ADDITIONAL NOTES ON THE GENUS LIPPIA. XX
Harold N. Moldenke

LIPPIA Houst.


LIPPIA ABYSSINICA (Otto & Dietr.) Cuf.


LIPPIA BURTONII J. G. Baker


LIPPIA CALLICARPAEFOLIA H.B.K.


LIPPIA HIRSUTA var. MORITZII (Turcz.) López-Palacios


LIPPIA KITUIENSIS Vatke


LIPPIA LACUNOSA Mart. & Schau.

The corollas are described as having been "rose" on Héringer & al. 538 & 7493 and "rose, the center yellow" on Héringer & al. 4827 & 5392 and Mendonça & Noqueira 147, "rose-lilac" on Héringer 15902, "lilac" on Héringer & al. 644, "lilac, the throat yellow" on Pereira 288, "avermelhadas" on Héringer & al. 205, and "roseo-avermelhas o centro amarelado" on Héringer & al. 5088.

Material of L. lacunosa has been misidentified and distributed in some herbaria as L. eupatorium Schau.

Additional citations: BRAZIL: Distrito Federal: Héringer & al. 644 (N); Héringer, Filgueiras, Mendonça, & Pereira 7493 (N, W--
2971676); Héring, Figueiras, Mendonça, Pereira, Héring Salles, & Silva 4827 (N), 5088 (N), 5392 (E--2978861, N); Héring, Paula, Mendonça, & Héring Salles 205 (E--2770491), 538 (N), 644 (W--2926627); Mendonça & Nogueira 147 (N); Pereira 288 (N, W--2958143). Goiás: Hatschbach 43073 (Ld); Héring 15902 (N).

**LIPPIA LACUNOSA** var. **ACUTIFOLIA** Mold.


**Synonymy:** *Lantana lamiana* Mold., Lilloa 5: 413. 1940.


Stems branching, the branches virgate, medium-slender, obtusely tetragonal, densely incanous with short, closely appressed, white, strigose hairs, less densely so toward the base in age; nodes very obscurely annulate; principal internodes 1.5--3.8 cm. long, mostly much abbreviated; leaves numerous, decussate-opposite; petioles obsolete or to 3 mm. long, flattened and winged, incanous-strigose; leaf-blades firmly membranous, stiff, ascending, often conduplicate, narrow-lanceolate or -oblanceolate, incanous on both surfaces, to 7.5 cm. long, 9--10 mm. wide, acute at both ends, marginally subentire or remotely dentate near the apex, densely strigose on both surfaces with short white hairs; midrib slender, subimpressed above, prominent beneath; secondaries numerous, slender, short, 5--9 per side, ascending, not much arcuate; vein and veinlet reticulation fine, nor prominent, mostly obscure or indiscernible above; heads subglobose, solitary in the uppermost leaf-axils, 1 or 2 pairs per branch, much shorter than the subtending leaves, incanous throughout.

The species is based on an unnumbered collection of T. Rojas (Hassler 9901; Herb. Osten 19904), collected on a high plateau and in declivities in the Sierra de Amambay, Paraguay, in December, 1907, and deposited in the herbarium of the Naturhistorisches Museum in Vienna. It is named in honor of my late respected colleague, Dr. Herman Johannes Lam, who did such noteworthy work on the Verbenaceae of the Pacific region.

**Citations:** PARAGUAY: T. Rojas s.n. [Hassler 9901; Herb. Osten 19904] (Ld--photo of type, N--clastotype, N--photo of type, Ug--isotype, V--type).

**LIPPIA LANTANIFOLIA** F. Muell.


**LIPPIA LASIOCALYCINA** Cham.


Recent collectors describe this plant as a shrub, 2 m. tall, and have found it growing in flooded sandy clay soil at forest borders, in both flower and fruit in March. The corollas are said by Höringer to be rose-color.


**Lippia lasiocalycina** var. **sainthilairei** Mold.


Fernandes & Nunes describe this plant as a subshrub, with lilac-colored corollas, and found it growing in *carrasco*, in flower in November.


**Lippia laxibracteata** Herzog


**Lippia liberiensis** Mold.


Folsom describes this plant as suffrutescent, erect, the bracts green, and the corollas white to yellow, and found it growing in re-growth shrubbery on cutover hillsides, in flower in May.

Material has been misidentified and distributed in some herbaria as *L. callicarpaefolía* H.B.K.


**Lippia Lindmanii** Briq.


**Lippia Lindmanii** f. **oppositifolia** Mold.


**Lippia linearifolia** Mold.


LIPPIA LUCENS Standl.


Dawson and his associates describe this plant as a small tree, 10 feet tall, the stems 2 inches in diameter at the base, the leaves aromatic, and encountered it in wet ravines.

The Molina R. 549, 1134, & 1456 distributed and previously cited by me as L. lucens, seem actually to be L. controversa Mold. instead, while Molina R. & Molina 22835 is L. controversa var. brevipedunculata Mold.

Additional citations: HONDURAS: Comayagua: Edwards 514 (W—1588714--isotype); Yuncker, Dawson, & Youse 6003 (W—1638914).

LIPPIA LUPULINA Cham.


Recent collectors have encountered this plant in cerrado, in flower in December, February, and March. The corollas are described as having been "lilac" on Pereira 208, "rose, the tube yellow" on Heringer & al. 6202, "purple (10 P 6/8) on Lindeman & Haas 3055, "with white, yellow, and rose" on Casas & al. FC.7504 and "avermelhadas" on Heringer & al. 6642. The bracts are described by Lindeman & Haas as having been "purple (10 P 6/6)".

The Herbert H. Smith s.n., cited by me in a previous publication in this series as typical L. lupulina, actually represents its var. paraguariensis Chod.


Inasmuch as this plant seems to differ from the typical form of the species only in its white corollas, modern practice would indicate nothing higher than form rank for it, and the only epithet available for it in that category is *alba*.


**LIPPIA LUPULINA** var. **PARAGUARIENSIS** Chod.


Casas & Molero describe this plant as 50 cm. tall, growing in sandy soil of cerrado. The Smith collection, cited below, was previously erroneously cited by me as typical *L. lupulina*. It certainly also bears striking resemblance to *L. diamantinensis* Glaz.


**LIPPIA MARTIANA** Schau.


Recent collectors describe this plant as a shrub, the leaves "coriacea escassa", and have encountered it among disturbed cerrado vegetation, in flower in February. The corollas are said to have been "white" on Héringier & al. 6509.

Additional citations: BRAZIL: Distrito Federal: Héringier, Filgueiras, Mendonça, & Peraire 6509 (W--2926786); Héringier, Paula, Mendonça, & Salles 361 (Ld, N, N); Herb. Tax. Class Univ. Bras. 367 (W--2975916). Goiás: W. R. Anderson 10228 (W--2755317); Irwin, Grear, Souza, & Santos 13726 (W--2630584).

**LIPPIA MATTOGROSSENSIS** Mold.


Additional citations: BRAZIL: Mato Grosso: W. R. Anderson 9857 (W--2755322); Irwin, Souza, Grear, & Santos 16787 (W--2630585), 17457 (W--2630583).
LIPPIA MCVAUIGH Mold.


Recent collectors describe this plant as an understory shrub, 2--3 m. tall, or as a tree, 5--6 m. tall, "la corteza parda, fisurada y se desprende en largas tiras", and the bracts white or greenish-white. They have found it growing in dry forests on a granitic substrate with Bursera and Cochlospermum, low deciduous woods, and secondary deciduous woods on metamorphic soil, at 200--250 m. altitude, in flower in February, and in fruit in February, May, and August. They report the vernacular name, "cuero de venado". The corollas are said to have been "white" on Magallanes 310 & 2754 and "yellowish" on Magallanes 982. The Magallanes 2754 collection is very typical of the species in all respects.

Material of L. mcvauighi has been misidentified and distributed in some herbaria as L. bracteosa (Mart. & Gal.) Mold., L. callicarpae-folia H.B.K., and L. nutans Robinson & Greenm.


LIPPIA MEDICA Fenzl ex Baill., Hist. Pl. 11: 94. 1891.

Nothing is known to me about this puzzling taxon.

LIPPIA MICROCEPHALA Cham.


Recent collectors describe this plant as a shrub, 1 m. tall, growing on rocky cliffs and among stones at the edge of waterfalls, in flower in February. The corollas are said to have been "apically lilac, basally white" on Mattos Silva & al. 258.

Wehmer (1911) reports that the air-dried leaves contain 0.006% ethereal oil and 23% resin.

Material of Lippia microcephala has been misidentified and distributed in some herbaria as Lantana sp.

Additional citations: BRAZIL: Bahia: Mattos Silva, Santos, & Brito 258 (N). Distrito Federal: Herb. Tax. Class Univ. Bras. 194 (W--2975908). Minas Gerais: Irwin, Maxwell, & Wasshausen 19813 (W--2630586); Irwin, Santos, Souza, & Fonseca 22680 (W--2863450); Mexia 5710 (W--1618200); Schwacke 14890 (W--1199716). MOUNTED CLIPPINGS:
LIPPIA MICROMERA Schau.


Recent collectors describe this plant as a shrub or subshrub, 1 m. tall, very fragrant when crushed, and have encountered it in deciduous forests, among shrubby vegetation, and in xerophytic roadside vegetation, at 20--550 m. altitude, in flower in May, August, and November. The corollas are described as having been "white" on Croat 54671 and Liesner & González 12146, "white, yellowish in the throat" on Kalloo B.688, and "white with a yellow center" on Davidse & González 19707.

López-Palacios (1982) reports that the plant is used in Venezuela in the treatment of asthma, while Reis & Lipp (1982) tell us that it is used to flavor meatloaf, stuffing, and gravy in Hawaii.
The E. C. Leonard 4116 and Leonard & Leonard 10010, distributed as Lippia micromera, actually are Lantana exarata Urb. & Ekm.


LIPPIA MICROMERA var. HELLERI (Britton) Mold.


Jansen found this plant growing in sandy soil with spiny cacti and much grazing by goats in the Dominican Republic, where Jiménez describes it as "very common" at 200 m. altitude and where it is known as "orégano". The corollas are said to have been "white" on Dod & Jiménez 8963 and Jiménez 8834. Reis & Lipp (1982) cite Lavas-ère 1857 from the Dominican Republic, while Liogier & Martorell (1982) assert that in Puerto Rico it is found wild on hillsides and in thickets at middle and lower elevations and where it is also cultivated for its aromatic foliage and known as "mejorana", "orégano", "orégano chiquito", and "orégano del pais".

Additional citations: HISPANIOLA: Dominican Republic: Dod & Jiménez 8963 (Lc, Ld); M. R. Jansen s.n. [1979 and 1980] (N); J. J. Jiménez 8834 (Me--282846).
LIPPIA MICROPHYLLA Cham.
182. 1981.
Recent collectors refer to this plant as a subshrub, growing in
cerrado, and have found it in flower in May and July. The corollas
are described as having been "white" on Herb. Prisco Bezerra 10403
and "yellow" on Herb. Prisco Bezerra 8841.
The collection by Steward and his associates, cited below, was
previously misidentified and cited as the very similar L. schombergh-
iana Schau.
Additional & emended citations: GUYANA: Maas, Westra, & al. 3634
(F--1931273). Roraima: Steward, Araujo, Buck, Ramos, & Ribamar 248
(N, W--2858548).

LIPPIA MODESTA Briq.
Novara found this plant in flower in November and describes the
corollas as "yellow".
Additional citations: ARGENTINA: Salta: Novara 2208 (E--2978864).
MOUNTED ILLUSTRATIONS: Troncoso in Burkart, Fl. Ilust. Entre Rios 5:
277, fig. 131. 1979 (Ld).

LIPPIA MORII Mold.

LIPPIA MORONGII Kuntze
Additional bibliography: Mold., Phytologia 48: 182 (1981) and 50:
250. 1982.
The corollas on Cabrera & al. 28960 are said to have been "yel-
low" when fresh and the plant was found in anthesis in October -- it
represents very well the broad-leaved form of this species.
Additional citations: ARGENTINA: Corrientes: Cabrera, Botta, Kies-
ing, Rotman, Tur, & Zuloaga 28960 (N).

LIPPIA MULTIFLORA Mold.
1981.

LIPPIA MYRIOCEPHALA Schlecht. & Cham.
Additional synonymy: Lippia myrocephala S. & C. ex Mold., Phyto-
Recent collectors refer to this plant as a "1.5 m. perennial", as a shrub, 3–4 m. tall, or as a tree, 7–10 m. tall, with a spreading crown, the flowers "small and green". They have found it growing along roadsides, in open forests, along streams in tall forests and cafetales, on disturbed roadsides with *Tremel* and *Guzuma*, on steep slopes with *Pinus*, *Quercus*, *Hauya*, *Erythrina*, *Lysiloma*, *Oreopanax*, and *Ostrya*, on steep slopes covered by evergreen cloud forest, in acahual with *Eupatorium*, *Xanthosoma* robustum, and *Heliconia*, in 15-year old acahual with *Heliocarpus donnell-smithii*, *Cordia alliodora*, and *Lonchocarpus*, and "common" in acahual along roadsides associated with *Pennisetum* and *Heliconia*. Calzada refers to it as "rare" in Veracruz, Wilbur and his associates report it "occasional" in El Salvador. Cowan and Ramos found it growing in 5-year old acahual with *Tremel micrantha*, *Cecropia*, and *Hampea*. Welch and his associates encountered it "in rainforest with many bamboo-walled houses with palm-thatched roofs nestled among the trees, many lianas and mostly ascending branches covered with numerous bromeliads, ferns, mosses and orchids". These recent collections have been made at altitudes of 800 to 2300 m. and the plant has been found in anthesis from September to January and in fruit in December. The wood is used for making the frames of native grass huts and for other purposes. The vernacular names, "colpanchi blanco", "copalillo blanco", "macahuitl", and "tatascame".

The corollas are described as having been "cream"-color on Cowan 2708, "white with a yellow center" on Stevens & Riviere 20882, "yellowish" on Williams & al. 43204, "pale-yellow" on Wilbur & al. 16328, "dull-yellowish" on Standley 20628, and "cream & yellow" on Breedlove 23258.

A particularly small-leaved form (annotated in an unknown hand "Lippia myriocephala forma") is well represented by Liebmnn 11357 and Heyde & Lux 4388.


Additional citations: MEXICO: Chiapas: Breedlove 23258 (Me—223726), 42691 (Me—255761); Hill & Cowan 1525 (Me—256632); Miranda...
LIPPIA MYRIOCEPHALA var. HYPOLEIA (Briq.) Mold.


Recent collectors refer to this plant as a shrub, 1--5 m. tall, a treelet, or a small to tall tree, 2--13 m. tall, unpleasantly aromatic, the stems to 6 inches in diameter, the bark pale and fissured, the "heads" lavender, and the flowers slightly odorous. They have found it growing on wooded slopes, in elfin cloudforests and ordinary cloudforests, in seasonal evergreen forests along stream slopes, in secondary high evergreen forests, moist forests, mixed subtropical forests, secondary deciduous oak forests, in secondgrowth, on slopes with Quercus, Dodonaea, and Calliandra or with Pinus and Liquidambar, in disturbed forests of Quercus, Liquidambar, and Clethra, on slopes and along small streams with tropical rainforest along the ridges, in acahual, and in acahual with Eupatorium, Xanthosoma robustum, and Heliconia, at 300--2000 m. altitude, in flower from January to March, May, and September to December, and in fruit in November, January, and February.

Nee found the variety common in much disturbed deciduous forests on steep rocky (calcareous) slopes with maize fields and patches of secondgrowth brush dominated by Alnus acuminata ssp. arguta; Williams
and Molina report it as "common in forests and the edges of clearings". Smyth refers to it as a common shrub on dry hillsides in Veracruz, while Standley reports it "frequent" in Costa Rica and "common on volcano crater rim" in El Salvador.

The corollas are described as having been "white" on 84 edtove 26515, 8 needtove & Thonne 20947, Mone.no 206, NonntA 17377, R 715, and lota. 8. 24 & 672, "white with a yellow eye" on VougtaA 19004, "whitish with a mustard-colored eye" on Lundett 17632, "cream" on AnaqutAtatn i at. 1726 and Mantnez & Catdendn 1211, "dull-white and lavender" on Johnson 46, "pale-yellow" on VneAAten & JonZA 190, "verdoso-cafe" on Vazquez T. 65, and "cafe" on AnaqutAtatn i. Sandtno 1432.

Vernacular names reported for the variety are "carbonero", "cutujuma", "calpanchi", "tamiagua", and "tatascame". The wood is used by the natives to make charcoal.

A notation accompanying PuApuA 8648 reads "leaves entire and more glabrous", but this is not true of the U. S. National Herbarium sheet of this collection.

Material of this variety has been misidentified and distributed in some herbaria as typical L. myntocephata Schlecht. & Cham., L. catttcanpae^otta h.b.k., L. gnaoeoten & h.b.k., L. umbettata Cav. Buddteta sp., and even CompoAttae. On the other hand, the VtoACOneaA 9961, EAytada i at. 765, Mtnanda 5720, and Wttbun & at. 16328, distributed as L. myntocephata var. hypoteta, actually represent the typical L. myntocephata Schlecht. & Cham., while Contreras 9641 is L. umbellata Cav. and Dorantes & al. 1126 is probably a species of Vannonta.

Additional citations: MEXICO: Chiapas: Breddlove 26515 (Me—199263), 28136 (Me—231870), 36623 (Me—255179); Breddlove & Thorne 20947 (Me—99257); Matuda 3630 (Me—86185); E. W. Nelson 3075 (W—234012); Ton 1724 (Me—121637), 1784 (Me—121362), 3692 (Me—133270). Chihuahua: Berlandier 739 (W—81754); Liebmann 11256 (W—1315068), 11258 (W—1315069). Hidalgo: Norris 17377 (Me—255026). Puebla: Boege 1947 (Me—96104); Gentry, Barclay, & Anguelles 20391 (W). San Luis Potosi: Edw. Patmen 1137 (W—82068). Tamaulipas: Vela G. 1774 (Me—222146). Veracruz: Balls 5489 (W—1793856); Beaman 6429 (Me—258951); Botteri 861 (W—242024); Bourgeau 1471 (W—78510), 2983 (W—78513); Dorantes, Acosta, Calles, & Marquez 1695 (Au); Dressler & Jones 190 (Me—43011, W—2328442); Gonzlez Leli & Garza 10052 (Me—179813); Greenman 274 (W—752602); Liebmann 11270 (W—1315073), 11272 (W—1315074), 11273 (W—1315075); Martnez Calderón 1211 (Me—140598, Me—140599, Mi); Mohn 327 (W—771833); M. Nee 23224 (N); Ortega & al. 24 (Me—214553); Purpus 421 (W—470241), 2254 (W—840372), 5751 (W—464429), 8648 (W—1169628); Rosas R. 715 (Me—118849); Rzedowski 18956 (Me—91619); Selier & Selier 3649 (W—1205654); C. L. Smith 1076 (Me—86159, W—312560); Smyth 169 (W—1209017); Sousa 2559 (Me—113187), 2647 (Me—112549); Taylor & Tay- lor 7277 (W—2914927); Vazquez T. 32 (Me—264932), 65 (Me—264897); Zola B. 24 (Me—271784), 672 (Me—232923, Me—260648). GUATEMALA: Alta Verapaz: H. Johnson 46 (W—1014674); Turtchheim 11.1474 (W—860816). Baja Verapaz: Williams, Molina R., & Williams 42122 (M1). El Petén: C. L. Lundell 17632 (Me—137927). Department undetermined:

LIPPIA MYRIOCEPHALA var. INTEGRIFOLIA Loes.

LIPPIA MYRIOCEPHALA var. OVATIFOLIA (Mold.) Mold.


LIPPIA NANA Schau.
The Hatschbach 19716, Irwin, Souza, & Reis dos Santos, and Regnell III.948, previously cited by me as Lippia nana, seem actually to be L. pumila Cham., while Macedo 3251 is Lantana glaziovii Mold.

LIPPIA NEPETACEA Schau.

LIPPIA OATESII Rolfe
Reis & Lipp (1982) cite J. C. Hopkins 10231 from Zimbabwe and report that the collector avers that this plant "keeps away snakes".

LIPPIA OAXACANA Robinson & Greenm.
Recent collectors describe this plant as a semi-woody herb, 60—80 cm. tall, or a shrub, 1.5 m. tall, with a minty odor, and have found
it growing in low deciduous forests (where Torres and his associates aver that it is abundant) with *Brahea* and *Yucca*, in regrowth woods on limestone hills, and in very dry soil with *Yucca* and cacti, at 1350--2165 m. altitude, in flower from July to November, in fruit in September. They report the vernacular names, "falsa salvia" and "oreganillo". The corollas are said to have been "white" on *L. Smith* Mex. 5 and Torres & al. 1153, and "yellow" on Delgado S. & al. 568.

It should be noted that the Nelson 1588 & 1841 specimens, cited below, were annotated as "Type" by someone at the United States National Herbarium, but actually are not types -- the species is founded on Pringle 6021.

Material of *L. oaxacana* has been misidentified and distributed in some herbaria as *L. alba* (Mill.) N. E. Br. or *L. geminata* H.B.K. On the other hand, the Bravo s.n. [April 29, 1953], distributed as *L. oaxacana*, actually is *Aloysia chiapensis* Mold.


**Lippia Obscura** Briq.

Recent collectors describe this plant as a slender shrub, 1.8 m. tall, the leaves very aromatic, and the flowers fragrant or rather fragrant, occasional in mata ciliar, at 800 m. altitude, in flower in March. The corollas are said to have been "white" on Heringer & al. 3708 and Pereira & Mendonça 408.

Material of this species has been misidentified and distributed in some herbaria as *Lantana* sp.


**Lippia Origanoides** H.B.K.


Recent collectors describe this plant as a small shrub, 1--2 m. tall, aromatic, the branches arched and subscandent, and the flowers
very fragrant. They have encountered it in rocky terrain of the savannas on plateaus of small tepuis, at 100 m. altitude, in flower in March, May, July, and August, and in fruit in July. They report the vernacular name, "salvinha".

López-Palacios reports that the plant is used by natives in the treatment of asthma, while Hill and his associates tell us that its leaves are used as a tea to treat stomach troubles. Reis & Lipp (1982) cite Steyermark 58601 and note that the "leaves boiled in water with guarapo (sugar drink) used for colds", reporting the native name, "chara-ceur".

The corollas are said to have been "white" on Bunting 6216, Hill & al. 12918, Liesner & González 11996 & 12148, and Prance & Huber 28380.


LIPPIA OXYCENEMIS Schau.


Recent collectors describe this plant as a shrub, 1.5 m. tall, with aromatic pubescent leaves, and have encountered it in cerrado and "near brejo", in anthesis in April and July. The corollas are said to have been "reddish" on Héringe & al. 7210 and "rose" on Pereira 465.

Additional citations: BRAZIL: Distrito Federal: Héringe, Filgueiras, Mendonga, & Pereira 7210 (N, W--2941379); Irwin, Ghear, Souza, & Reis dos Santos 15636 (W--2863362), 18034 (W--2630566); Pereira 465 (N, W--2971679); Sucze 750 (W--2564914). Minas Gerais: Williams & Assis 7206 (W--1932936).

LIPPIA OXYPHYLLARIA (Donn. Sm.) Standl.


Recent collectors describe this plant as a slender, bushy shrub, 1--2.5 m. tall, or a small tree or treelet, 3--5 m. tall, the stems 5--7.5 cm. in diameter at breast height, and the flowers fragrant. They have found it growing on lava flows, in open badly gullied lava fields, and woods adjacent to grassy slopes on lava flows, at 200--1900 m. altitude, in flower from December to March and in June, in fruit in March and December. Little refers to it as "common in groves at the edge of savannas on soil of volcanic dust and pumice and lava boulders" and in evergreen rainforests.

The corollas are said to have been "yellow on Hammel 1598, Molina
R. 3077, Tyson 7280, and Wilbur & Teeri 13337 and "pale-yellow" on Wilbur & al. 15309.

Material of this species has been misidentified and distributed in some herbaria as L. callicarpaefolia H.B.K., L. substrigosa Turcz., and L. umbellata Cav.

Additional citations: HONDURAS: Morazán: Molina R. 3077 (W—2022485); COSTA RICA: Puntarenas: Pittier 3951 (W—1322985—cotype), 10632 (W—1322984); Panamá: Chiri-qui: P. H. Allen 1008 (W—1976216), 1541 (W—1820117); Davidson 793 (W—1820756); Hammel 1598 (Ld); Little 6071 (U. S. For. Serv. 95251) (W—1842538); Maurice 693 (W—1844123); Pittier 3336 (W—677719); Tyson 7280 (Me—202468); Wilbur, Almeda, Luteyn, & Utley 15309 (Me—165882); Wilbur & Teeri 13337 (Me—165898). Cocoí: R. S. Williams 151 (W—1208090). MOUNTED ILLUSTRATIONS & CLIPPINGS: Mold. in Wood-son, Schery, & al., Ann. Mo. Bot. Gard. 60: 68, fig. 4. 1973 (Ld); Donn. Sm., Bot. Gaz. 23: 249. 1897 (W); Pittier, Prim. Fl. Costaric. 2: 207. 1898 (W).

LIPPIA PALMERI S. Wats.


Recent collectors describe this plant as a small shrub, 1.5—2 m. tall, many-branched, and have found it growing in low matorral, on south-facing slopes, hillsides, and arid hilltops, on low hills and flats, basaltic hills, and in association with Jatropha cinerea, Lysiloma candida, and Gochnatia arborescens, with Pachycreus, Larrea, Bursera, Fouquieria, Opuntia, Machaerocereus, and Stenocereus, and with Prosopis, Calliandra, Lantana, and Ruellia. Daniel refers to it in one locality as "frequent" and in another as "infrequent". Collectors have encountered it at 5—300 m. altitude, in flower from January to April and in October, in fruit in January, April, and October. The vernacular name, "oregano", is reported for it. The corollas are said to have been "white" on Carter 2667 and Gentry 3007, "purplish" on Daniel 2437, and "purple" on Daniel 2459. The young leaves are very densely white-pubescent on Ortega 5509 Reis & Lipp (1982) cite Carter & Moran 5381.

Rzedowski (1978), quoting Shreve (1951), states that in Baja California Lippia palmeri grows in matorral in close association with Atriplex canescens, Suada fruticosa, Lycium carinatum, Maytenus phyllanthooides, Stegnosperma halimifolium, and Phaulothamnus spin-escens.

The Sousa, Germán, & Rico 8074, distributed as Lippia palmeri, actually is L. graveolens H.B.K., while Barkley & Carr 36013 is Aloy- sia sonorensis Mold. and Vaughn 621 is Lantana macroioda Torr.

Additional citations: MEXICO: Baja California: Ames, Hones, Kop-loy, Perrill, Urry, & Turner 77-62 (Me—243280); Brandegee s.n. [Sierra de la Trinidad, Nov. 1902] (W—397996); A. Carter 2667 (W—2023092); Carter, Alexander, & Kellogg 2476 (W—2022971); Carter & Ferris 3758 (W—2539503); Daniel 2437 (Mi), 2459 (Mi); Hammerly 405.
LIPPIA PALMERI f. SPICATA (Rose) Mold.

Gold encountered this plant in low matorral. in both flower and fruit in March.

Additional citations: MEXICO: Baja California: Edw. Palmer 62 (W--46706--type); D. M. Porter 380 (Me--48264); Wiggins 5539 (Me--107732), 14614 (Me). GULF OF CALIFORNIA ISLANDS: Tiburon: Gold s.n. [25 Marzo 1968] (Me--117053); Wiggins 17149 (Me--106883); Wilkinson s.n. [12 October 1977] (Mi).

LIPPIA PAUCIFLORA Urb. ex Mold., Phytologia 50: 252 sphalm. 1982
This binomial is the result of an unfortunate typographic error -- the "L." should stand for "Lantana" rather than Lippia. It therefore falls into the synonymy of Lantana pauctflora Urb.

LIPPIA PEDUNCULOSA Hayek


LIPPIA PENDULA Rusby


LIPPIA PETIOLATA Mold.


LIPPIA PHAEOCEPHALA Brig.

Additional citations: MOUNTED ILLUSTRATIONS: Troncoso, Darwiniana 12: 277, fig. 10. 1961 (Ld).
Lippia plicata J. G. Baker


Belsky describes this plant as a perennial herb with white corollas and found it growing in the tall grass-Acacia woodland association with Hyparrhenia filipendula, Themeda triandra, and Diheteropogon amplexicaulis, in flower in May. White & Angus (1962) cites Bull. 3960, Carson 198, and Richards 214 from Zambia. Kahurananga and his associates describe the plant as a shrub, 2.5 m. tall, and encountered it in highland scrub-grassland, in both flower and fruit in May, the flowers "small, white, and sparse". White & Angus (1962) describe the leaves as fragrant, variable, more or less lanceolate, 3--9 cm. long, 1--3 cm. wide, rugose and usually scabrid above, puberulous beneath, the flower-heads strobiliform. about 1.5 cm. long and wide, enlarging to 5 cm. long and 2 cm. wide in fruit, the bracts foliaceous, 7 mm. long and 4.5 mm. wide, and the corollas white.

Material of this species has been misidentified and distributed in some herbaria as L. javanica (Burm. f.) Spreng.

Additional citations: TANZANIA: Tanganyika: Belsky 271 (Ba--394624); Kahurananga, Kibuwa, & Mungai 2583 (Mu).

Lippia pohliana Schau.


Lippia pohliana var. longibracteolata Mold.


Lippia polytricha Briq.


Lippia primulina var. goyazensis S. Moore


Additional citations: BRAZIL: Distrito Federal: Irwin, Souza, & Reis dos Santos 8577 (W--2630580); Pereira 81 (W--2951319).

Lippia pringlei Briq.

Additional synonymy: Lippia pringlei Brign., in herb.

Recent collectors describe this plant as a large, single-stemmed shrub or small, conical, round-topped tree, 1.5—15 m. tall, with heavy foliage and weak branches, the bark rather smooth and gray, the leaves fragrant with a strong lemon odor, the flower-heads greenish, and the flowers much visited by small bees. They have found it growing along roadsides and stream sides, gravel roadsides, pastures, ravines, barrancas, and secondary matorral, in deciduous and low deciduous forests, wooded quebradas, and heavily grazed secondary oak scrub, on oak-pine rocky slopes, oak-pine woods, among rank, weedy, brushy roadside vegetation in former tropical subdeciduous woodland, on dry slopes and in rocky ravines through sparse oak forests, and near the base of cliffs and talus slopes among pines and oaks, at 66—2600 m. altitude, in flower from October to March and May, in fruit from November to March and May. Ner vaes Montes & Salazar refer to it as abundant in moist places in Sinaloa, where Gentry & Argtelles also speak of it as "common". Il tis and his associates found it "very common on roadsides and among xerophytic shrubs" in Jalisco. A wood sample accompanies the Palmer 1199 collection. Common names reported for the species are "macuay", "nacare", "nacare", "nacari", "tabanquillo", and "tefrozana".

The corollas are described as having been "yellow" on Croat 45736, Ernst 2446, Gentry & Argtelles 18181, Hinton 11717, Miller & al. 241, and Nell 5410, "yellowish" on Croat 45792 & 46081, "pale-yellow" on Croat 45711 and Standley 34678, "yellow or cream" on Ferris 5907, "light-cream to yellow"on Lent 1783, "deep-yellow fading to pale-yellow" on Iltis & al. 1144, "dark-yellow fading to very pale-yellow" on Iltis & Nee 1505, "greenish-yellow" on Croat 45342, "yellow and reddish" on Langlassé 744, "yellow at anthesis, later nearly white" on Wiggins 13187, "more or less white or very pale-yellow" on Ernst 2558, "greenish-white" on Croat 45324, "green" on Vazquez T. V.1869, and "white" on Langman 3148.

Material of Lippia princei has been widely misidentified and distributed in many herbaria as L. callicarpaefolia H.B.K., L. chrysanthha Greenm., L. myrioccephala Schlecht. & Cham., L. umbellata Cav., and even Compositae.

Additional citations: MEXICO: Colima: Lott & Magallanes 929 (Ld). Guerrero: Croat 45711 (Ld), 45736 (Ld); Freeland & Spetzman 127 (Me—149769); Hinton 11717 (Me—64800, W—1822363); Langlassé 744 (W—366156); E. W. Nelson 2285 (W—566485), 2319 (W—566483); Edw. Palmer 479 (W—267037, W—1689160); Reko 5058 (W—1269846); Schwabe s.n. [10 de enero de 1977] (Me—220043). Jalisco: Iltis, Guzmán M., & Nee 1144 (Ld, M); Iltis & Nee 1505 (M); Langman 3148 (Me); Mexico 1354 (W—1318291); Miller, Lorence, & Trigos 241 (Ld); Pringle 1733 (W—42739—isotype, W—1322972—isotype), 11088 (W—1586761), 11669 (W—461127); Purpus 508 (W—474731). México: González Medrano & al. 5385 (Me—158522); Hinton 7237 (W—1822265); Matauda & al. 27854 (Me—108894), 30505 (Me—64809). Michoačán: Chiong, González Medrano, & Ramos A. 602 (Me—153347); Góndara s.n. [Zamora] (Me—56593); Germán & al. 406 (Me—282643); Hinton 12949 (W—1805634), 13614 (W—1805674); E. W. Nelson 6838 (W—399188), 6951 (W—399271). Morelos: Bourgeau 1217 (W—82067); Harking 625 (Me—64799); Lyonnet 1166 (Me—241024,
Me—241025): Miranda 239 (Me—73566); Paray 3014 (Me—100006); Pringle 11087 (W—460471), 13982 (W—1586768); Selar & Selar 4337 (W—1206016); Vdzquez 5027 (Me—168933). Nayarit: CioaX 45193 (Ld), 45324 (Ld), 45342 (Ld); Pfiingle 13982 (w—1586768); SeXeA 4337 (W—1206016); Vdzquez 5027 (Me—168933). Nayarit: CioaX 45193 (Ld), 45324 (Ld), 45342 (Ld); Pfiingle 13982 (w—1586768); SeXeA 4337 (W—1206016); Vdzquez 5027 (Me—168933).

Lipia PSEUDO-THEA (A. st.-Hil.) Schau.


The Williams & Assis 7160, cited by me as L. pseudo-thea in a previous segment of these notes and so distributed, actually is L. florida Cham.

Lipia PUMILA Cham.


Recent collectors describe this plant as growing from a xylopo-dium and refer to it as rather frequent on rocky campos. They have found it in flower in August and September; the corollas are said to have been "yellow" on Hatschbach 19716 and Héringer & al. 7481.

Material of L. pumila has been misidentified and distributed in some herbaria (and even cited by me in a previous installment of these notes) as L. nana Schau. On the other hand, the Dusén 15736, previously cited by me as L. pumila, seems, rather, to be L. intermedia.
Cham.


LIPPIA RAMBOI Mold.


LIPPIA RAMBOI var. PILOSA Mold.


LIPPIA RECOLLETAE Morong


Recent collectors describe this plant as an abundant, spreading, coarse herb or subshrub, 50 cm. tall, and have encountered it on campos and in cerrado, at 320--3300 m. altitude, in both flower and fruit in December, but also in flower in February.

The corollas are described as having been "yellow" on King & Bish- op 7577, "white and yellow" on Casas & Schinini 7480 and Schinini 22969, "white, the interior of the tube deep-yellow" on Hatschbach 45952 and 46114, and "light-lilac with a yellow center" on Casas & Moleiro FC.5912.

This species is very closely related to L. suffrutescens (Griseb.) Kuntze and may better be regarded merely as a more shaggy variety of the latter, The Steinbach collection, cited below, has been distributed and cited under both names.

Additional & emended citations: BRAZIL: Mato Grosso: Hatschbach 45952 (Ld), 46114 (Ld); Murça Pires & Furtado 17243 (Ld). BOLIVIA: Cochabamba: King & Bishop 7577 (E--2615859); R. F. Steinbach 740 (W--2533616). PARAGUAY: Casas & Moleiro FC.5912 (N); Casas & Schinini 7480 (Ld); Morong 62 (W--47866--isotype); Schinini 22969 (Ld).


LIPPIA RECOLLETAE var. PICKELII (Mold.) Mold.


Solomon describes this plant as having ascending stems and pale-pink corollas. He encountered it along open roadsides in disturbed moist tropical forests with abundant epiphytes, at 600 m. altitude, in both flower and fruit in April.

Additional citations: BOLIVIA: Tarija: Solomon 9973 (Ld).

LIPPIA RHODOCNEMIS Mart. & Schau.


**Lippia Rigida** Schau.
Additional citations: BRAZIL: Bahia: Harlely, Renwoize, Erskine, Brighton, & Pinheiro in Harlely 15602 (W--2791573), 15756 (W--2791586), 16708 (W--2791550).

**Lippia Rivalis** Mold.

**Lippia Rondonensis** Mold.
Recent collectors describe this plant as an aromatic herb or subshrub, 1 m. tall, with green bracts, and have encountered it on wet savannas and in varzea woods, at 70--200 m. altitude, in flower in January and July. It is used by natives in the form of a tea to treat upset stomachs.
The corollas are said to have been "violet" on Beck 5468 "lavender" on Gentry & al. 30738, "arroseadas" on Cid & Lima 3500, and "purple with a yellow center" on Campbell & al. P.21214.
It seems very possible that this taxon (or, at least, some of the specimens so identified) may prove actually to represent only a form of the very variable *L. alba* (Mill.) N. E. Br., perhaps identical with its *f. intermedia* Mold. It has been misidentified as *Lantana* sp.

**Lippia Rosmarinifolia** Anderss.

**Lippia Rotundifolia** Cham.
Irwin and his associates encountered this plant at 900 m. altitude, in both flower and fruit in June, and describe the corollas as "purple, fading to reddish-lavender in age".
The Ratter & al. R.2600, distributed and previously cited as typical *L. rotundifolia*, is now regarded as the newly described var. bahiensis Mold., while HéRinger & al. 644 is *L. lacunosa* Mart. & Schau.
Additional citations: BRAZIL: Goias: Irwin, Souza, Grear, & Reis dos Santos 17922 (W--2863363); Macedo 3313 (W--2197084).


Collectors describe this plant as an herb with "rather lignified shoots", to 1.5 m. tall, and have encountered it in cerrado (tall savanna woodland). The corollas are said to have been "mauve-purple with a yellow throat" on the Ratter collection, cited below, and "rose with a yellow center" on the Heringer collection. The Ratter collection was previously incorrectly cited by me as typical *L. rotundifolia* Cham.


**Lippia Rubiginosa** Schau.


Landrum describes this plant as a shrub, 1.5 m. tall, with white corollas, and found it growing among mainly shrubby vegetation on a very rocky iron-rich substrate, at 1200--1700 m. altitude, in both flower and fruit in February.

Additional citations: BRAZIL: Minas Gerais: Landrum 4254 (N); Macedo 2071 (W--2196797).

**Lippia Salamensis** Loes.


**Lippia Salicifolia** Anderss.


**Lippia Salisa** Griseb.


Recent collectors have found this plant in flower in November. The corollas are said to have been "white" on Burkart & al. 30583 and "lilac-white" on Burkart & al. 30600.

Additional citations: ARGENTINA: Santiago del Estero; Burkart, Troncoso, Bacigalupo, Guaglianone, Rotman, & Ulibarri 30583 (Me--204554), 30600 (Me--203020, W--2928384). MOUNTED ILLUSTRATIONS: Ragonese, Revist. Invest. Agric. 5: 209, fig. 44. 1951 (Ld).
LIPPIA SALVIAEFOlia Cham.


Recent collectors describe this plant as a shrub, 1--3 m. tall, and have found it in flower in January and February. The corollas are described as having been "white" on Shepherd & Gibbs 11248, "cream" on Mantovani 1678, and "yellowish" on Mantovani 1560.

Additional citations: BRAZIL: SãO Paulo: Mantovani 1560 (N), 1678 (N); Shepherd & Gibbs 11248 (N). PARAGUAY: Balansa 4624 (Me--243966).

LIPPIA SAVORYI Meikle


LIPPIA SCABERRIMA Sond.


Wehmer (1931) records the vernacular name "beukess boss" for this plant in South Africa. He reports that the dried plant yielded volatile formis acid, heptacosan, alcohol, hentriacontan, phytosterin, fatty oil with formic, buteric, valerianic, arachinic, stearinic, palminitic, & linolic acids, lippianol, a glycoside, tannin, etc.

Recent collectors have encountered this plant in sandy soil, describing it as aromatic.

Material of Lippia scaberrima has been misidentified and distributed in some herbaria as Lantan/a sp.

Additional citations: SOUTH AFRICA: Transvaal: Giess 154 (Mu).

LIPPIA SCHLIMII Turcz.


Melampy encountered this plant in dry shrub-dominated areas at 2500 m. altitude.


LIPPIA SCHLIMII var. GLABRESCENS (Mold.) Mold.


Bunting & Croat describe this plant as a tree, 4 m. tall, and found it in flower in August, the corollas "white".


LIPPIA SCHOMBURGKIANA Schau.

Additional synonymy: Lippia schomburghiana Schau., in herb.
Recent collectors describe this plant as an herb, 50 cm. tall, the leaves coriaceous, "com silica", with a pleasant odor, the flowers fragrant, and the fruit brown. They have found it growing in dry cerrado subject to periodic fires, in caatinga, and common in red sandy soil of capoeira in disturbed Orbignya forests, in flower in April, August, and September, and in fruit in September.

The corollas are described as having been "white" on Martins & Angélica 8342, "cream" on Heringer 18056, and "yellow" on Chagas & Silva 206.

The vernacular names, "alecrim" and "gapu-che-le", are reported for the plant in Brazil, where Balick and his associates note that "when a woman is menstruating and a man has intercourse with her and he gets an infection or has other problems, he makes a tea of the leaves of this plant and drinks it."

Material of Lippia schoenburgkiana has been misidentified and distributed in some herbaria as the very similar L. origanoides H.B.K. On the other hand, the Steward et al. 248, distributed as L. schoenburgkiana, actually is L. microphylla Cham.


LIPPIA SCLEROXYLLA Briq.


Casas & Molero describe this plant as 1 m. tall and found it growing in "prados con rosales de bosquete, abundante ganado" and in open rather high forests, in both flower and fruit in February. The corollas are said to have been "white" on their no. 6311 and "white with a yellow center" on no. 6347.

Material of Lippia sclerophylla has been misidentified and distributed in some herbaria as Aloysia sp.

Additional citations: PARAGUAY: Casas & Molero FC.6255(N), 6311 (Ld), 6347 (Ld).

LIPPIA SERICEA Cham.


Heringer and his associates encountered this plant in cerrado, in anthesis in April, and describe the corollas as small and "yellow".

Some workers regard Lippia stoechas Briq. as a synonym of Lippia sericea, but it seems clear to me that it belongs in the synonymy of the lamiaceous Lavandula stoechas L.