., however, is to be placed as a form to _tristis_ Bsd. (p. 917) as well as _clitus_ Dyar nec Edw.

Genus **Melanthes.**

_M. brunnnea_ H.-Schäff. (p. 918) from the Antilles has also been taken in Florida.

Genus **Hesperia.**

As the name of the genus for the species belonging hereto, the name _Erynnys Schrk._ has been of late proposed.

_H. syrichthus_ F. (p. 918, t. 178 k). As has been mentioned in the first passage on p. 919, _montivagus_ Reak. (= _fumosa_ Reak.) (178 k) has to be placed as the synonym or perchance as an insignificant, somewhat darker form to _syrichthus_, as the type in the Coll. STRECKER shows.
H. centaureae Ramb. (p. 918). Here the name ruralis Boul. as a synonym is to be eliminated and placed behind the latter as a distinct species with the synonyms: caespitalis Boul., ricara Edw., petreus Edw. (p. 919). It is a smaller and darker species than the preceding, distributed from Alberta to Texas.

II. xanthus Edw. (p. 919, t. 179 a). Insert here: f. macdunnoughi Obth. is only half as large with somewhat smaller spots slightly more distinctly and clearly contrasting with the purer dark ground. From Arizona.

The species called H. monticella (p. 919) must be named: tessellata Schläf. Insert between D. gyranus Plätz (p. 924, t. 180 a) and microsticta G. & S. (p. 925, t. 180 a):

**Genus Dalla.**

D. pirus Edw. (= semiecaec M. & R.). Above dull blackish-brown, marked as in polingii, but with smaller, partly quite absent spots. Hindwing without spots. Beneath lighter brown, the forewing in the disc somewhat blackened; 3 minute subapical spots close together in one line with 2 below the lower cell-angle. Utah, Colorado.

**Genus Pamphila.**

Barnes and Mc DUNNOUGH propose to replace this name by: Carterocephalus Led.

P. floridae Mab. (p. 926) is to be cancelled here; the name is to be placed as a synonym to Lerodea eufala Edw. (p. 941, t. 182 k).

**Genus Oarisma.**

O. edwardsii Barnes. To this species the description has yet to be added. Above bright golden yellow, fringes proximally dark brown, distally lighter. Beneath the forewing is yellowish, except the proximal margin being shaded with blackish. Hindwing greyish-yellow, in the anal third yellow. Described according to 1 3 from Denver (Colorado).

**Genus Ancyloxypha.**

A. longleyi French (p. 927) is to be placed to the preceding numitor (p. 927, t. 180 c) of which it is merely a form with a lustrous bluish-black upper surface.

**Genus Copacodes.**

C. wrightii Edw. and evanus Edw. are to be placed into the following genus Chaerephon; before Ch. rhesus Edw. (p. 928, t. 180 e).

C. myrtis Edw. is to be cancelled as a species and the name to be placed as a synonym to Ancyloxypha arenata Edw. (p. 928, t. 180 e).

To C. singularis H.-Schöff. (p. 928, t. 180 d) add as another synonym numitor Wts., and insert after this species:

C. rayata B. & McD. (= ♀ procris Edw. (part.), waco Plätz nec Edw., aurantiaca G. & S.). This small species resembles arenata (180 e) above, but beneath it is easily discernible by a white ray of the hindwing extending from the base through the cell to the distal margin, the other cell-spaces being also striped whitish. Expanse of wings: 18 to 20 mm. Texas to Mexico.

**Genus Chaerephon.**

Beside the above mentioned species Copacodes wrightii Edw. (180 d) and evanus Edw. (180 e), also Erynnis evanus Edw. (p. 930) and Stomyles simius Edw. (p. 943, t. 193 b) have recently been inserted in this genus.

**Genus Erynnis.**

As the name Erynnis has to supersede the genus having hitherto been known as Hesperia in the literature. Barnes and Mc DUNNOUGH have proposed to designate the former Erynnis as genus Hesperia. The arrangement of the species differs so entirely in the position and synonymy from the former arrangement by Dyar that we prefer to follow the arrangement stated by A. W. Lindsey and according to the latest researches by Mr. F. H. Benjamin; in order to facilitate this, we add the number of pages and lines of our former treatment.
Additions: HESPERIDAE. By Dr. M. DeAUIDT.

_H. uncus_ Edw. (= ridingsii Edw. [p. 930, line 24 from below], ♀ axius Plötz [p. 930, line 20 from below]).

_H. lasus_ Edw. p. 930, line 25 from above.
_H. licinus_ Edw. p. 930, line 4 from below.
_H. meta_ Sddr. p. 930, line 24 from below.
_H. morrisoni_ Edw. (= morrisoni Plötz) p. 931, line 1 from above.
_H. columbiana_ Sddr. (= sylvanoides Sddr. [p. 934, line 1 from above], california Wright, erynnioides). _Dyar_ (p. 931, line 6 from below), p. 929, line 2 from below.
_H. abelius_ Edw. p. 930, line 29 from above.
_H. karpathus_ Edw. p. 930, line 12 from above.
_H. comma_ L. p. 929, line 14 from below.
   —_f. colorado_ Sddr. (line 4 from below). Under surface bright green, the band purely white, short, the basal spots united in the shape of a U.
   —_f. manitoba_ Sddr. (= laurentina Lyman [p. 930, line 2 from above]) p. 929, line 13 from below. Beneath golden brown with white spots.
   —_f. idaho_ Edw. p. 929, line 6 from below.
   —_f. assiniboi_ Lyman p. 930, line 1 from above.
   —_f. oregonia_ Edw. p. 929, line 1 from below. Beneath like the preceding but the band yellowish instead of white.
_H. juba_ Sddr. (= comma _Bst._) p. 929, line 9 from below.

_H. woodgatei_ Willms, was described as a form of _juba_, but it seems to be a distinct species which _woodgatei_. is very similar to _juba_, but shows much smaller spots; the under surface is generally dark, scantily strewn.
Arizona, Texas, New Mexico, taken in September and October.
_H. viridis_ Edw. p. 929, line 10 from below is a distinct species.
_H. nevada_ Sddr. p. 929, line 7 from below, is also a distinct species; it flies from North Canada to Arizona.
_H. ruricola_ Bst. p. 939, line 16 from below.
_H. attalus_ Edw. p. 930, line 15 from below.
   —_f. seminole_ Sddr. (= quasipes Sddr., stlossoma Skinn., attalus Holl.) is above and beneath very dark; the ♀ has smaller spots and on the forewing beneath but very little reddish-yellow; the ♀ has quite whitish spots and beneath no reddish-yellow at all.
_H. horus_ Edw. (p. 968, line 2 from below) owing to the stout antennal club with a short point does not belong to _Lepera_, but hereo; as, however, only 1 ♀ is known, its position remains uncertain; it is perhaps merely a melanotic specimen of another species (attalus or leonardus).
_H. leonardus_ Harr. p. 934, line 19 from above.
_H. meskei_ Edw. (= straton Edw.) p. 934, line 23 from above.
_H. otoe_ Edw. p. 930, line 21 from above.
_H. gaetane_ Dodge (= ogallala Leuellers) p. 930, line 17 from above.
   —_f. montana_ Skinn. (line 19 from above).
_H. sassafras_ Harr. p. 930, line 6 from above.
   —_f. dacotae_ Skinn. p. 930, line 9 from above.
   —_f. manitoboides_ Flesch. p. 930, line 4 from above. _nata_ Edw. p. 930, line 25 from below belongs to _Augiades_ as the Colorado-form of _sylvanoides_ (p. 934, t. 181 f, g); it is larger and beneath less variable.
   _yuma_ Edw. p. 930, line 11 from below, likewise belongs to _Augiades_ (p. 939) with the synonym: _scudderi_ Skinn. (p. 936, line 6 from below).
   _earus_ Edw. p. 930, line 8 from below, as stated under _Chacephon_, belongs to this genus (p. 928) after _Ch. rhesus_.

Genus _Thymelicus_.

_breutis_ _Bst. & Leg._ (p. 931, line 16 from below) is placed to the genus _Politis_ (p. 932) by _Barnes_ and _Mc Drenough_, also the following species _myth_ (line 9 from below) with _dacotah_ Edw. (= _pallida_ Skinn.) (p. 930, line 25 from below) as a form of it. — ab. _weetamoo_ Sddr. and ab. _nubs_ Sddr. are both darkend melanotic female forms.

_chusca_ (p. 932, line 4 from above) and _draco_ (ibid, line 8) are likewise to be placed to _Polites_, the former as a form of _Pol. sabuliti_ _Bst._ (p. 932, t. 181 d).

_siris_ _Edw._ (p. 932, line 11 from above, t. 181 b) is to be placed as a synonym to _sonora_ _Sddr._ (p. 934, line 1 from above, as _sylvanoides_) and comes to the
Genus **Polites** (p. 932).

*chispa* Wr. (p. 932, line 8 from below, t. 181 d) is to be replaced by the older name **tecumseh** Grinnel; it comes as a form to *sabuleti*, whilst the name *chispa* Wr. becomes synonymous.

Genus **Catia**.

*C. druryi* Latr. (p. 933, line 13 from above) has to be replaced by the older name *otho* with Abbott and Smith as authors.

Genus **Ochloides**.

Line 4 from below:

To *neumorum* comes *verus* Edw. of p. 934, line 23 from below, as a synonym and *pratincola* Bsd. of p. 934, line 26 from below, as a form, whereas *greeh* Edw. is to be transferred to *agrica* Bsd. line 6 from above.

P. 934, line 1 from above, instead of the synonym *sonora* place the two following *agrica* Bsd. (= francisca Plötz) as synonyma.

Line 9 from above: *snowi* Edw. is to be placed to *Augiodes* (p. 939).

Lines 19 and 23: *leondius* Harr. and *mestei* Edw. are to be ranged in the genus *Hesperia* after *horus* Edw.

Genus **Limochares**.

*L. bimacula* Grt. & Rob. p. 934, line 14 from below, is to be placed to the genus *Euphyes* (p. 935). Line 10 from below: *pontiac* Edw. becomes synonymous to *conspicua* Edw. which name has the priority.

**rheina.** Line 7 from below: place *manataqua* to the genus *Polites* (p. 932). Add as a form of it: *rheina* Edw. (= aleina Skinn.) being a lighter, western race from Colorado.

Line 2 from below: *yehl* Skinn. belongs into the genus *Parastrapone* p. 936.

Line 3 from above: *dion* belongs into the genus *Euphyes* (p. 935), as well as *arpa* (line 6) and *patalka* (line 8).

**alabamae.** To *L. dion* (p. 935, line 3 from above) add as a form: *alabamae* Lindl. The reddish-yellow colour of the upper surface is reduced to a single subapical spot, a small stripe in the lower cell-end and a small spot behind it, which is followed by some more along the distal edge of the scent-spot; on the hindwing the reddish-yellow colour is also reduced. Beneath darker than *dion*; instead of the macular band there are only 3 small spots behind the stigma; the 2 light rays contrast less with the ground-colour. Alabama. Insert after it:

**dokesi.**

*L. dukesi* Lindl. like *dion* shows on the hindwing beneath 2 light rays; it is much darker beneath, and the spots of the forewing are absent altogether. Above the reddish-yellow is much darker, also on the disc of the hindwing, on the forewing it is only present as a small spot behind the stigma. Alabama.

*L. byssus* Edw. (p. 935) with a doubtful synonym (= bulenta Bsd. & Lec.) belongs to the genus *Atrytone* Schlr. (p. 937).

Insert after it:

**kumskaka.**

*Kumskaka* Schlr. is a questionable species from Iowa, which was hitherto regarded as *conspicua* Edw. It seems to be very closely allied to *byssus* (181 k), if it is not to be regarded merely as a local form of this species only known from Florida.

*L. cernes* Bsd. & Lec. (p. 937, line 18 from above) is to be ranged with the genus *Polites* (p. 932), but it becomes synonymous to *thaumas* F., with the other synonym *phocion* F.

Genus **Euphyes**.

*E. metacomet* Harr. (p. 935) becomes synonymous to *vestris* Bsd. which name has the priority, to which also *osyka* Edw. (p. 935, t. 182 a) is to be added.

*E. verna* Edw. (p. 935, t. 182 a) belongs into the genus *Atrytonopsis* (p. 940).

Genus **Oligoria**.

To *O. maculata* Edw. (p. 935, t. 181 a) add as another synonym: *norus* Plötz.

Genus **Atrytone**.

*delaware* Edw. (p. 937, line 12 from above, t. 182 c) becomes synonymous to *logan* Edw. which name *lagus* has the priority. Add to it: f. *lagus* Edw. as the western race with a very light under surface.
Additions: HESPERIDAE. By Dr. M. Draudt.

Genus Euthlius. 
A. aragios Bol. & Sec. (p. 939, t. 182 g). Add yet as synonym: vielliius Abb. & Sm.
A. streckeri Skinn. is to be placed as a synonym to Choranthus radiatus Lec. (p. 941) which species has of late been placed to Euphyes (p. 935) beside dukesi and dion.
A. ruricola Bol. belongs to the genus Hesperia (formerly Ergynus) between juba and attalus (p. 930).

Genus Atrytonopsis.
Into this genus, between hianna (p. 940) and jubes (p. 941) belong yet A. loammi Whitney (= regulus Edw.) of p. 968, line 7 from below and banus Edw. (p. 969, line 1 from above). vierecki Skinn. resembles deca (182 h), but it is smaller, lighter and greyer, with 2 occasionally connected spots in the cell-end of the forewing and a more distinct stigma. New Mexico, in June. cestus Edw. is very closely allied to python Edw. (182 i), but larger, the spot between the median cestus. veins of the forewing very large and triangular. Hindwing beneath watered with purple blackish, the spots semi-diaphanous. Only the type from Arizona seems to be known.
edwardsi B. & McD. Above deep blackish-brown, base of forewing and costal margin scaled yellow, edwardsi. hindwing in the basal half haired yellow. Forewing with a large, quadrangular hyaline spot in the cell, 3 minute subapical spots and 3 postdiscal ones, the lowest being small and triangular, the middle one very large and triangular. Hindwing with a small white cellular spot and 3 behind it, the uppermost being the largest. Beneath the apex of the forewing and the hindwing are dusted with a bluish grey, the hindwing beside the spots of the upper surface with 3 whitish basal spots. Expanse of wings: 30 to 35 mm. Arizona.
To python Edw. (182 i) belongs f. margarita Skinn. being the race from New Mexico, which is beneath margarita, on the hindwing less contrasting, the spots distally not shaded with brown. Above the spots are not so yellowish as in python.

Genus Lerodea.
Before eufala p. 941, line 18 from above, insert: arabus Edw. of p. 943, line 28 from below.

Genus Amblyscirtes.
Line 19 from below: ecos (p. 942) becomes a synonym to alternata Grt. & Rob. which name to be cancelled with samoset (p. 943, line 5 from above), and add as another synonym: meridionalis Dyar.

Genus Stomyles.
St. cassus Edw. (p. 903), cornus Edw. to which species the name quinquemacula Skinn. (of Pamphila p. 927, line 1 from above) belongs yet as synonym, as well as hegen Seddr. (samoset Seddr. becomes synonomous) are of late ranged with Amblyscirtes (p. 942); so are nereus Edw. (183 b, c), tolteca Seddr. (183 b), florus G. & S., probably also gallio Mab. and pupillatus Mab. (183 c). The genus Stomyles is to be cancelled again. Of the remaining species fusca Grt. & Rob. is to be placed to the genus Megistius (p. 973) and ostleri Skinn. to Mastor (p. 972).

Genus Calpodes.
Place to the end of this genus (p. 944) after C. ethlius Gr.;
C. coscinia H.-Schn. (p. 949, line 25 from above). Specimens from Brownsville (Texas), according to Barnes and M. Dunnough, as well as the Mexican specimens, are better placed to the genus Calpodes owing to the spined middle tibiae. It is not impossible that Felder in the description of his ares has had another species before him with unspined tibiae, for which reason the insect will for the present better ranged by HERRICH-SCHÄFFER’s name.

Genus Mastor.
bellus and phylace (p. 972, t. 187 g) are nevertheless 2 separate species; the former is found in North America in the mountains of South Arizona and has two breeds (in May, June, and the second in July) being entirely alike, whereas phylace occurs in South Colorado and New Mexico and probably yields but one breed in June. The scent-spot is in both species different: in bellus long and narrow, in phylace shorter and more compact.
To anabis (line 24 from below) add as another synonym: bicolor Mab.
abdonides (Cyclosma) Draudt 978.
aberrans (Hydraenomia) Draudt 1019.
aberrans (Phyc. acaemia) Rob. 448.
abrupta (Phyc. claphaena) Rob. 439.
abubuia (Prep. omphale) Frust. 562.
abulina (Adelpha abyla) Frust. 524.
arauflata (Aanaes) Rob. 580.
actinodina (Phyciodes) Rob. 449.
acuta (Tagetis) Weym. 188.
adam (Hedic. hyagnara) Seitz 392.
adstricta (Adelpha erynthis) Frust. 518.
adurea (Thecla) Draudt 759.
advena (Rinthon) Draudt 955.
acefta (Ager. amphiomne) Frust. 541.
asea (Peris. priene) Rob. 397.
acepeona (Thecla) Draudt 793.
acquaterialis (Catast. chelidonis) Rob. 71.
acquaterialis (Phyciodes) Rob. 142.
affine (Lymnaea. albocanula) Weym. 249.
affinis (Catasticta) Rob. 103.
agamedes (Morpho procticus) Frust. 313.
agamidora (Euptych. chloris) Weym. 219.
agathus (Prep. laetres) Frust. 560.
agere (Em. sophonisba) Seitz 487.
agnes (Dynamine) Rob. 505.
agraenius (Pseudosteroma) Weym. 242.
agauca (Thecla) Draudt 799.
agraserus (Agris. percles) Fassl 1016.
agasekanka (Argynnn. pales) Lehn. 424.
alba (Collias flavoea) Rob. 94.
alba (Collias philodice) Rob. 91.
alba (Dana. melite) Rob. 99.
albescens (Catasticta hegemom) Rob. 1017.
albescens (Dalla seleca) Draudt 923.
albescens (Phyciodes) Rob. 441.
albida (Ennesis lucinda) Seitz 605.
albifasciata (Catag. aririanhiae) Rob. 1032.
albifasciata (Epiph. orea) Rob. 478.
albinaeaula (Diamorphia) Rob. 1024.
albinaeaula (Charon. eurytelon) Rob. 68.
albimedetsa (Systases emorsa) Draudt 904.
albina (Adelpha eriti) Frust. 519.
albipлага (Mesone epaphis) Seitz 676.
albipuncta (Phyciodes) Rob. 444.
albofasciata (Phyc. drusilla) Rob. 441.
alkeunus (Barbic. basilis) Seitz 661.
alina (Pteron. lineera) Hsch. 153.
alphiios (Ager. arete) Frust. 545.
amalda (Euptychia) Weym. 213.
amalda (Leucoth. amalda) Hsch. 149.
amanda (Mesosenia telegone) Seitz 640.
amanda (Athyrt. mechanitis) Hsch. 121.
amazonica (Dynamine) Rob. 505.
ambra (Eupt. astha) Weym. 198.
ambrata (Meton. cecilia) Seitz 633.
amnea (A從in. callithane) Jord. 361.
amphiktion (Prep. merander) Frust. 556.
amphileeta (Actinope) Jord. 396.
amaloga (Mesos. phelina) Seitz 340.
amastostomosis (Thecla meridias) Draudt 706.
amepos (Aanaes) Rob. 1042.
amodola (Hedic. phyllis) Seitz 393.
amugstosciaeta (Peris. populii) Rob. 1035.
amuina (Melin. mediatr) Hsch. 123.
antacu (Hamear. erosstratus) Seitz 701.
augha (Leuchth. astraea) Hsch. 147.
atoninias (Adelpha. pleurica) Frust. 321.
apollonidas (Cal. idemoneus) Frust. 324.
apheilis (Phyc. paralirina) Rob. 447.
apheilas (Anaea appius) Rob. 585.
apheilota (Anaea troglodyta) Rob. 582.
aquillia (Adelpha scripiina) Frust. 531.
araquaya (Lynnias) Seitz 666.
arena (Mecan. lycide) Hsch. 126.
areas (Megistias) Draudt 975.
archelaus (Eusel. teleclus) Seitz 632.
archilida (Adelpha lerna) Frust. 525.
arenne (Ager. arinome) Frust. 544.
argennfus (Morpha menelaus) Frust. 355.
argentina (Thephei) Draudt 952.
argolis (Catasticta) Robin 107.
argus (Megistias) Draudt 975.
argus (Padtraona) Draudt 946.
argyria (Prep. eugenus) Frust. 560.
aristophanes (Caligo meneoecius) Frust. 326.
aris (Euptychia) Weym. 198.
arpyoxida (Thecla) Draudt 775.
artaxata (Pieris phaloc) Rob. 1016.
artemis (Calicore) Rob. 502.
aspernatus (Thephei) Draudt 932.
aspernas (Opsph. batea) Frust. 294.
asulla (Thecla) Draudt 745.
asteria (Tayg. andromeda) Weym. 189.
avlaiama (Symmach. probetor) Seitz 682.
avastornunides (Diam. amphione) Rob. 102.
avteria (Ager. iphiium) Frust. 543.
avterrima (Barbic. melanops) Seitz 665.
avtina (Ager. sephas) Frust. 546.
avs (Phyc. ianthi) Rob. 443.
avtaius (Prep. phiridamas) Frust. 564.
avtaius (Mesos. eumene) Seitz 638.
List of the new species and varieties.

cauda (Adelpha basileodes) Frasch. 524.
caliphan (Adelpha) Frasch. 326.
calypso (Goepertxyx muscipe) Rob. 88.
campula (Adelpha noc) Frasch. 352.
campyloa (Anatole glaphyra) Seitz 716.
canina (Adelpha coca) Frasch. 516.
canulae (Adelpha anidla) Frasch. 526.
capnides (Actin. abana) Jord. 360.
caren (Monethe albertus) Seitz 671.
carmela (Adelpha attica) Frasch. 529.
carnosa (Dian. mercenaria) Rob. 1025.
carula (Actino. abana) Jord. 373.
catalytapara (Ager. feronia) Frasch. 542.
catapechea (Kasul. ecruincus) Seitz 624.
catastica (Hesperoch. mena) Rob. 419.
catharina (Thecla) Draudt 788.
cavea (Actin. equatoria) Jord. 371.
List of the new species and varieties.

cyanomelas (Myocelia) Röb. 482.
cyanni (Thecla) Draudt 796.
daedeia (Adelpha iphiela) Fruhst. 523.
dagnana (Adelpha cytherea) Fruhst. 521.
damou (Adelpha serra) Fruhst. 531.
daphulia (Ager. chloro) Fruhst. 541.
dealbata (Perisama) Röb. 1035.
dealbata (Thecla phylidea) Draudt 752.
decaenaria (Bia notorion) Weym. 276.
decedoria (Huma omnibus) Hsch. 116.
deconata (Phyca levina) Röb. 450.
deflora (Pythions pteracrus) Draudt 887.
deleta (Adelpha erota) Fruhst. 518.
delonga (Adelpha erota) Fruhst. 519.
demaculata (Anaea xencrateis) Röb. 1042.
demetor (Dism. propserpinia) Röb. 106.
derondina (Leucoth. deondata) Hsch. 148.
dero (Thecla synocclus) Draudt 779.
adesphila (Adelpha cytherea) Fruhst. 521.
derita (Clastis. loca) Röb. 73.
deterges (Triobus) Draudt 948.
diadenata (Adelpha celerio) Fruhst. 530.
diacoecus (Adelpha celerio) Fruhst. 531.
diasia (Ager. ferox) Fruhst. 541.
diastria (Adelpha naxia) Fruhst. 525.
diciera (Thecla) Draudt 803.
dildia (Adelpha coca) Fruhst. 516.
didyma (Phyca velica) Röb. 438.
diffilis (Xenides) Draudt 551.
dignata (Thecla) Draudt 754.
dicta (Epiphe) Röb. 478.
dimidiata (Brassilia astyra) Fruhst. 287.
dionhttpses (Gilgo atenus) Fruhst. 326.
disceophora (Anaea) Röb. 1042.
discreta (Lycocra halla) Hsch. 116.
discutrenus (Mel. zanea) Hsch. 122.
disjuncta (Dism. aecuipennis) Röb. 99.
disomophina (Charon. eurytela) Röb. 68.
dissentanea (Thecla) Draudt 758.
dissuluus (Thepia) Draudt 954.
disyllus (Narope sarastoa) Fruhst. 329.
ditaenioa (Callisore) Röb. 1058.
diversus (Helicopsis cupido) Seitz 623.
diversa (Actin. oceanoneae) Jord. 353.
divides (Perisama) Röb. 1034.
divina (Anaea dia) Röb. 501.
divina (Euphycia) Weym. 217.
domina (Corades pannonia) Weym. 274.
doma (Prep. chaliciota) Fruhst. 557.
donata (Pteronymia) Hsch. 152.
donia (Dism. autonoma) Röb. 1025.
doris (Terias) Röb. 82.
dobedeyai (Leptop. cleome) Röb. 62.
druidi (Micro. elva) Röb. 453.
drominea (Hymenitis) Hsch. 135.
drusinula (Phyloodes) Röb. 141.
dulliae (Adelpha celerio) Fruhst. 531.
dyrhrachelus (Eusel. eutychus) Seitz 624.
dysmenia (Theconera) Draudt 745.
echinda (Lymanas epijarbas) Seitz 661.
echion (Thecla echion) Draudt 786.
cepsyis (Panara thibace) Seitz 687.
effusa (Potamanax) Draudt 899.
efigurata (Morpho ostenndaris) Fruhst. 540.
elaphina (Phyca elaphina) Röb. 439.
elganius (Anaca magdalenae) Röb. 501.
elicia (Targ. andromedas) Weym. 189.
elia (Eusebasiia) Seitz 625.
elia (Pierias clathran) Röb. 84.
elia (Thecla) Draudt 756.
ecidina (Pierias prapa) Röb. 90.
enius (Callith. optima) Röb. 492.
enama (Leucothyris) Hsch. 117.
eniana (Nymphidium) Seitz 711.
enyo (Necyria bellona) Seitz 693.
epipheae (Actin. equatoria) Jord. 371.
epyzios (Adelpha) Fruhst. 527.
epina (Adelpha) Fruhst. 527.
erebia (Phyca levis) Röb. 449.
erosia (Gneathoth. exclamationii) Röb. 454.
eriones (Tallora hegeliius) Seitz 716.
erstina (Adelpha jordana) Fruhst. 518.
erstina (Euphycia) Weym. 206.
eros (Mophos sulkowskyi) Fruhst. 249.
ertica (Helicopsis cupido) Seitz 635.
eratana (Rodina lysippus) Seitz 658.
erida (Calithea dempseyi) Röb. 492.
erpatra (Eusel. euseopus) Seitz 630.
erpolena (Ager. quamalelae) Fruhst. 512.
erpishyce (Thecla) Draudt 811.
ertropis (Mophos iaera) Fruhst. 339.
etanscena (Phyca ortbis) Röb. 138.
evanides (Hyposch. adelphina) Hsch. 144.
exanima (Adelpha iphiela) Fruhst. 525.
exesa (Lymanopoda) Weym. 247.
eximia (Catalsteta) Röb. 74.
exima (Actin. ultima) Jord. 361.
eximia (Phyca catula) Röb. 445.
eximia (Pierella dracantia) Weym. 177.
eximia (Thecla ion) Draudt 754.
exul (Stalachita phaenoidea) Seitz 719.
fabricia (Adelpha euboon) Fruhst. 518.
faemius (Dynamor. dariae) Fruhst. 280.
falespinus (Adelpha) Fruhst. 526.
farinosa (Artines) Draudt 987.
farvoluta (Ager. feronia) Fruhst. 542.
fascia (Metronia) Draudt 968.
fasciata (Lycocra cerea) Hsch. 115.
fasciata (Peris. humboldtii) Röb. 1055.
fasciata (Phycolodes) Röb. 452.
fasciata (Phyca fasciata) Röb. 438.
fascinatrix (Heli. melipomene) Seitz 386.
fassli (Adelpha nova) Fruhst. 532.
fassli (Anacea pasibula) Röb. 501.
fassli (Ariceria) Seitz 721.
fassli (Callithcia) Röb. 493.
fassli (Catagry. taxa) Röb. 495.
fassli (Epiphe) Röb. 479.
fassli (Eurybia dardus) Seitz 636.
fassli (Hylephila) Draudt 929.
fassli (Mesos metusana) Seitz 642.
fassli (Pedal. chryseolena) Weym. 259.
fassli (Peris. calana) Röb. 498.
fassli (Phyca lida) Röb. 447.
fassli (Potamanax) Draudt 899.
List of the new species and varieties.

guatemalena (Celiaus phildocer) Röb. 91.
gudruna (Phyce olivencia) Röb. 147.
gulula (Ager. februna) Frahm. 539.
guenéei (Calliconore) Röb. 502.

habanae (Eunicea monimna) Seitz 185.
haecuera (Actin. neleus) Jord. 361.
haenschel (Tayg. celeria) Wegm. 188.
habnelli (Aeg. equatoria) Jord. 370.
heciconia (Phyce nurena) Röb. 417.
helios (Euphyxia) Wegm. 218.
velle (Catast. hegemon) Röb. 1017.
heraeles (Morpho hecuba) Frahm. 338.
heredia (Adelpha plesaure) Frahm. 521.
heremia (Adelpha cytherea) Frahm. 522.
hieroglyphica (Theaspis) Draudt 653.
hierone (Aeg. februna) Frahm. 540.
hieronela (Adelpha naxia) Frahm. 525.
hilaria (Phyce acrasia) Röb. 418.
hippodochus (Caligo idoneus) Frahm. 324.
hollandi (Appias drusilla) Röb. 68.
holochroa (Actin. antea) Jord. 390.
honofina (Aeg. glauconema) Frahm. 546.
hopfier (Catasticta) Röb. 71.
hopfiere (Phyocides) Röb. 449.
hübleri (Chlor. lauræ) Röb. 547.
yagnis (Lyman. ferruginosum) Wegm. 247.
yperborea (Vanessa antiopa) Seitz 457.
yperion (Siseme pseudopallus) Seitz 698.
yphochlora (Meroctes) Draudt 909.
yphoxauta (Dayton. lycimnia) Röb. 70.

ilexia (Aeg. februna) Frahm. 546.
idiographa (Actin. thalía) Jord. 369.
ilia (Peris. alicia) Röb. 499.
ilmatar (Prep. antimac) Frahm. 555.
imitanus (Eucides imitans) Seitz 398.
immaeulata (Tatoch. stigmatic) Röb. 57.
impicata (Adelpha philiassa) Frahm. 521.
inachia (Adelpha olynthia) Frahm. 511.
inc (Dalia) Draudt 952.
incurru (Thiaso. wayloris) Seitz 715.
inertia (Catasticta) Röb. 1021.
inconsipita (Siseme) Draudt 892.
indefecta (Adelpha philiassa) Frahm. 523.
imetus (Pythionides) Draudt 888.
ines (Dismorphia) Röb. 101.
inuseata (Callithom. schulzi) Wehm. 128.
ingens (Emm. marginata) Seitz 180.
inuna (Catast. pieris) Röb. 70.
insulae (Adelpha cytherea) Frahm. 521.
insulae (Aeg. februna) Frahm. 512.
insulae (Morpho pelicis) Frahm. 545.
insulae (Pythionides) Draudt 887.
intermedia (Actin. demonstra) Jord. 308.
intermedia (Loconda dysoni) Röb. 69.
intermedia (Phyce polina) Röb. 446.
interrupta (Eupt. lissata) Wegm. 211.
iphimedes (Aeg. viacens) Röb. 586.
iphimedia (Adelpha philiassa) Frahm. 523.
irion (Stalactis phlegia) Seitz 718.
iris (Aeg. sicaeans) Frahm. 517.
ithoniella (Dism. fortunata) Röb. 104.
List of the new species and varieties.

1061

macrophthalmus (Morpho patroclus) Frasbt. 355.
madeira (Melnaea) Hsch. 123.
madeira (Mysc. capensis) Rb. 485.
maenas (Ceratina) Hsch. 130.
magdalena (Anasa) Rb. 699.
magna (Poruna leihnsa) Rb. 67.
magnifica (Methyl. cecilia) Schiz 635.
magnos (Prep. meander) Frasbt. 357.
mamais (Adelpha larus) Frasbt. 512.
maira (Adelpha jutina) Frasbt. 514.
mamae (Adelpha cubocea) Frasbt. 518.
mangie (Melaena) Hsch. 123.
List of the new species and varieties.

nigretta (Lynnus cephise) Seitz 900.
nigrüppus (Danaeos archippus) Hscr. 113.
nikita (Epithomia) albus) Hscr. 140.
ninus (Agrias claudia) Fossil 1037.
nlobe (Castitica) Rob. 72.
nobilis (Euphycria norita) Weym. 214.
nobilia (Ager. eronis) Frasbat. 1542.
noetoeclum (Stalactus phlega) Seitz 719.
nonja (Ager. chloë) Frasbat. 541.
nymphagoza (Phulia) Rob. 97.
nysiella (Phulia) Rob. 98.

obidona (Ager. chloë) Frasbat. 541.
obrumila (Ager. aristome) Frasbat. 514.
obversura (Hirstus tarricna) Hscr. 120.
obseurior (Castitica hopfferi) Rob. 71.
obunabara (Ager. fermonia) Frasbat. 542.
oerellata (Phys. letitia) Rob. 418.
oerhaceae (Leptophoria eleone) Rob. 62.
oerhodinbatuts (Dalla) Druad 1924.
oerhodatena (Sisene aristotes) Seitz 908.
oerhodatena (Ager. anova) Jord. 369.
oenottia (Caeladilma dinas) Weym. 296.
olga (Euidos isabella) Neustett. 597.
olga (Helic. isabella) Neustett. 597.
olivenina (Ancylin. aestesites) Seitz 607.
olynthia (Adelph olynthia) Frasbat. 514.
onoua (Caloh. hopfferi) Hscr. 143.
opheclas (Adelph delphicola) Frasbat. 510.
opheles (Adelph boreas) Frasbat. 513.
opina (Eu. ochus) Weym. 293.
opinata (Euphycria) Weym. 167.
ophebosis (Oespl. quifertia) Frasbat. 390.
orhazena (Adelph secpa) Frasbat. 531.
ornta (Anaca glycerium) Rob. 583.
oruta (Morpho monelus) Frasbat. 554.
orthoenia (Bacotsis prima) Seitz 684.
ortylica (Ager. arete) Frasbat. 545.

paeis (Ithys) Druad 821.
paeis (Tetoriocolias attinas) Rob. 90.
paea (Eu. xaphiunna) Weym. 299.
pallantihas (Prep. Lasites) Frasbat. 560.
palleus (Castitica) Rob. 1021.
pallaeuscos (Ager. paraphaces) Jord. 373.
palllida (Dism. aronia) Rob. 104.
pallida (Matthania aureomaculata) Rob. 78.
pallidula (Pieris mandala) Rob. 61.
palliolata (Ager. arechusa) Frasbat. 545.
pammes (Prep. demophon) Frasbat. 554.
pannancangers (Thecla) Druad 801.
pandora (Perlybris pyrrha) Rob. 61.
pardoxa (Castitica) Rob. 73.
pardulina (Physydotes) Rob. 447.
patehene (Euphycria) Weym. 216.
pavy (Chlor. cherubina) Rob. 510.
paula (Daptom. Iycynia) Rob. 75.
paula (Pereute autodyca) Rob. 96.
paula (Tetias phiace) Rob. 85.
pavo (Artinnes) Druad 987.

pavonides (Caligo memnon) Frasbat. 322.
pellia (Morpho anaxibia) Frasbat. 352.
pellenea (Physydotes) Rob. 450.
pelluca (Dismorphia) Rob. 1026.
pellulda (Thecla) Druad 754.
peregrina (Pplias) Rob. 195.
perrula (Actin. equatoria) Jord. 370.
perza (Adelph falkeniana) Frasbat. 527.
perpleiotes (Oespl. cassinu) Frasbat. 306.
pernassa (Adelph protia) Frasbat. 519.
periana (Dism. lysis) Rob. 191.
periana (Hylephila) Druad 929.
perniana (Phyc. teletusa) Rob. 438.
peruviana (Dynamite gisella) Rob. 508.
peruvians (Perute philotes) Rob. 66.
phacana (Thecla) Druad 790.
pharad (Adelph iphidula) Frasbat. 523.
pharamaees (Eupt. phaes) Weym. 629.
phelidiales (Caligo illinoma) Frasbat. 310.
phera (Adelph iphidula) Frasbat. 523.
phercinuie (Agrias beuvrionius) Frasbat. 577.
phila (Castitica) Rob. 1021.
philmone (Castat. chelidonias) Rob. 71.
philodina (Castitica) Rob. 1021.
philutias (Adelph celerio) Frasbat. 530.
plkllidiles (Caligo oberturhi) Frasbat. 527.
phlorkys (Caligo tencer) Frasbat. 317.
phlodeles (Adelph phyllaca) Frasbat. 520.
physosca (Heliconius uracaca) Seitz 378.
piwis (Eosmogrya satyrus) Seitz 659.
pieris (Carystus) Druad 979.
placenitia (Oespl.ansae cassiope) Frasbat. 310.
plaeiidas (Eosmolasia) Seitz 629.
plazia (Phyc. nauplia) Rob. 416.
planiana (Cosmonastrys quies) Weym. 234.
plausibilis (Adelph claudia) Frasbat. 569.
plleseni (Castitica colla) Rob. 71.
plsenell (Tetoriocollias athsas) Rob. 90.
plutubillibatuta (Callic. gabaza) Rob. 1036.
poeelia (Cobulus) Druad 988.
pollina (Adelph salahia) Frasbat. 518.
polyidos (Morpho becone) Frasbat. 399.
polyinnia (Phyc. olivenica) Rob. 417.
polyplaca (Barbic. basilis) Seitz 664.
polyxena (Anaca polyx) Rob. 1042.
popescuata (Lorena) Druad 968.
paearcandia (Adelph ala) Frasbat. 515.
paeenomona (Lencoth. sexmaculata Hscr. 146.
paeenestina (Prep. prenestes) Frasbat. 565.
paeenestina (Morpho delania) Frasbat. 555.
paeenstera (Adelph delphicola) Frasbat. 519.
paevalvia (Adelph justina) Frasbat. 514.
paxvitas (Adelph syma) Frasbat. 522.
paxiodes (Caligo illinumen) Frasbat. 318.
paxivata (Adelph scharas) Frasbat. 517.
paxivata (Dalla) Druad 929.
paxivata (Prep. prenestes) Frasbat. 565.
paxigina (Adelph ala) Frasbat. 515.
paxiades (Hylephila) Seitz 627.
paxba (Eupt. erigone) Weym. 203.
paxbata (Eupt. erigone) Weym. 203.
paxex (Pheznadaces) Druad 956.
paxina (Dis. pinhacues) Rob. 1020.
paxean (Prep. demanemias) Frasbat. 553.
psammathe (Eosul. crotopus) Seitz 628.
<table>
<thead>
<tr>
<th>Latin Name</th>
<th>English Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>pseudarete</td>
<td>(Adelpha arctic) Friedl. 529.</td>
</tr>
<tr>
<td>pseudomessana</td>
<td>(Adelpha) Friedl. 526.</td>
</tr>
<tr>
<td>punctata</td>
<td>(Eupteryx) Weym. 203.</td>
</tr>
<tr>
<td>pupilla</td>
<td>(Thecla) Draudt 801.</td>
</tr>
<tr>
<td>purissima</td>
<td>(Thecla) Draudt 788.</td>
</tr>
<tr>
<td>putil</td>
<td>(Mesosenia) Seitz 638.</td>
</tr>
<tr>
<td>pyrrhoma</td>
<td>(Tatocellia) Rob. 56.</td>
</tr>
<tr>
<td>quadroma</td>
<td>(Hypoloria oncella) Hach. 190.</td>
</tr>
<tr>
<td>quassa</td>
<td>(Thecla) Draudt 781.</td>
</tr>
<tr>
<td>quindiensis</td>
<td>(Thecla luxurina) Draudt 758.</td>
</tr>
<tr>
<td>radiata</td>
<td>(Adelpha serpa) Friedl. 531.</td>
</tr>
<tr>
<td>radina</td>
<td>(Leucoth. cyanina) Hach. 118.</td>
</tr>
<tr>
<td>ramaona</td>
<td>(Leucoth. amazones) Hach. 117.</td>
</tr>
<tr>
<td>rana</td>
<td>(Lymanop. fritufungosa) Weym. 217.</td>
</tr>
<tr>
<td>raidoloi</td>
<td>(Aprotopos melafontho) Hach. 127.</td>
</tr>
<tr>
<td>reducia</td>
<td>(Actin. ozomene) Jord. 392.</td>
</tr>
<tr>
<td>reducita</td>
<td>(Chlor. cyanae) Rob. 516.</td>
</tr>
<tr>
<td>reducata</td>
<td>(Pereute. leucodromina) Rob. 06.</td>
</tr>
<tr>
<td>referens</td>
<td>(Lycoreia alta) Hach. 116.</td>
</tr>
<tr>
<td>reimhadi</td>
<td>(Amphiceleta) Weym. 192.</td>
</tr>
<tr>
<td>renissa</td>
<td>(Eupt. renata) Weym. 201.</td>
</tr>
<tr>
<td>reindens</td>
<td>(Thecla) Draudt 793.</td>
</tr>
<tr>
<td>restsiti</td>
<td>(Adelpha. zina) Friedl. 514.</td>
</tr>
<tr>
<td>rhenea</td>
<td>(Prep. emphusa) Friedl. 530.</td>
</tr>
<tr>
<td>rhomboida</td>
<td>(Daeitalma dinias) Weym. 296.</td>
</tr>
<tr>
<td>riola</td>
<td>(Adelpha cocola) Friedl. 516.</td>
</tr>
<tr>
<td>rosa</td>
<td>(Pereute. autodyna) Rob. 66.</td>
</tr>
<tr>
<td>rosalinda</td>
<td>(Geronia) Friedl. 513.</td>
</tr>
<tr>
<td>rosea</td>
<td>(Meganostoma eurydice) Hach. 91.</td>
</tr>
<tr>
<td>rothschildi</td>
<td>(Adelpha) Friedl. 525.</td>
</tr>
<tr>
<td>rothschildii</td>
<td>(Mimocastnia) Seitz 652.</td>
</tr>
<tr>
<td>rubrigutta</td>
<td>(Phye. fasciata) Rob. 452.</td>
</tr>
<tr>
<td>ruflilla</td>
<td>(Adelpha) Friedl. 527.</td>
</tr>
<tr>
<td>rufoeneta</td>
<td>(Eupt. pica) Weym. 196.</td>
</tr>
<tr>
<td>sahata</td>
<td>(Ager. flura) Friedl. 510.</td>
</tr>
<tr>
<td>sagittata</td>
<td>(Tatocellia demodes) Rob. 57.</td>
</tr>
<tr>
<td>sajama</td>
<td>(Cosmosatyrus chiliensis) Weym. 233.</td>
</tr>
<tr>
<td>salaciae</td>
<td>(Thecla) Draudt 754.</td>
</tr>
<tr>
<td>sanidus</td>
<td>(Eunides) Seitz 727.</td>
</tr>
<tr>
<td>sapho</td>
<td>(Hyminetish) Hach. 101.</td>
</tr>
<tr>
<td>sarana</td>
<td>(Adelpha phyla) Friedl. 520.</td>
</tr>
<tr>
<td>sarilis</td>
<td>(Leucothysis) Hach. 150.</td>
</tr>
<tr>
<td>satura</td>
<td>(Lymanop. leana) Weym. 249.</td>
</tr>
<tr>
<td>satura</td>
<td>(Colias flavoca) Rob. 91.</td>
</tr>
<tr>
<td>satuatara</td>
<td>(Phye. satata) Rob. 496.</td>
</tr>
<tr>
<td>sautrids</td>
<td>(Ager. aeriussa) Friedl. 544.</td>
</tr>
<tr>
<td>savaea</td>
<td>(Catastia) Rob. 78.</td>
</tr>
<tr>
<td>savaea</td>
<td>(Catastia) Rob. 1021.</td>
</tr>
<tr>
<td>seyrus</td>
<td>(Prep. lincemades) Friedl. 553.</td>
</tr>
<tr>
<td>sedusa</td>
<td>(Hypoloria orlonia) Hach. 160.</td>
</tr>
<tr>
<td>segesta</td>
<td>(Eupteryx) Weym. 214.</td>
</tr>
<tr>
<td>seirocastnia</td>
<td>(Dalla) Draudt 923.</td>
</tr>
<tr>
<td>seitzi</td>
<td>(Carysanth) Draudt 890.</td>
</tr>
<tr>
<td>seitzi</td>
<td>(Helle. rubellus) Neustett. 594.</td>
</tr>
<tr>
<td>setzi</td>
<td>(Phyiodis) Rob. 455.</td>
</tr>
<tr>
<td>setzii</td>
<td>(Phyiodis) Rob. 415.</td>
</tr>
<tr>
<td>sellasia</td>
<td>(Ager. flura) Friedl. 510.</td>
</tr>
<tr>
<td>semilunarea</td>
<td>(Tweg. yplima) Weym. 186.</td>
</tr>
<tr>
<td>semilutea</td>
<td>(Actin. equatoria) Jord. 370.</td>
</tr>
<tr>
<td>semilurita</td>
<td>(Lasiophila orbifera) Weym. 296.</td>
</tr>
<tr>
<td>semilurea</td>
<td>(Mesos. marsena) Seitz 610.</td>
</tr>
<tr>
<td>semounis</td>
<td>(Pteron. starkn) Hach. 155.</td>
</tr>
<tr>
<td>senta</td>
<td>(Thecla) Draudt 783.</td>
</tr>
<tr>
<td>serbolis</td>
<td>(Leucothysis) Hach. 118.</td>
</tr>
<tr>
<td>serenina</td>
<td>(Adelpha arctica) Friedl. 516.</td>
</tr>
<tr>
<td>serifa</td>
<td>(Adelpha attica) Friedl. 299.</td>
</tr>
<tr>
<td>seropina</td>
<td>(Callicore) Rob. 1025.</td>
</tr>
<tr>
<td>serpeutina</td>
<td>(Adelpha fusa) Friedl. 532.</td>
</tr>
<tr>
<td>servius</td>
<td>(Twyg. rectifascia) Weym. 187.</td>
</tr>
<tr>
<td>sexpunctata</td>
<td>(Lynnaeus pico) Seitz 663.</td>
</tr>
<tr>
<td>signata</td>
<td>(Drec. epidero) Hach. 139.</td>
</tr>
<tr>
<td>silkyon</td>
<td>(Opsiph. tamarindus) Friedl. 297.</td>
</tr>
<tr>
<td>silfa</td>
<td>(Adelpha dhona) Friedl. 522.</td>
</tr>
<tr>
<td>simasea</td>
<td>(Thecla) Draudt 791.</td>
</tr>
<tr>
<td>simplicia</td>
<td>(Amphidicta pignoculator) Weym. 192.</td>
</tr>
<tr>
<td>sterna</td>
<td>(Adelpha pleurae) Friedl. 521.</td>
</tr>
<tr>
<td>semeina</td>
<td>(Theopes eurygynia) Seitz 796.</td>
</tr>
<tr>
<td>sialilla</td>
<td>(Ager. flura) Friedl. 510.</td>
</tr>
<tr>
<td>sospes</td>
<td>(Thecla) Draudt 778.</td>
</tr>
<tr>
<td>speciosa</td>
<td>(Catag. excelsorum) Rob. 400.</td>
</tr>
<tr>
<td>speculium</td>
<td>(Mesone epaphus) Seitz 676.</td>
</tr>
<tr>
<td>sphaeritis</td>
<td>(Prep. garleppitina) Friedl. 565.</td>
</tr>
<tr>
<td>spina</td>
<td>(Pedal. paetsyes) Weym. 259.</td>
</tr>
<tr>
<td>standfussi</td>
<td>(Colias pelidneo) Rob. 91.</td>
</tr>
<tr>
<td>stantius</td>
<td>(Pteron. habena) Hach. 151.</td>
</tr>
<tr>
<td>stasia</td>
<td>(Cosmosatyrus) Weym. 234.</td>
</tr>
<tr>
<td>standingi</td>
<td>(Callith. lucyky) Rob. 191.</td>
</tr>
<tr>
<td>stenotaenia</td>
<td>(Callie. gabaza) Rob. 1035.</td>
</tr>
<tr>
<td>stenotaenia</td>
<td>(Phye. citiboho) Rob. 110.</td>
</tr>
<tr>
<td>sterope</td>
<td>(Ager. arino) Friedl. 514.</td>
</tr>
<tr>
<td>stratopsis</td>
<td>(Leucothysis) Hach. 147.</td>
</tr>
<tr>
<td>straninosa</td>
<td>(Actin. antites) Jord. 399.</td>
</tr>
<tr>
<td>straudi</td>
<td>(Colias) Rob. 1023.</td>
</tr>
<tr>
<td>strationides</td>
<td>(Caligo idomeneus) Friedl. 324.</td>
</tr>
<tr>
<td>stricillata</td>
<td>(Eupt. amulla) Weym. 198.</td>
</tr>
<tr>
<td>stiposis</td>
<td>(Episcia claduna) Hach. 150.</td>
</tr>
<tr>
<td>stupenda</td>
<td>(Heliocops cupido) Seitz 692.</td>
</tr>
<tr>
<td>stupenda</td>
<td>(Thracides) Draudt 904.</td>
</tr>
<tr>
<td>suapura</td>
<td>(Adelpha cocola) Friedl. 516.</td>
</tr>
<tr>
<td>suasa</td>
<td>(Catastia) Rob. 72.</td>
</tr>
<tr>
<td>suassella</td>
<td>(Catast. suasa) Rob. 72.</td>
</tr>
<tr>
<td>subalbata</td>
<td>(Dioptph. philemon) Seitz 648.</td>
</tr>
<tr>
<td>subbadia</td>
<td>(Actin. polleona) Jord. 372.</td>
</tr>
<tr>
<td>subbrunnesces</td>
<td>(Anaea xeno) Rob. 555.</td>
</tr>
<tr>
<td>subcreolocor</td>
<td>(Phydios) Rob. 411.</td>
</tr>
<tr>
<td>sublaeocita</td>
<td>(Phye. albonis) Rob. 418.</td>
</tr>
<tr>
<td>subobscura</td>
<td>(Eupt. hesione) Weym. 214.</td>
</tr>
<tr>
<td>subosa</td>
<td>(Leucoth. stella) Hach. 150.</td>
</tr>
<tr>
<td>subobesa</td>
<td>(Catastia) Rob. 1021.</td>
</tr>
<tr>
<td>subuniformis</td>
<td>(Clor. povon) Rob. 546.</td>
</tr>
<tr>
<td>subvarianis</td>
<td>(Pereute. clavrops) Rob. 96.</td>
</tr>
<tr>
<td>suasa</td>
<td>(Thecla) Draudt 706.</td>
</tr>
<tr>
<td>sulphuresces</td>
<td>(Hesperoc. macnalis) Rob. 79.</td>
</tr>
<tr>
<td>suppar</td>
<td>(Ate) Draudt 880.</td>
</tr>
<tr>
<td>superior</td>
<td>(Anarynthus meneris) Seitz 691.</td>
</tr>
<tr>
<td>superior</td>
<td>(Dalla) Draudt 922.</td>
</tr>
<tr>
<td>superior</td>
<td>(Thespieus) Draudt 933.</td>
</tr>
<tr>
<td>susarion</td>
<td>(Morpho thessens) Friedl. 336.</td>
</tr>
<tr>
<td>suspecta</td>
<td>(Actin. cedates) Jord. 399.</td>
</tr>
<tr>
<td>syilpis</td>
<td>(Selinurubles) Friedl. 823.</td>
</tr>
<tr>
<td>symphitus</td>
<td>(Prep. meander) Friedl. 557.</td>
</tr>
<tr>
<td>sydennius</td>
<td>(Papilio eleotes) Jord. 33.</td>
</tr>
<tr>
<td>syrma</td>
<td>(Adelpha decorio) Friedl. 530.</td>
</tr>
</tbody>
</table>
List of the new species and varieties.

teniana (Physiodes) Röb. 438.
tamina (Catag. tommyris) Röb. 73.
tamina (Pteron. zetlina) Hsch. 152.
tampanaya (Pteron. tucuna) Hsch. 153.
tarapotis (Molin. menophilus) Hsch. 122.
tarapotis (Calloloria nise) Hsch. 114.
tarpeia (Adelpha zea) Frusht. 532.
tarratia (Adelpha cytherea) Frusht. 521.
tecta (Melin. eitra) Hsch. 124.
tegreta (Adelpha leucophthalma) Frusht. 514.
tegyra (Ager. forest) Frusht. 541.
tehuacana (Rhabdoides) Draidt 81.
theura (Eupt. eupt. chir) Weym. 218.
tennifaseata (Pisamob. bombi) Rob. 1053.
terenzius (Opisph. tanamadi) Frusht. 297.
terpsiche (Stalactis calliope) Seitz 719.
tersa (Eupt. tatesii) Weym. 214.
testaee (Annea) Röb. 585.
testacea (Peris. triung) Röb. 1035.
tetra (Ensul. gc) Seitz 632.
theaena (Adelpha olythis) Frusht. 514.
thefrada (Ager. arethusa) Frusht. 545.
theia (Cerat. thea) Hsch. 131.
thebas (Prep. antimanae) Frusht. 555.
thereias (Adelpha seriaphia) Frusht. 531.
thesis (Gonepteryx menippe) Röb. 89.
thiasins (Morpho theseae) Frusht. 336.
thryridiana (Leucoth. ferra) Hsch. 150.
titlia (Adelpha alala) Frusht. 515.
tolima (Helicon. leucuca) Seitz 588.
tolima (Lymenop. fuilana) Weym. 245.
tomentosa (Pedaliodes) Weym. 255.
torva (Eupt. julia) Weym. 215.
transiue (Sisene alectryo) Seitz 698.
transleida (Lymenop. ferruginosa) Weym. 247.
transversa (Catagrapina) Röb. 1051.
transversa (Euptychia) Weym. 197.
tremoua (Leucoth. athalina) Hsch. 149.
trepostis (Pseudoec. salonina) Hsch. 161.
trichromia (Tmetogelone) Seitz 727.
triloutis (Actin. pellexe) Jord. 372.
triloutis (Helicop. cupido) Seitz 633.
triloutis (Protog. hippona) Röb. 589.
tripunca (Perichares) Draidt 905.
tritivis (Agris porides) Fassl 1039.
trozenides (Catasticta) Röb. 72.
tryphon (Agris amydyon) Frusht. 573.
tuschea (Agris claudia) Fassl 1037.
typhen (Catag. pygas) Röb. 495.
tytrias (Prep. antimanae) Frusht. 555.
umbrana (Hymenitis poliesena) Hsch. 164.
umbrina (Eretris subpunctata) Weym. 292.
undinargo (Xyrophid. niuias) Seitz 714.
unicolor (Porzette leucodrosine) Röb. 66.
uniformis (Pedaliodes) Weym. 256.
nuoellenata (Hetaera piera) Weym. 175.
urrana (Adelpha cocala) Frusht. 516.
ursina (Artines) Draidt 987.
uta (Adelpha erotla) Frusht. 519.
valentina (Adelpha) Frusht. 514.
vallina (Cerat. nionia) Hsch. 130.
valora (Cerat. fenestella) Hsch. 130.
vanscoides (Physiodes) Röb. 449.
varibalis (Catasticta) Röb. 1021.
variegata (Physiodes) Röb. 147.
veliada (Adelpha velia) Frusht. 526.
venezolana (Stalactis phlegia) Seitz 719.
venezolana (Ensul. crotopus) Seitz 628.
veraerunculis (Actin. guatemalena) Jord. 370.
verenda (Adelpha bores) Frusht. 513.
viceneionia (Opisph. berycynthia) Frusht. 308.
vicinalis (Annea) Röb. 500.
victrix (Prep. laetetes) Frusht. 560.
vola (Thesela) Draidt 791.
vioceae (Drucina osedico) Weym. 270.
vioceaeus (Morpho achilllaena) Frusht. 342.
viridicans (Euptychia) Weym. 199.
viridis (Phyc. castilla) Röb. 450.
virina (Leucoth. flexibilis) Hsch. 147.
vitella (Methonella ecclita) Seitz 633.
vodena (Adelpha phyllys) Frusht. 524.
volumis (Adelpha eponina) Frusht. 512.
vunleana (Rhomia terra) Hsch. 142.

xanthomelas (Peris. mandela) Röb. 61.
xanthea (Diomorphia) Röb. 1926.
xanthophila (Kriogonia lyside) Röb. 80.
xanthoalaena (Catasticta) Röb. 1019.
xenarchus (Prep. chromus) Frusht. 558.
xenia (Ager. chloe) Frusht. 541.
xenopus (Hypoloria) Hsch. 190.
xyniatus (Prep. demophom) Frusht. 554.

yáritomis (Morpho theseae) Frusht. 336.

zalma (Adelpha thosa) Frusht. 522.
zamora (Melin maeonis) Hsch. 123.
zela (Morpho peleides) Frusht. 341.
zonarins (Morpho peleides) Frusht. 544.
zopyra (Adelpha olythis) Frusht. 544.
zoranthes (Prep. demophom) Frusht. 554.
zyralaees (Adelpha) Frusht. 530.
zynda (Adelpha naxia) Frusht. 525.
<table>
<thead>
<tr>
<th>Index Term</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>anapheida G. &amp; S. Ensl. 629</td>
<td>122 b</td>
</tr>
<tr>
<td>ambidenta Bas. Col. 93</td>
<td></td>
</tr>
<tr>
<td>ambikition Fral. Prep. 556</td>
<td></td>
</tr>
<tr>
<td>ambilicata Jord. Act. 306</td>
<td></td>
</tr>
<tr>
<td>amphibius Cap. 429</td>
<td></td>
</tr>
<tr>
<td>amphibianus F. Prep. 557</td>
<td></td>
</tr>
<tr>
<td>amphibius Proa. 557</td>
<td></td>
</tr>
<tr>
<td>amphibiondon Fdry. Eryph. 311</td>
<td></td>
</tr>
<tr>
<td>amphikon Eryph. 312</td>
<td></td>
</tr>
<tr>
<td>amphion Hon. Telen. 603</td>
<td>118 a, f</td>
</tr>
<tr>
<td>amphipron Cr. Dist. 102</td>
<td>30 b, c</td>
</tr>
<tr>
<td>amplifica Bry. Pyrrh. 471</td>
<td></td>
</tr>
<tr>
<td>amphibirhostocr. Hon. Prep. 397</td>
<td></td>
</tr>
<tr>
<td>anykhircho Opra. 394, 395, 396, 397</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Lun. 794</td>
<td>137 d</td>
</tr>
<tr>
<td>amplis Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amplis Hyperfr. Prep. 32</td>
<td></td>
</tr>
<tr>
<td>amplithor Fral. Dist. 192</td>
<td></td>
</tr>
<tr>
<td>amplitricion Stgr. Mor. 399</td>
<td></td>
</tr>
<tr>
<td>amphiher Strateg. Cat. 35 a</td>
<td></td>
</tr>
<tr>
<td>amphon Tanis. Cat. 131</td>
<td>155 b</td>
</tr>
<tr>
<td>amphon Hon. Thecla 705</td>
<td>138 b</td>
</tr>
<tr>
<td>amphon Hon. Dyn. 506</td>
<td>101 a, f</td>
</tr>
<tr>
<td>amphon Hon. Dyn. 506</td>
<td>101 a, f</td>
</tr>
<tr>
<td>amplirhostocr. Herch. Scoda 138</td>
<td></td>
</tr>
<tr>
<td>amplirhostocr. Stich. Prep. 392</td>
<td></td>
</tr>
<tr>
<td>amplior Stich. Out. 310</td>
<td></td>
</tr>
<tr>
<td>ampliour Prep. 306</td>
<td></td>
</tr>
<tr>
<td>amplitudo Br. Thecla 573</td>
<td>149 b</td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>anykhircho Opra. 394, 395, 396, 397</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Lun. 794</td>
<td>137 d</td>
</tr>
<tr>
<td>amplis Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Dist. 192</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Dist. 192</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Dist. 192</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Dist. 192</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Dist. 192</td>
<td></td>
</tr>
<tr>
<td>anykhircho Opra. 394, 395, 396, 397</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Lun. 794</td>
<td>137 d</td>
</tr>
<tr>
<td>amplis Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>anykhircho Opra. 394, 395, 396, 397</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Lun. 794</td>
<td>137 d</td>
</tr>
<tr>
<td>amplis Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>anykhircho Opra. 394, 395, 396, 397</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Lun. 794</td>
<td>137 d</td>
</tr>
<tr>
<td>amplis Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>anykhircho Opra. 394, 395, 396, 397</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Lun. 794</td>
<td>137 d</td>
</tr>
<tr>
<td>amplis Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>anykhircho Opra. 394, 395, 396, 397</td>
<td></td>
</tr>
<tr>
<td>amplis Hon. Lun. 794</td>
<td>137 d</td>
</tr>
<tr>
<td>amplis Fral. Pir. 58</td>
<td></td>
</tr>
<tr>
<td>amphiaphous Fral. Pir. 58</td>
<td></td>
</tr>
</tbody>
</table>
INDEX.
<table>
<thead>
<tr>
<th>INDEX</th>
</tr>
</thead>
<tbody>
<tr>
<td>zephyrus Edw. Pol. 456</td>
</tr>
<tr>
<td>zebrula Frat. Catast. 1018</td>
</tr>
<tr>
<td>Zephyrus B. B.</td>
</tr>
<tr>
<td>zebrula B. B.</td>
</tr>
<tr>
<td>zelus C. B.</td>
</tr>
<tr>
<td>zenobia B. B.</td>
</tr>
<tr>
<td>zephyris B. B.</td>
</tr>
<tr>
<td>zebrula B. B.</td>
</tr>
<tr>
<td>zephyrus Edw. Pol. 456</td>
</tr>
<tr>
<td>zebrula Frat. Catast. 1018</td>
</tr>
<tr>
<td>Zephyrus B. B.</td>
</tr>
<tr>
<td>zebrula B. B.</td>
</tr>
<tr>
<td>zelus C. B.</td>
</tr>
<tr>
<td>zenobia B. B.</td>
</tr>
<tr>
<td>zephyris B. B.</td>
</tr>
<tr>
<td>zebrula B. B.</td>
</tr>
</tbody>
</table>
List of Errata of Volume V.

P. 3 line 19 from above, after Glaucoptis add: (older name for many Syntomidae).
P. 4 line 26 from below, for leucodrosyne place: leucodrosine.
P. 6 line 28 from below, for Halesidota read: Hatisidota.
P. 26 line 21 from below, after turmis place: L.
P. 42 line 24 from above, after P. orthosilaus Weym., for (16 c) read: (16 a).
P. 46 line 10 from below, after Doubt, insert: (17 e).
P. 55 line 14 from below, for (18 a) place: (18 a, 194 a).
P. 55 line 3 from below, after theologise, for Bl. place: Blech.
P. 56 line 24 from above, for Tropaeolum read: Tropaeolum.
P. 57 line 16 from above, after stigmaece Sgr. insert: (194 a).
P. 57 lines 7 and 6 from below, for coromina read: coromina.
P. 68 line 23 from below, after sublineata Schaus cancel: (19 a).
P. 62 line 28 from below, for D.-H. read: Dbl. & Hew.
P. 65 line 11 from below, for autodyca read: autodyca.
P. 66 line 11 from above, after phaler cancle: (21 b).
P. 71 line 8 from above, after philemone Sgr. i. l. insert: (194 c).
P. 71 line 17 from above, for teutaniis read: teutaniis.
P. 71 line 11 from below, for troezene place: affinis.
P. 74 line 21 from below, after susiana Hpi. insert: (194 c).
P. 82 line 14 from below, for Mentrie's read: Mentrie.
P. 84 line 17 from above and lines 15 and 18 from below, for cleathea read: elathea.
P. 86 line 6 from above, for (25 c) place: (25 b).
P. 86 line 17 from above, for (25 b) place: (25 c).
P. 88 line 11 from below, for (26 g) place: (24 g).
P. 92 line 11 from below, for (27 d) place: (27 e).
P. 95 line 14 from below, cancel the reference (28 a).
P. 104 line 13 from below, for Heterosias — read: Heteroscaulo —.
P. 107 column a, line 9 from below, for brevos place: brephos.
P. 119 line 15 from above, for bonplatidi place: bonplatidi.
P. 121 line 26 from above, before hippothaus insert: Heliconius.
P. 126 line 19 from below, for forewing read: hindwing.
P. 144 line 3 from below, after anchiala Hew. insert: (38 c).
P. 192 line 17 from below, for reynolds place: reynolds.
P. 201 line 30 from above, for (47 c) read: (47 c).
P. 208 line 21 from below, for spartacus read: spartacus.
P. 219 line 24 from above, for sericella read: sericella.
P. 221 lines 1 and 2 from above, for agaya read: ayaya.
P. 231 line 4 from above, for Thly. read: Thly.
P. 234 line 6 from above, for milesi read: milesi.
P. 242 line 4 from above, for (51 f) read: (51 g).
P. 242 line 8 from below, after tritonia Edw. insert: (52 b).
P. 246 line 7 from below, for (51 f) read: (51 g).
P. 249 lines 16 and 18 from above, for (52 c) read: (52 c).
P. 253 line 16 from below, for (53 c) read: (53 c).
P. 264 line 20 from below, for (56 c) read: (56 c).
P. 264 line 10 from below, for (55 f) read: (56 f).
P. 268 line 21 from below, for (47 d) read: (57 d).
P. 268 line 18 from below, for (47 c) read: (57 c).
List of Errata of Volume V.

P. 270 line 12 from below, after cothun Sale. insert: (58 e).

P. 293 line 20 from above, for 65 b read: 63 b.

P. 361 line 20 from above, for 61 a read: 61 c.

P. 312 line 21 from above, after Weste. insert: (64 b).

P. 332 line 22 from below, after Flhr. insert: (62 d).

P. 343 line 8 from below, after pelides insert: Koll.

P. 350 line 5 from above, after mellinia Frasht. insert: (66 b).

P. 355 line 8 from below, for ADAM read: ADAMS.

P. 361 line 23 from above, after stratonice insert: Latr.

P. 365 line 1 from below, for (81 d, 82 b) read: (82 b).

P. 368 line 1 from below, for (83 e) read: (83 d).

P. 369 line 3 from below, for (82 g) read: (82 f, g).

P. 374 line 27 from below, after surima insert: Schs.

P. 375 line 1 from above, before Subfamily insert: „2."

P. 375 line 11 from below, for E. viculata read: H. viculata.

P. 379 line 17 from below, after diffusa Bhr. insert: (= divisius Kaye).

P. 380 line 9 from below, after schultzi Riff. insert: (72 d).

P. 382 line 4 from above, after pretiosus Weym. cancel: (32 c).

P. 384 line 24 from below, for flavifascia read: flavifascia.

P. 384 line 8 from below, for (74 h as fasshi) read: (74 f as fasshi).

P. 385 line 19 from below, after niepelti Riff. insert: (110 A c).

P. 386 line 8 from above, for hippolyta read: hipppolyta.

P. 386 line 27 from below, after timareta read: timareta.

P. 388 line 21 from above, after cassandra Flhr. cancel: (76 c).

P. 388 line 6 from below, after aoede Hbn. cancel: (76 f).

P. 389 line 8 from above, after falcia Frasht. insert: (76 e as aoede).

P. 399 line 11 from above, for vola read: vula.

P. 391 line 10 from above, for (77 a) read: (78 a).

P. 397 line 25 from above, for lybyoides read: lybioides.

P. 398 line 8 from above, to zorcanh add: (80 g).

P. 400 line 6 from below, for telesiphe Hew. read: tithraustes Sale.

P. 400 line 4 from below, for tithraustes Sale. read: telesiphe Hew.

P. 402 line 4 from below, for (84 c) read: (84 f).

P. 402 line 15 from below, for 2. Subfamily read: 3. Subfamily.

P. 403 line 1 from above, for 3. Subfamily read: 4. Subfamily.

P. 404 line 19 from above, for poaria read: poasina.

P. 423 line 19 from below, after alaskensis Holl. cancel: (87 c).

P. 423 lines 13 and 4 from below, for freya read: freija.

P. 424 line 19 from below, after improba Bhr. insert: (88 b).

P. 424 line 13 from below, for (87 c) read: (87 e).

P. 431 line 25 from above, for (88 b) read: (88 b, 103 b).

P. 431 line 15 from below, for (88 b) read: (88 b, 103 b).

P. 431 line 3 from below, for (88 b) read: (88 c).

P. 431 line 2 from below, for „oblique“ place: „are“.

P. 433 line 18 from above, after „desert-form“ add: According to COCKERELL an eastern form of minuta.

P. 433 line 21 from below, after bollii Edw. insert: (103 c).

P. 433 line 18 from below, after definita Aar. insert: (103 c).

P. 433 line 1 from below, after Phyciodes add: „— juliea Edw., according to COCKERELL, forms the transition to wrightii“.

P. 434 line 27 from above, after brucei Edw. insert: (103 c).

P. 434 line 28 from above, after maria Skinn. insert: (103 b).

P. 434 line 30 from above, for gilettei place: gilettei.

P. 434 line 30 from above, after Barn. insert: (103 c).

P. 434 line 22 from below, after neumoegeni Skinn. insert: (103 c).

P. 442 line 22 from below, for archesilea place: archesilea.

P. 447 line 5 from above, after gudruna forma. nov. insert: (92 b).

P. 448 line 22 from above, for philyra read: philyra.

P. 448 line 1 from below, to „very“ add: prominent.

P. 449 line 25 from above, for byzia read: byzia.

P. 458 lines 21 and 25 from above, for agricula read: agricula.
List of Errata of Volume V.

P. 457 line 18 from below, for cyanomelas read: cyanomelas.
P. 459 line 22 from above, for fulva read: fulvia.
P. 460 line 18 from below, after lindigi Fldtr., for (94 e) read: (103 d).
P. 466 line 4 from above, for (pl. 143) read: (143 d).
P. 466 line 8 from above, after caecilia, for Cr. read: Fldtr.
P. 468 line 27 from below, after merops, for Bd. read: Bch.
P. 468 line 17 from below, after harmonia, for DbI. & Hev. read: Klug.
P. 469 line 21 from below, for (96 d) read: (96 e).
P. 472 last line from below was, by mistake, not filled out, but is otherwise correct.
P. 474 line 24 from above, after opphi Bitr. for (95 d) read: (95 d, c).
P. 476 line 6 from below, after pseudoaridnae Frasot, insert: (97 e).
P. 478 line 11 from below, for Fassl read: Fassl.
P. 479 lines 3 and 4 from above, for apiome read: apiome.
P. 484 lines 22 and 19 from below, for coerulesc read: coerula.
P. 486 line 4 from above, for (100 A d) read: (100 A e).
P. 487 line 6 from above, after „similar“ insert: Northern parts of South America.
P. 494 line 24 from below, for hystapes read: hystapes.
P. 495 line 20 from above, for (101 B g) read: (101 B g, h).
P. 495 line 7 from below, for (103 A a) read: (103 a).
P. 496 line 3 from above, for hydritis read: hydritis.
P. 496 line 3 from above, for hydritis Godt. insert: (102 b a).
P. 499 line 14 from below, for compaspe Hev. (103 A a) read: compaspe Hev. (103 A).
P. 505 line 12 from above, after americana spec. nov. cancel: (101 A a).
P. 506 line 15 from below, for (100 A a) read: (100 A e).
P. 509 line 4 from above, for (103 A a) read: (103 a).
P. 512 line 18 from below, after Godm. & Sell insert: (109 a).
P. 513 line 2 from above, for tunit read: tunita.
P. 513 line 24 from below, after ximenia Fldtr. insert: (109 a).
P. 514 line 26 from above, after justua Fldtr. insert: (109 a).
P. 514 line 17 from below, for Villavicencia read: Villavicencio.
P. 516 line 10 from below, for (106 b as viola) read: (106 c as viola).
P. 523 line 18 from above, after iphilda L. for (107 a) read: (107 c).
P. 526 line 26 from above, after indefecta subs. nov. for (107 c) read: (107 c).
P. 524 line 17 from above, for lativittata read: lativittata.
P. 531 line 18 from below, for paraena Bitr. read: paraena Bat.
P. 533 line 14 from below, for abdominal margin read: abdominal end.
P. 536 line 14 from above, for unnoticeable read: unnistakable.
P. 536 line 13 from below, for (103 c) read: (103 d).
P. 544 last line from below is to be cancelled.
P. 546 line 28 from above, for (110 b) read: (110 B b).
P. 546 line 22 from below, after fluibunda Frasot. insert: (110 B c).
P. 549 line 5 from below, for (109 A a 5, c 2) read: (109 a 5, c 2).
P. 561 line 22 from above, add the marginal name: laertes.
P. 562 line 27 from above, for louisa Bitr. read: louisa Bat.
P. 576 line 7 from above, for forms of Agrrias read: forms of Agrrias pericles.
P. 578 line 16 from below, after syene Hev. for (116 c) read: (116 b).
P. 579 line 6 from above, for Hypna Hbr. read: Hypna Hbr.
P. 585 line 21 from above, for Peru read: Pará.
P. 591 line 10 from below, for (120 D b) read: (120 D b, c).
P. 592 line 7 from below, for (116 b) read: (116 c).
P. 598 line 11 from above, for P. 451 read: P. 457.
P. 598 line 13 from above, for P. 451 read: P. 459.
P. 600 line 19 from above, for ximenea read: ximena.
P. 624 line 3 from above, after eucrillus insert: Hev. (121 a).
P. 624 line 1 from below, for Rio Jurna read: Rio Jurna.
P. 626 line 11 from above, after eustachius insert: Hbst. (121 c).
P. 626 line 19 from above, after riiodon form. nov. insert: (121 f).
P. 627 line 16 from above, after tarina Schaus, for (110 A f) read: (122 a, b).
P. 628 line 21 from above, after uria Hev. insert: (121 b).
P. 628 line 27 from above, for (121 g) read: (121 f, g).
P. 628 line 28 from below, after ater form. nov. insert: (121 g).
List of Errata of Volume V.

P. 628 line 27 from below, after mutator form. nov., for Hindwing read: Forewing.
P. 629 line 1 from above, after behind this insert; often.
P. 631 line 5 from above, for (122 a) read: (122 e).
P. 635 line 5 from above, after steli insert: Hew.
P. 638 line 21 from above, after attalus form. nov. insert: (124 c).
P. 638 line 5 from below, after atroculis Btlr. insert: (124 f).
P. 639 line 3 from above, for lapilla read: lapillus.
P. 639 line 26 from below, for magnesia read: magnessa.
P. 640 line 18 from below, for gaudiolus read: gaudiolus.
P. 641 line 15 from above, for (121 f) read: (121 e).
P. 641 line 28 from below, for meneotes read: meneotes.
P. 642 line 5 from above, after hypermegala insert: Sich.
P. 643 line 19 from below, after parishi Drc. insert: (126 a).
P. 646 line 24 from above, for (136 a) read: (126 a).
P. 647 line 24 from below, after isslia insert: Btlr. (126 e).
P. 650 line 17 from above, for bochus read: bochus.
P. 652 line 7 from above, for tarinda read: tarinda.
P. 652 line 17 from above, for helydrias read: thelydrias.
P. 655 line 21 from below, for jaeris Bsl. read: jaeris Bat.
P. 656 line 18 from above, for callixena read: callixena.
P. 656 line 17 from below, after „cf. Additions“ insert: p. 727.
P. 662 line 7 from below, for zeonia read: Zeonia.
P. 665 line 7 from below, for oblos read: oblos.
P. 666 line 2 from below, after naevianus Sich. insert: (130 e).
P. 669 line 18 from below, for whyteliana read: whityeliana.
P. 674 line 1 from above, for (142 g) read: (142 e).
P. 675 line 4 from below, after hya Wsc. and line 3 after Bat. insert: (110 A e).
P. 676 line 1 from above, for paraene read: paraena.
P. 676 line 8 from below, for t. 261 read: t. 26.
P. 677 line 16 from above and 2 from below, for dukinfieldia read: dukinfieldia.
P. 677 line 29 from above, after trucidata Btlr. insert: (134 h).
P. 678 line 23 from above, after setatus insert: Dalm.
P. 679 line 14 from above, for (142 g) read: (135 d, 142 g).
P. 680 line 13 from above, for Eudole-like read: Eudole-like.
P. 686 line 9 from below, for micon Sich. read: micon Drc.
P. 691 line 6 from above, for quadrinotata read: quadrinotata.
P. 694 line 15 from above, for hegyas read: hegyas.
P. 698 line 15 from below, for pedias G. read: pedias Godin.
P. 698 line 6 from below, for Additions insert: p. 728.
P. 700 line 30 and 29 from below, for drury read: duryi.
P. 702 line 14 from below, after Metacharis insert: Btlr.
P. 704 line 26 from above, for Dalm. read: Dalm.
P. 707 line 21 from above, for glaucobithris read: glaucobithris.
P. 708 line 14 from below, for nicator Sch. place: alector-Ω.
P. 710 line 2 from above, for coiling read: angulation.
P. 712 line 2 from below, for hesperium read: hesperium.
P. 712 line 2 from below, for erythrocium read: erythrocium.
P. 713 line 5 from above, for hindwing read: forewing.
P. 713 line 6 from below, after menacus insert: Stoll.
P. 717 line 6 from below, for glaucogonia read: glaucogonia.
P. 718 line 4 from above, after Pandemos insert: Hbn.
P. 720 line 6 from below, for noticeable above read: hardly noticeable.
P. 722 lines 9 and 18 from above, for (142 h) read: (142 k).
P. 727 line 12 from above, for (110 D f) read: (110 A f).
P. 727 line 15 from below, for Z. cancace read: C. candace.
P. 741 line 20 from above, for latreillei read: latreillei.
P. 745 line 7 from above, for (146 a, b) read: (146 a).
P. 754 line 18 from above, for (153 b) read: (153 e).
P. 773 line 3 from above, for Hahrodias read: Hahrodias.
P. 777 line 22 from below, for (154 d) read: (155 d).
List of Errata of Volume V.

P. 778 line 22 from below, for purpurea read: purpura.

P. 784 line 20 from above, after Schausi-group add: (Genus Ipidecla Dyar).

P. 787 line 3 from above, for (160 d) read: (145 l).

P. 807 line 26 from below, for (160 d) read: (145 l).

P. 817 line 13 from above, for (144 f) read: (144 g).

P. 819 line 9 from below, after bogotana f. nov. insert: (144 k).

P. 835 line 24 from below, for cerealis read: cerialis.

P. 835 line 2 from below, for t. 72 read: t. 75 b.

P. 839 line 12 from above, after (araaxes Holl.) insert: (171 g).

P. 839 line 4 from below, for hindwing read: forewing.

P. 841 line 1 from above, for J. fleximargo read: P. fleximargo.

P. 848 line 22 from above, (165 a) is to be placed after phoronis, not after sothis Mob.

P. 848 line 16 from below, cancel the reference: (166 e).

P. 853 line 8 from above, for rautenbergi read: rauterbergi.

P. 854 line 20 from above, for (160 c) read: (160 e).

P. 856 line 24 from below, after undulatus insert: Hev.

P. 857 line 14 from above, after auginus insert: H.-Schöff.

P. 858 line 15 from above, after guatemalaina insert: Ehrn.

P. 861 line 5 from above, for ogens read: egens.

P. 863 line 11 from above, for (172 h) read: (167 b).

P. 863 line 24 from above, cancel (167 d, e), and 16 from below, cancel (167 b).

P. 868 line 11 from above, for zentus read: zentus.

P. 870 line 24 from above, after zonilis Mob. insert: (168 f).

P. 884 line 21 from above, for (172 f) read: (172 f, g).

P. 884 line 16 from below, after (olenia Mob.) insert: (191 h).

P. 908 line 26 from below, for Brachycoryne read: Brachycoryne.

P. 919 line 17 from above, (178 b) read: (179 b).

P. 927 line 24 from below, for (180 b) read: (180 b, e).

P. 928 line 12 from above, for (180 d) read: (180 c, d).

P. 935 line 23 from below, for (182 k) read: (182 a).

P. 963 line 8 from above, for (186 g) read: (186 f).

P. 972 line 20 from below, for (187 g) read: (187 h).

P. 990 line 18 from below, cancel the reference: (190 f).

P. 1030 line 13 from above, for Eucorma read: Eucora.

P. 1030 line 17 from above, for „similar“ read: „male“.

P. 1035 line 22 from below, for compospe read: compospe.

P. 1065—1088, above the columns read „Pl.“ instead of „Taf.“
Corrections of the Plates of Volume V.

<table>
<thead>
<tr>
<th>PL</th>
<th>4. fig. for</th>
<th>place</th>
<th>4. fig. for</th>
<th>place</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 b</td>
<td>bocelliana</td>
<td>panpusus</td>
<td>oconcne</td>
<td>floribasis</td>
</tr>
<tr>
<td>3 c</td>
<td>chloris</td>
<td>amazonis</td>
<td>5</td>
<td>oconcne</td>
</tr>
<tr>
<td>3 e</td>
<td>leontia</td>
<td>leontia</td>
<td>6</td>
<td>comula</td>
</tr>
<tr>
<td>10 a</td>
<td>androgenus</td>
<td>piatanthus</td>
<td>7</td>
<td>capelia</td>
</tr>
<tr>
<td>15 a</td>
<td>chiasmeothes</td>
<td>aulcaulus</td>
<td>7</td>
<td>capelia</td>
</tr>
<tr>
<td>17 d</td>
<td>bakri</td>
<td>bakri</td>
<td>7</td>
<td>tithraudes</td>
</tr>
<tr>
<td>22 e</td>
<td>manco</td>
<td>incerta</td>
<td>7</td>
<td>tithraudes</td>
</tr>
<tr>
<td>28 b</td>
<td>eotheria</td>
<td>eotheria</td>
<td>7</td>
<td>gyerce</td>
</tr>
<tr>
<td>31 d</td>
<td>montagni</td>
<td>montagni</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>35 d</td>
<td>antaeas</td>
<td>antea</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>38 e</td>
<td>crispsinella</td>
<td>crispsinilla</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>40 b</td>
<td>semplices</td>
<td>gahanti</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>40 f</td>
<td>penina</td>
<td>torquatilla</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>47 b</td>
<td>antina</td>
<td>antina</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>49 c</td>
<td>ejanilia</td>
<td>ejanitle</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>49 f</td>
<td>tehnania</td>
<td>toldania</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>50 d</td>
<td>sylvestris</td>
<td>sthenile</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>51 c</td>
<td>leonemas</td>
<td>limonias</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>51 f</td>
<td>handilis</td>
<td>moderata</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>51 g</td>
<td>herophila</td>
<td>herophile</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>53 a</td>
<td>apiculata</td>
<td>apiculata</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>53 b</td>
<td>phanaerea</td>
<td>jochleta</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>53 b</td>
<td>japhleta</td>
<td>pelinova</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>54 d</td>
<td>phagania</td>
<td>phagania</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>54 f</td>
<td>poliaca</td>
<td>poliaca</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>55 b</td>
<td>quinceclia</td>
<td>quinceclis</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>55 d</td>
<td>phannaces</td>
<td>phannaces</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>56 e</td>
<td>ceros</td>
<td>ciris</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>56 b</td>
<td>osciure</td>
<td>violacea</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>59 a</td>
<td>alena</td>
<td>chironne</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>60 a</td>
<td>alena</td>
<td>idana</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>60 d</td>
<td>marginalis</td>
<td>idana</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>61 a</td>
<td>saforeica</td>
<td>betula</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>61 b</td>
<td>tawingee</td>
<td>siccon</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>61 c</td>
<td>meridionalis</td>
<td>recollata</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>62 a</td>
<td>astria</td>
<td>phileacea</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>62 c</td>
<td>cynclastes</td>
<td>cynclastes</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>62 d</td>
<td>obdianes</td>
<td>obdianes</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>63 b</td>
<td>syne</td>
<td>fumosa</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>64 b</td>
<td>autanodon</td>
<td>polyceus</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>64 b</td>
<td>autanodon</td>
<td>polyceus</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>66 c</td>
<td>astora</td>
<td>auroca</td>
<td>7</td>
<td>hortesia</td>
</tr>
<tr>
<td>67 a</td>
<td>limpida</td>
<td>hydronia</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>67 b</td>
<td>callia</td>
<td>heracles</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>69 b</td>
<td>papilias</td>
<td>citrea</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>70 a</td>
<td>aarchiles</td>
<td>violaceus</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>72 a</td>
<td>conena</td>
<td>narceas</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>72 c</td>
<td>stiarna</td>
<td>estra</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>72 d</td>
<td>schulzi</td>
<td>schulzi</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>72 f</td>
<td>gradatne</td>
<td>aradone</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>73 a</td>
<td>hesel</td>
<td>urania</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>74 f</td>
<td>faseli</td>
<td>suilias</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>74 f</td>
<td>rebellia</td>
<td>saltzi</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>75 c</td>
<td>hiphopolis</td>
<td>hippolyte</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>76 e</td>
<td>cassandra</td>
<td>intermecha</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>76 f</td>
<td>oscele</td>
<td>faleria</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>78 c</td>
<td>callide</td>
<td>collista</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>78 e</td>
<td>crytkraea</td>
<td>crytkrea</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>78 a</td>
<td>charitonia</td>
<td>charithonia</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>79 a</td>
<td>micro VI</td>
<td>micros U</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>79 b</td>
<td>microq</td>
<td>micros U</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>80 b</td>
<td>cyclenida</td>
<td>cyclenida</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>80 d</td>
<td>dimension</td>
<td>dimension</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>80 g</td>
<td>aracula</td>
<td>arquata</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>81 d</td>
<td>callintheq</td>
<td>anoenaq</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>81 e</td>
<td>oconcne</td>
<td>floribasis</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>82 d</td>
<td>compula</td>
<td>compula</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>83 a</td>
<td>capelia</td>
<td>capelia</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>84 d</td>
<td>tithraudes</td>
<td>tithraudes</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>84 f</td>
<td>roanta</td>
<td>roanta</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>85 a</td>
<td>chondraq U</td>
<td>chirondraq U</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>86 c</td>
<td>hippolyte</td>
<td>hippolyte</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>86 e</td>
<td>poaraq U</td>
<td>poaraq U</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>87 f</td>
<td>cghere</td>
<td>cghere</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>88 b</td>
<td>hortila</td>
<td>hortila</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>89 i</td>
<td>chalpikna</td>
<td>chalpikna</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>89 k</td>
<td>decimaq</td>
<td>decimaq</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 a</td>
<td>niveanda</td>
<td>niveanda</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 b</td>
<td>plattonia</td>
<td>plattonia</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 b</td>
<td>niveanda</td>
<td>niveanda</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 c</td>
<td>decimaq</td>
<td>decimaq</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 d</td>
<td>albuscissa</td>
<td>albuscissa</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 e</td>
<td>dianasa</td>
<td>dianasa</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 f</td>
<td>acranies</td>
<td>acranies</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 g</td>
<td>megala</td>
<td>megala</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 h</td>
<td>lagentia</td>
<td>lagentia</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 i</td>
<td>infernedia</td>
<td>infernedia</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>90 j</td>
<td>kefassanq</td>
<td>kefassanq</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>91 c</td>
<td>liaugitaq</td>
<td>liaugitaq</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>91 f</td>
<td>sauplia</td>
<td>sauplia</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>91 g</td>
<td>supeiga</td>
<td>supeiga</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>91 h</td>
<td>aradon</td>
<td>aradon</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 a</td>
<td>aereaq</td>
<td>aereaq</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 a</td>
<td>cimcodes</td>
<td>cimcodes</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 a</td>
<td>polina</td>
<td>polina</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 b</td>
<td>chrisites</td>
<td>chrisites</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 c</td>
<td>salabura</td>
<td>salabura</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 c</td>
<td>aledegi</td>
<td>aledegi</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 e</td>
<td>freyga</td>
<td>freyga</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 e</td>
<td>buckyli</td>
<td>buckyli</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 f</td>
<td>degadon</td>
<td>degadon</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 f</td>
<td>warea</td>
<td>warea</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 g</td>
<td>sophonsiba</td>
<td>sophonsiba</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 g</td>
<td>gercisa</td>
<td>gercisa</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 g</td>
<td>decimaq</td>
<td>decimaq</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 h</td>
<td>masanua</td>
<td>masanua</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 h</td>
<td>palteiaq U</td>
<td>palteiaq U</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 i</td>
<td>aeraq U</td>
<td>aeraq U</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 i</td>
<td>behrona</td>
<td>behrona</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>coffina</td>
<td>coffina</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>ebrina</td>
<td>ebrina</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>cotinna</td>
<td>cotinna</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>cylsthes</td>
<td>cylsthes</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>metazae</td>
<td>metazae</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>canuciaq</td>
<td>canuciaq</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>suupna</td>
<td>suupna</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>ahetalia</td>
<td>ahetalia</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>arsenta</td>
<td>arsenta</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>serpenta</td>
<td>serpenta</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>areica</td>
<td>areica</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>desopilata</td>
<td>desopilata</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>aca</td>
<td>aca</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>episone</td>
<td>episone</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>agila</td>
<td>agila</td>
<td>7</td>
<td>arctas</td>
</tr>
<tr>
<td>92 j</td>
<td>mesentina</td>
<td>mesentina</td>
<td>7</td>
<td>arctas</td>
</tr>
</tbody>
</table>
Dr. Schlüter & Dr. Mass, Halle on Saale, Germany.
Institute for means of instruction of natural science.
Founded in 1853 by Wilhelm Schlüter.

* Speciality of many years standing:

Entomological and Biological Preparations, Collections, Models and Wall-Pictures
in a first class execution at moderate prices.

Own workshops; managed only by experts.

Head-catalogue No. 260 sh. 2.— postfree (for Institutes uncharged).

Utensils for Entomologists.

Publishers of the tables of the »German society for applied Entomology;
representing the life and the destroying of noxious insects; composed in
cooperation with the best German experts.

Prospectus forwarded on application!

Dr. O. Staudinger & A. Bang-Haas
Dresden-Blasewitz (Saxony).

List of Lepidoptera 58 contains about 29000 species of palearctic and exotic Macrolepidoptera and Microlepidoptera, prepared larvae, 110 pages in large octavo, with a complete list of genera and authors. Price goldmarks 1.50.

List of Series XII contains extremely cheap series (lots), single specimens for private collectors, Museums, in the following divisions:
I. Palearctic Lepidoptera. II. Exotic Lepidoptera. III. Coleoptera. IV. Different Insects. V. Complete Collections. We negotiate the sale of collections of all kinds of insects and have, within the last years, sold a number of very large collections.
VI. Entomological Utensils, Drawers, Cabinets, new and second-hand.
VII. Entomological Library, new and second-hand works.

List of Coleoptera No. 30 (100 pages in large octavo) with about 30000 Coleoptera. Price goldmarks 2.50.

List VII of Different Insects (26 pages in large octavo) with 3200 Hymenoptera, 2400 Diptera, 2200 Hemiptera, 600 Neuroptera and 1100 Orthoptera. Price goldmarks 2.50.

We call the specialists' attention to our also being able to supply many single specimens, aberrations etc. not being mentioned in the price-list, as well as many species from different and interesting habitats.

Selections of Exotic and expensive Palearctic Lepidoptera at reduced prices are most willingly sent.

Very easy rates of payment. — Monthly instalments.

We are always purchasers of original returns from all countries, first class single specimens, collections etc.


The largest and oldest Entomological Establishment in the World.
THE MACROLEPIDOPTERA OF THE WORLD

A SYSTEMATIC DESCRIPTION OF THE HITHERTO KNOWN MACROLEPIDOPTERA

IN COLLABORATION WITH WELL-KNOWN SPECIALISTS
EDITED BY

DR. ADALBERT SEITZ, PROFESSOR

DIVISION I: FAUNA PALAEOARCTICA VOL. 1—4
DIVISION II: FAUNA EXOTICA VOL. 5—16

VOL. 5

ALFRED KERNEN VERLAG STUTTGART 1924
THE
AMERICAN
RHOPALOCERA

WITH 203 PLATES

PLATES

ALFRED KERNEN VERLAG STUTTGART
1924
### Vol. 5.

#### Index of Plates.

The numbers indicate the plates.

On each plate, for want of space, only the first and last of the genera represented on the plate are stated, for instance on pl. 117 only „Hypna-Anaea“, whilst it also contains figures of species of the genus Protogonius enumerated in the index of plates, as stated in the text-volume on p. 579/80.

<table>
<thead>
<tr>
<th>Plate Number</th>
<th>Plate Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>167</td>
<td>Atrytone</td>
</tr>
<tr>
<td>161</td>
<td>Athysoris</td>
</tr>
<tr>
<td>159</td>
<td>Athesis</td>
</tr>
<tr>
<td>158</td>
<td>Aethea</td>
</tr>
<tr>
<td>157</td>
<td>Atea</td>
</tr>
<tr>
<td>156</td>
<td>Athysoris</td>
</tr>
<tr>
<td>155</td>
<td>Baeotis</td>
</tr>
<tr>
<td>154</td>
<td>Baeotis</td>
</tr>
<tr>
<td>153</td>
<td>Baeotis</td>
</tr>
<tr>
<td>152</td>
<td>Baeotis</td>
</tr>
<tr>
<td>151</td>
<td>Baeotis</td>
</tr>
<tr>
<td>150</td>
<td>Baeotis</td>
</tr>
<tr>
<td>149</td>
<td>Baeotis</td>
</tr>
<tr>
<td>148</td>
<td>Baeotis</td>
</tr>
<tr>
<td>147</td>
<td>Baeotis</td>
</tr>
<tr>
<td>146</td>
<td>Baeotis</td>
</tr>
<tr>
<td>145</td>
<td>Baeotis</td>
</tr>
<tr>
<td>144</td>
<td>Baeotis</td>
</tr>
</tbody>
</table>

**Abbreviations:**
- **A**: Atrytone
- **B**: Baeotis
- **C**: Coelauchen
- **D**: Daptonoura
<table>
<thead>
<tr>
<th>Index of Plates.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>VI</strong></td>
</tr>
<tr>
<td>Imelda 129</td>
</tr>
<tr>
<td>Ipaeola 144, 193</td>
</tr>
<tr>
<td>Ispis 132</td>
</tr>
<tr>
<td>Itaballia 20</td>
</tr>
<tr>
<td>Ithomiæ 18, 38,</td>
</tr>
<tr>
<td>Ithomia 127</td>
</tr>
<tr>
<td>Iuuna 31</td>
</tr>
<tr>
<td>Itylos 144</td>
</tr>
<tr>
<td>Krieconia 26</td>
</tr>
<tr>
<td>Lamprosplotus 143</td>
</tr>
<tr>
<td>Lasaina 135, 142</td>
</tr>
<tr>
<td>Lasioptila 55—57</td>
</tr>
<tr>
<td>Lemonias 137, 138, 142</td>
</tr>
<tr>
<td>Locodends 21, 22</td>
</tr>
<tr>
<td>Lepodicornis 127, 128, 136</td>
</tr>
<tr>
<td>Lepotodes 144</td>
</tr>
<tr>
<td>Lepitophila 20, 194</td>
</tr>
<tr>
<td>Lerana 187</td>
</tr>
<tr>
<td>Lerode 182</td>
</tr>
<tr>
<td>Leucidia 24</td>
</tr>
<tr>
<td>Leucochrysa 38, 39</td>
</tr>
<tr>
<td>Libythea 120 D</td>
</tr>
<tr>
<td>Libythea 97</td>
</tr>
<tr>
<td>Lignostola 171</td>
</tr>
<tr>
<td>Linomia 169</td>
</tr>
<tr>
<td>Linomachæs 181</td>
</tr>
<tr>
<td>Lucilla 128</td>
</tr>
<tr>
<td>Lucinia 97</td>
</tr>
<tr>
<td>Lycaena 144</td>
</tr>
<tr>
<td>Lycas 191</td>
</tr>
<tr>
<td>Lychnichoides 190</td>
</tr>
<tr>
<td>Lychnochus 190</td>
</tr>
<tr>
<td>Lycomia 31</td>
</tr>
<tr>
<td>Lymanopena 51—53</td>
</tr>
<tr>
<td>Lynnaus 13 B, 131</td>
</tr>
<tr>
<td>Lynovertyx 129, 142</td>
</tr>
<tr>
<td>Mahotia 164</td>
</tr>
<tr>
<td>Manerebia 51</td>
</tr>
<tr>
<td>Marcella 172</td>
</tr>
<tr>
<td>Mastes 176</td>
</tr>
<tr>
<td>Mastor 187</td>
</tr>
<tr>
<td>Mathanda 23, 194</td>
</tr>
<tr>
<td>Mechanides 35, 34</td>
</tr>
<tr>
<td>Megalaus 190</td>
</tr>
<tr>
<td>Megallura 96</td>
</tr>
<tr>
<td>Meganostoma 26</td>
</tr>
<tr>
<td>Megathyrsus 150</td>
</tr>
<tr>
<td>Megastanis 104</td>
</tr>
<tr>
<td>Melanges 168</td>
</tr>
<tr>
<td>Melanthes 178</td>
</tr>
<tr>
<td>Melanon 32, 33</td>
</tr>
<tr>
<td>Melittaea 88, 106</td>
</tr>
<tr>
<td>Mesoco 110, 134, 153, 112</td>
</tr>
<tr>
<td>Mesonopès 125</td>
</tr>
<tr>
<td>Messophthalmus 125</td>
</tr>
<tr>
<td>Messosenta 124—126, 142</td>
</tr>
<tr>
<td>Metachara 157</td>
</tr>
<tr>
<td>Metamorphia 84</td>
</tr>
<tr>
<td>Metardarix 104</td>
</tr>
<tr>
<td>Methionopis 189</td>
</tr>
<tr>
<td>Methomia 122</td>
</tr>
<tr>
<td>Mettuses 187</td>
</tr>
<tr>
<td>Metrocclus 187</td>
</tr>
<tr>
<td>Metron 187</td>
</tr>
<tr>
<td>Microrora 164</td>
</tr>
<tr>
<td>Microrotia 88</td>
</tr>
<tr>
<td>Milea 28</td>
</tr>
<tr>
<td>Milabera 40</td>
</tr>
<tr>
<td>Millanum 176</td>
</tr>
<tr>
<td>Milltomiges 178</td>
</tr>
<tr>
<td>Mimocastriæ 127</td>
</tr>
<tr>
<td>Minuamides 163, 164, 166</td>
</tr>
<tr>
<td>Minucera 171</td>
</tr>
<tr>
<td>Misanaxis 187</td>
</tr>
<tr>
<td>Miasaxes 189</td>
</tr>
<tr>
<td>Miascles 180</td>
</tr>
<tr>
<td>Miasdus 187</td>
</tr>
<tr>
<td>Miasmos 187</td>
</tr>
<tr>
<td>Miasmosis 187</td>
</tr>
</tbody>
</table>
PYRRHOPYGE

Pars II. Fauna americana 1.
Pars II. Fauna americana I.
2. Pars II. Fauna americana 1
Pars II. Fauna americana 1.
Pars II. Fauna americana I.
THESPIEUS - COBALUS

Pars II. Pecu Americana

Werner u. Winter, Frankfurt a. M.
| a          | oeagrus | oeagrus | tiberius | tiberius | reticulata ♀ | reticulata ♀ | reticulata ♀ | pertinax |
| b          | peritax | matuta  | unia U   | odilia U | accius ♀    | accius ♀    | accius ♀    | postpuncta |
| c          | parumpunctata ♀ | parumpunctata ♀ | parumpunctata ♀ | lochius U | peneia U | peneia U | postpuncta |
| d          | coyana  | mulla   | mulla U  | hypozona | striga U | chrysoaster U | fascia U | leucogaster |
| e          | leucogaster ♀ | hypodesma ♀ | hypodesma ♀ | hypochlora U | integra ♀ | dictys | microsma | rubida U   |
| f          | derasa U | oropa   | oropa U  | subcostulata | leucopogon | theas U | theas U | fimbriata |
| g          | lurida U | caura   | caura U  | corisana | corisana ♀ | patage | lateranus ♀ | anubis |
| h          | bellus  | circellata ♀ | phylace | penicillatus ♀ | penicillatus ♀ | illudens U | illudens U | venosus |
| i          | tripunctatus ♀ | jera ♀ | labdacus | labdacus U | edata U | fuisse U | telata U | theogenous |
| k          | uruba U | tripunctatus ♀ | leuccone | corticea | corticea ♀ | servilius | erythrocitha | erythrocitha ♀ | plicassinus |

Pars II. Fauna americana I.
V. Artines - Thracides

psittacina
haworthiana
ethoda
ethoda U
stupenda U
xanthura

Pars II. Fauna americana I.
Fauna americana 1.
Pars II. Fauna americana 1.