Calyx-tube nearly erect, 0.8 mm. long; sepals truncate-triangular, about 0.4 mm. long; exterior teeth merely totally adnate thickenings. Petals obovate, inequilateral, white, 1.9 mm. long. Stamens isomorphic; filaments flat, 3.3 mm. long, tapering from a broad base, geniculate at two-thirds of their length, glabrous; anthers oblong, 1.3 mm. long; connective greatly thickened below and prolonged about 0.3 mm. below the thecae, not lobed. Style gradually enlarged distally, glabrous, 3.5 mm. long; stigma truncate.

Prov. El Oro, Ecuador, between Paccha and Puente Grande, altitude 1830–2430 meters, Steyermak 54142. The species appears related to M. divergens Triana, in which the panicle and upper leaf-surface are pilose and the flowers smaller.

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NOTES ON NEW AND NOTEWORTHY PLANTS. II

Harold N. Moldenke

AEGIPHILA FARINOSA Moldenke, sp. nov.

Arbor; ramulis crassis tetragonis cavis dense ochraceo-farinosis; petiolis crassis dense ochraceo-farinosis; laminis late ellipticis vel subobovatis breviter acuminatis, ad basin attenuato-acutis vel breviter acuminatis, integrias supra parce farinosis glabrescentibus, subtus farinosis; inflorescentiis axillaribus vel supra-axillaribus bifurcatis fulvo-farinosis; calyce truncato integro vel minutissime 4-apiculato.

Tree to 8 m. tall; bark almost flat, gray-ochraceous, succulent, clear-ochre in section; wood pliant, white; branchlets apparently stout, tetragonal, hollow, amphiolate and flattened at the nodes, densely ochraceous-farinose, slightly tuberculate-lenticillate; nodes not annulate; principal internodes 3–4 cm. long; leaves decussate-opposite; petioles stout, 3–4 cm. long, densely ochraceous-farinose; blades membranous-chartaceous, clear-green above when fresh, somewhat lighter beneath, broadly elliptic or very slightly obovate, 13.5–24 cm. long, 6–10 cm. wide, short-acuminate at apex, attenuate-acute or short-acuminate at base, entire, sparsely farinose above but glabrescent in age except for the densely farinose midrib, sparsely farinose beneath, more densely so on the midrib and larger veins; midrib stout, prominulous above, very prominent beneath; secondaries slender, 9 or 10 per side, arcuate-ascending, arcutely joined in many loops some distance from the margins, plane above, prominulous beneath; vein and veinlet reticulation conspicu-
ous on both surfaces and very slightly prominulous, usually densely farinose; inflorescences axillary or supra-axillary, 2 per node, several times bifurcate, their branches densely tawny-farinose, stout, firm, widely divergent; bractlets and prophylla linear-elongate, 1--7 mm. long, very densely tawny-farinose; calyx campanulate, about 4 mm. long and wide, densely tawny-farinose, its rim truncate, entire or very obscurely 4-apiculate; corolla hypocraeteriform, yellowish-white, violet outside at the extremities, the tube broadly cylindrical, about 4 mm. long, glabrous or slightly farinose outside, often slightly farinose at the throat within, its rim 4-parted, the lobes broadly elliptic, about 5 mm. long and 3 mm. wide, entire, glabrous on both surfaces or slightly farinose at the base; stamens exerted; filaments filiform, white, projecting about 1 mm. from the corolla-limb when this is erect, about 5 or 6 mm. when this is wide-spreadling; anthers yellowish-white; pistil included.

The type of this interesting species was collected by José Cuatrecasas (no. 21689) at La Falma on the right bank of the Río Fichinde, Hoya del Río Cali, on the eastern slopes of the Cordillera Occidental, El Valle, Colombia, at an altitude of 2500 m., on July 24, 1946, and is deposited in the Britton Herbarium at the New York Botanical Garden.

ALONSOA WARSCEWICZII f. COCCINEA Moldenke, f. nov.

Hae form a forma typica speciei corollis coccineis reccidit. - This form differs from the typical form of the species in its scarlet corollas. The type was collected by me (no. 7827) from cultivated plants at Watchung, Somerset Co., New Jersey, on July 30, 1933, and is deposited in the Britton Herbarium at the New York Botanical Garden.

ALOYSIA CHIAFENSIS Moldenke, sp. nov.

Fruitex; ramis ramulisque obtuse tetragonis dense hirsutulis; intermodiis valde abbreviatis; petiolis gracillimis densissime hirsutulis vel villosulis; laminis chartaceis lanceolatis, ad apicem acutis vel rotundatis, serrulatis, ad basin acutis, supra rugosis et dense pustulato-strigosae, subtus densissime tomentellis; inflorescentii congestae.

Shrub, apparently considerably branched; stems subterete or obscurely tetragonal, gray, glabrate; branches and branchlets obtusely tetragonal, brownish, densely hirsutulous, not resinous-punctate, less densely so in age; nodes not annulate; principal internodes mostly greatly abbreviated, 2--30 mm. long, occasionally to 6.5 cm. long on vigorous shoots; leaves decussate-opposite, apparently caducous; leaf-scars large, prominent, coryx, more or less lunate, on divergent sterigmata; petioles very slender, 1--4 mm. long, very densely hirsutulous or villosulous with white hairs;
leaf-blades (immature?) chartaceous, uniformly green on both surfaces, lanceolate, 1--2.5 cm. long, 4--9 mm. wide, acute or rounded at apex, uniformly serrulate from apex to base with small blunt teeth, acute at base, rugose above and densely strigose with white, pustulate-based, antrorse hairs, very densely tomentellous or short-pubescent beneath, the hairs on the larger venation beneath sometimes strigose on younger leaves; the very slender midrib and about 7 pairs of close ascending-divergent secondaries somewhat impressed above and prominent beneath, the abundant veinlet reticulation also more or less impressed above and prominent beneath; inflorescence axillary, 2--6 per node, greatly congested toward the tips of the branchlets, but apparently also produced on entirely leafless branches, about equaling the leaves where these are present (but the leaves may still be immature), divergent or drooping, very densely many-flowered, 1--3 cm. long; peduncles very slender, 5 mm. long or less, very densely hirsutulous; bractlets large, foliaceous, conspicuous, lanceolate, about 6.5 mm. long and 2.5 mm. wide, 3-nerved, attenuate-subacuminate at apex, rather densely short-pubescent with microscopically glandular-cipitate hairs and sericeous-villosulous with much longer whitish antrorse hairs on the back, only microscopically puberulent on the inner surface; calyx cupuliform, 2-parted, 1--1.2 mm. long, densely setulose-hirsute on the outside with stiff widely spreading hairs as long as or longer than the diameter of the calyx, each segment navicular, obtuse at apex, glabrous within; corolla infundibular or hypocrateriform, about 3.8 mm. long in all, its tube cylindric, about 0.7 mm. wide at base, constricted immediately above the ovary to 0.3 mm., ampliate to 0.9 mm. at apex, puberulent or short-pubescent with spreading hairs from just above the ovary to the apex on the outer surface, densely pubescent within, its limb about 1.5 mm. wide, 5-lobed, the lobes unequal, the largest less than 1 mm. wide and 0.5 mm. long, rounded, undulate-margined, glabrous on the inner and pubescent on the outer surface; stamens 4, didynamous, inserted about 0.8 mm. below the mouth of the corolla-tube; filaments practically obsolete; anthers very small, apparently effete; pistil one; style capillary, about 2.1 mm. long, glabrous; stigma lateral, oblique, about 0.4 mm. long; ovary subglobose, about 0.6 mm. long and wide, glabrous.

The type of this remarkable species was collected by Carl Albert Purpus (no. 10512) on rocky banks at Monserrate, Chiapas, Mexico, in March, 1925, and is deposited in the Britton Herbarium at the New York Botanical Garden. The species is obviously related to A. barbata (T. S. Brandeg.) Moldenke, of Baja California, and may like that species be polygamo-dioecious. It differs from A. barbata in its pubes-
ence, leaf-size and shape, and especially the much smaller size of its flowers.

ALOYSIA REICHII var. TRIOLOBATA Moldenke, var. nov.

Haec varietas a forma typica speciei foliis semper 3-lobatis recedit. - This variety differs from the typical form of the species in having all its leaves 3-lobed.

The type was collected by Rodolfo Wagenknecht (Looser 4238) at Río Turbio, dept. Elqui, Coquimbo, Chile, on October 19, 1940, and is deposited in the Britton Herbarium at the New York Botanical Garden. It was inaccurately reported by me in Lilloa 6: 312 (1941) as typical A. Reichii Moldenke, whose leaves are mostly unlobed.

ALOYSIA TERNIFOLIA Moldenke, sp. nov.

Frutex; ramulis gracilibus subtetragonis striatis griseis adpressis-pubescentibus; foliis ternatis; petiolis gracillis-mis densiusculis adpressis-pubescentibus; laminis chartaceis ellipticis abrupte acutis vel obtusiusculis, apicem versus 6--12-dentatis, supra minute scabriolo-puberulis, subtus molliter puberulis; inflorescentiis apicatis multifloris.

Shrub; branchlets slender, subtetragonal, somewhat striate-rigided, gray, appressed-pubescent with very short grayish hair; nodes annulate; principal internodes 2.5--4 cm. long; leaves ternate; petioles very slender, 1--5 mm. long, rather densely appressed-pubescent with very short white or grayish hairs like the branchlets, slightly margined especially toward the apex; blades chartaceous, bright-green, only very slightly lighter beneath, elliptic, 4--7.5 cm. long, 1.2--3 cm. wide, abruptly acute or bluntish at apex, the lower 2/3 of the margin entire, the upper 1/3 with 6--12 broad and rather blunt antrorse teeth, minutely scabriolo-puberulent above under a handle, softly puberulent with obscure hairs beneath, slightly dense on the larger venation; inflorescence spicate, in the upper leaf-axils, 2 or 3 per node, 7--9 cm. long, many-flowered, rather dense, all except the very lowest flowers more or less imbricate; peduncles very slender, 1.5--3 cm. long, densely white-puberulent; rachis very slender, densely white-puberulent; bractlets lanceolate, 1.5--3 mm. long, 0.5 mm. wide, long-acuminate, appressed-puberulent on the back; calyx deeply 2-labiata, the lips divergent, about 2.8 mm. long, finely appressed-puberulent on the outside, each usually 2-lobed or 2-toothed at the apex; corolla hypocrateriform, its tube 3.5--4 mm. long, about 1 mm. wide at the base, ampliate to 2 mm. at the center and from there to the apex, glabrous outside, densely tomentose within, the limb 2-lipped, the upper lip 2-lobed, the lower lip 3-lobed, the lobes lingulate-orbicular, 1.5--2 mm. long and wide, the margin slightly undulate, glabrous
outside, pubescent at the base within; stamens 4, inserted near the apex of the corolla-tube, included, didynamous; filaments obsolete or to 0.5 mm. long; anthers 2-celled; style stoutish, about 1.3 mm. long, glabrous, firm; stigma capitate, slightly 2-lobed; ovary obovate, about 1 mm. long and 1.3 mm. wide, glabrous, 2-celled.

The type of this very distinct species was collected by Fer Karl Hjalmar Dusén (no. 4228) at a rivulet at Itaiascoca, near Ponta Grossa, Santa Cruz, Argentina, March 17, 1904, and is deposited in the herbarium of the Naturhistoriska Riksmuseum at Stockholm.

ALOYSIA VIRGATA var. FLATPHYLLA (Briq.) Moldenke, comb.nov.


CALLICARPA CANDICANS var. FERRYANA (Dop) Moldenke, comb.nov.


CHLOANTHES GRANDIFLORA Moldenke, sp. nov.

Frutex, caulibus densissime lanato-tomentosis; internodis abbreviatis; foliis sessilibus crassis, ad apicem obtusis vel subacutis, integris utrinque densissime lanato-tomentosis; floribus solitariis vel fasciculatis axillaribus.

Apparently shrubby; stems suberecte, very densely lanate-tomentose, less densely so at the apex; principal internodes abbreviated, about 1 cm. long below the inflorescences and to 2.5 cm. long among the inflorescences; leaves decussate-opposite, sessile, thick-textured, 1.8–3 cm. long, 8–13 mm. wide, obtuse or subacute at apex, entire, very densely white-lanate-tomentose on both surfaces or becoming merely densely stellate on both surfaces; midrib and a few long-ascending secondaries sometimes barely visible through the tomentum; flowers solitary or in small clusters in the upper ten leaf-axils, the lower ones often borne on stout white-lanate peduncles 1–2 cm. long; calyx campanulate, deeply 5-parted almost to the base, the lobes equal, elliptic, about 8 mm. long, 3.5–4 mm. wide, acute at the apex, densely lanate-tomentose on the outer surface with white hairs, venose; corolla large, showy, tubular, the tube about 2 cm. long, slightly asymmetrical and curvate, about 4 mm. wide at the base and to above the ovary, ampliate to 12 mm. near the apex, glabrous or very obscurely puberulent outside, glabrate within except for the densely villous-tomentose ring above the ovary, venose, the limb 2-lipped, the upper lip 2-lobed, the lower lip 3-lobed, the lobes ovate-orbicular, 3–4 mm. long, 4–5 mm. wide, rounded, puberulent on the outer surface, venose; stamens 4, inserted at about the middle of
the corolla-tube, included, didynamous; filaments flattened, 6—7 mm. long, glabrous; anthers bifid; style capillary, about 17 mm. long, glabrous, included or equaling the corolla-tube; stigma unequally and shortly bifid; ovary small, about 1 mm. long and wide, farinose-pulverulent.

The type of this species was collected by J. Mauritzon somewhere in Western Australia in September, 1936, and is deposited in the herbarium of the Naturhistoriska Riksmuseum at Stockholm.

CONGEA CHINENSIS Moldenke, sp. nov.

Frutex scandens; ramis dense villosopubescentibus; nodis annulatis; petiolis dense villosus; laminis ellipticis acuminate, ad basin rotundatiss vel subcordatis, integris supra leviter pilosulis subtus plusminusve dense pilosol-punctulatis; inflorescentiis paniculatis; bracteolis involucri 4 ellipticis vel suboblongo-ellipticis ad basin connatis utrinque dense albo-tomentosis obtusis vel subacutis.

Woody vine; stems branched; branches rather slender, subterete or very obtusely tetragonal, densely villous-pubescent with more or less appressed antrorse brownish hair, less so in age; principal internodes 3.5—6 cm. long; nodes distinctly annulate; leaves decussate-opposite; petioles rather stout, 5 mm. long or less, densely villous like the branchlets; blades dark-green and brunnescent in drying above, lighter beneath, chartaceous, elliptic, 7—10.5 cm. long, 3.5—4.2 cm. wide, acuminate at apex, usually rounded or subcordate at base, entire, lightly pilosulous above, more densely pilose on the larger veins, more or less densely pilose-punctulate beneath, more densely so on the larger veins; midrib very slender, slightly prominent above, prominent beneath; secondaries slender, 4—6 per side, articulate-ascending, plane above, prominent beneath; vein and veinlet reticulation obscure above, subprominent beneath; inflorescence racemose, in pairs in the upper axils, forming a large terminal panicle; peduncles slender, 5—9 cm. long, densely villous like the branches, annulate and bracteate at the nodes of the rachis; bracts foliaceous, elliptic-lanceolate, 1.5—6 cm. long, 4—20 mm. wide, decreasing in size toward the apex of the inflorescence, in pairs at the nodes, similar to the leaves in color, texture, and pubescence or more densely pubescent on both surfaces; pedicels slender, 6—15 mm. long, densely villous, two per node; involucre composed mostly of 4 bractlets, elliptic or slightly oblaneculate, connate at base to form a cup about 6 mm. high, the free portions 2—2.5 cm. long, obtuse or subacute at apex, densely white-tomentose on both surfaces; flowers about 5 per head, densely white-villous-tomentose with short appressed hairs on the outer surface.
The type of this distinct species was collected by H. T. Tsai (no. 52611) in Yunnan, China, in 1932, and is deposited in the herbarium of the Naturhistoriska Riksmuseet at Stockholm. It was determined as C. tomentosa Roxb. by R. C. Ching, and so distributed, but differs pronouncedly from that species in the large involucral cups and in other characters. Its involucres are similar to those of C. connata Fletcher and C. siemensia Fletcher, of Thailand, which, however, may be distinguished at once by their uniformly 3-parted involucres.

**HELIPTERUM ROSEUM f. ALBUM (L. H. Bailey) Moldenke, stat. nov.**


**LANTANA EHRENBERGIANA Moldenke, sp. nov.**

Frutex; ramis obtuse tetragonis submarginitatis glabris; ramulis gracilimis numerosis tetragonis antrorse strigosis glabrescentibus; internodiis abbreviatis; petiolis strigosis; laminis firmis chartaceis ovatis obtusis, ad basin subtruncatis, serratis supra strigosis subutus dense griseo-tomentellis; capitulis subglobosis; bracteis ovatis foliaceis strigillosis acutis vel breviter acuminatis.

Shrub; branches obtusely tetragonal, slightly margined on the angles, glabrous, gray; branchlets and twigs very slender, numerous, tetragonal, antrorse strigose-pubescent, becoming glabrescent in age; principal internodes 0.5–2.8 cm. long, mostly quite abbreviated; leaves decussate-opposite; petioles 1–4 mm. long, densely antrorse-strigose; blades firmly chartaceous, rather dark-green above, lighter beneath ovate, to 3 cm. long and 2 cm. wide, obtuse at apex, subtruncate at base and slightly cuneately attenuate into the petiole in the middle, coarsely serrate along the margins from base (except the cuneate prolongation) to apex with rounded rather appressed antrorse teeth, strigose above and usually rugose, densely gray-tomentellous beneath; midrib slender, impressed above, prominent beneath; secondaries slender, 4 or 5 per side, impressed above, prominent beneath; vein and veinlet reticulation impressed above, usually not obvious beneath; inflorescence axillary toward the tips of the twigs, apparently usually one per node, ascending or erect; peduncles very slender, 1–4 cm. long, strigose; heads subglobose, 1–1.5 mm. wide, densely flowered; bracts ovate, foliaceous, to 7 mm. long and 5 mm. wide, acute or shortly acuminate, strigillose; corolla slightly surpassing the bracts.

The type of this species was collected by Carl August Ehrenberg -- in whose honor it is named -- at Santo Domingo,
Dominican Republic, Hispaniola, in or before 1839, and is deposited in the Meisner Herbarium at the New York Botanical Garden.

LANTANA MEARNSII var. CONGOLENSIS Moldenke, var. nov.

Haec varietas a forma typica speciei recedit laminis foliorum tenuior chartaceis vel submembranaceis supra scabrellis subitus plusminusvae leviter puberulis; inflorescentiis 2--6 aggregatis, pedunculis gracilibus in longitudine valde variabilibus plerumque 2.5--3 cm. longis; spicis usque ad 3 cm. elongatis; bracteis lanceolatis attenuato-acuminatis laxe puberulis.

This variety differs from the typical form of the species in its thin-chartaceous or even submembranous leaf-blades which are scabrellous above and more or less lightly puberulent beneath. The inflorescences are 2--6 per node, the slender peduncles very variable in length, usually 2.5--3 cm. long. The spikes elongate to 3 cm. after anthesis, and the bracts are lanceolate, 7--10 mm. long, 2--3 mm. wide at the base, attenuate-acuminated at the apex, loosely puberulent.

The type of this variety was collected by Feller (no. A. 46) at Congo da Lemba, Belgian Congo, on April 24, 1913, and is deposited in the herbarium of the Jardin Botanique de l'Etat at Brussels. A common name is "disiusu na bakala". The corolla is described as white by the collector, who also states that the plant is boiled down for vapor baths.

LANTANA MEARNSII var. LATIBRACTEOLATA Moldenke, var. nov.

Haec varietas a forma typica speciei recedit pedunculis usque ad 1 cm. longis ternatis et bracteis 7--9 mm. longis, 4--5 mm. latis, ad apicem triangulares-acutis rectis imbricatis densiusculae breviterque pubescentibus ciliatis.

This variety differs from the typical form of the species in its uniformly short-peduncled spikes, the peduncles only 1 cm. long or less, 3 per node, and its broadly ovate bracts which are 7--9 mm. long and 4--5 mm. wide at the base, abruptly narrowed to the triangular-acute apex, erect, imbricate, rather densely short-pubescent and ciliate-margined. The leaves are thin-chartaceous, scabrellous-puberulent above, densely tomentellous beneath.

The type of this variety was collected by Joseph Charles Corneille Bequaert (no. 5490) in the steppes at the edge of a lake, Kabare, Belgian Congo, on August 29, 1914, and is deposited in the herbarium of the Jardin Botanique de l'Etat at Brussels. The corolla is described by the collector as red-violet.

LIPPIA CHEVALIERII Moldenke, sp. nov.
Herba (?); ramis gracilimis stramineis subteretibus obscure strigillosi; foliis ternatis vel verticillatis subsessilibus; laminis chartaceis ob lanceolatis acutis, ad basin cuneato-attenuatis, argute serratis supra parciusculae strigosis, subbus dense strigosis; inflorescentiis axillarisibus 3--6 aggregatis; capitulis oblongo-cylindricis densissime flavo-tomentosis; bracteolis ovatis acuminatis.

Herbaceous (?); branches very slender, stramineous, subterete, striate, rather obscurely strigillose; nodes annulate; principal internodes elongate, 5--13 cm. long; leaves ternate or in 4's, subsessile; blades chartaceous, often rather thin, bright-green above, grayish-green beneath, oblanceolate, 4--6 cm. long, 1.3--2 cm. wide, acute at apex, cuneate-attenuate at base, sharply serrate except at and near the base, the teeth small and rather obtuse, antrorse, rather sparsely strigose above, much more densely so beneath; midrib very slender, usually plane above, prominent beneath; secondaries very slender, 4 or 5 per side, ascending, almost indiscernible above, prominent beneath; vein and veinlet reticulation indiscernible above, rather obscure beneath, flat; inflorescence axillary only, 3--6 per node in the uppermost 2 or 3 nodes, usually shorter than the subtending leaves; peduncles slender, 5--15 mm. long, densely white-pubescent with antrorse hairs; heads oblong, cylindrical, 4--11 mm. long, 5--6 mm. wide, very densely yellow-tomentose, all save the lowest bractlets completely hidden by the yellow tomentum; lowest bractlets ovate, about 3 mm. long and 2 mm. wide, acuminate, densely tomentose on the back; corolla about 4 mm. long in all, its limb about 2 mm. wide.

The type of this species was collected by August J. B. Chevalier (no. 67) -- in whose honor it is named -- at Toukota, French Soudan, French West Africa, on December 28, 1898, and is deposited in the herbarium of the Jardin Botanique de l'Etat at Brussels.

LIPPIA DOMINGENSIS Moldenke, sp. nov.

Frutex decumbens; caulis prostratis gracilibus saepe ad nodos radicantibus glabris; ramis tetragonis dense brunneo-puberulis resinosis glabrescentibus; foliis oppositis vel ternatis numerosis parvisimis; petiolis gracilimis strigilloso-puberulis resinosis; laminis crassiusculis ovalibus vel suborbicularibus, ad apicem rotundatis, ad basin acutis, supra valde bullatis rugosisisque scaberrimisque regulariter dentatis, subtus adpresso-pubescentibus.

Prostrate or spreading shrub; stems to 4 feet long, slender, gray, often rooting at the nodes, glabrous, the bark exfoliating in age; branches numerous, short, very slender, tetragonal, densely brownish-puberulent, resin-
ous, glabrescent in age; branchlets and twigs numerous, very slender, tetragonal, densely brownish-puberulent, resinous; nodes annulate; principal internodes abbreviated, 3--20 mm. long; leaves decussate-opposite or ternate, numerous, very small; petals very slender, 1--2.5 mm. long, strigillose-puberulent, resinous; blades very small, rather thick-textured, bright-green above, somewhat lighter beneath, oval or suborbicular, 4--15 mm. long, 3--11 mm. wide, rounded at apex, acute at base, deeply bullate above, the margins regularly dentate with small rounded rather spreading teeth, rugose and very scabrous above, appressed-pubescent or strigose beneath and somewhat resinous; midrib slender, deeply impressed above, very prominent beneath; secondaries very slender, 3--6 per side, ascending, rather straight, deeply impressed above, very prominent beneath; tertiaries very slender, connecting the secondaries and at right angles to them, rather straight and subparallel, deeply impressed above, prominent beneath; inflorescence axillary, sparse, less than 1 cm. long in all, about equaling the subtending leaves; peduncles very slender, 4--5 mm. long, densely puberulent and resinous; heads few-flowered, subglobose, not elongating in fruit; bractlets elliptic or ob lanceolate, 2.5--3 mm. long, 1 mm. wide, obtuse or subacute at apex, resinous-puberulent; corolla white, its tube 3--4 mm. long, slightly surpassing the subtending bractlets; corolla-limb 1--1.5 mm. wide.

The type of this species was collected by Richard A. and E. S. Howard (no. 5110) at the edge of a limestone ravine in pine woods along the trail between Federales and Aceitual, alt. 4200 feet, prov. Barahona, Dominican Republic, between August 8 and 12, 1946, and is deposited in the Britton Herbarium at the New York Botanical Garden. The collectors note that only 4 flowers open at a time in each head.

LIPPIA LEPIDA Moldenke, sp. nov.

Planta pumila, ad basin lignosa, usque ad 15 cm. alta; caulibus gracilibus subteretibus dense breviterque pubescentibus saepe glanduliferis; foliis oppositis sessilibus ellipticis obtusis argutae serratis, ad basin subacutis vel obtusis, supra dense breviterque pubescentibus, subtus albo-tomentosis; inflorescentiis capitatis; bracteis magnis ovato-ellipticis acutis glandulosae-pubescentibus imbricatis

Dwarf plant, apparently from a woody base, to 15 cm. tall; stems slender, subterete, densely short-pubescent with spreading often gland-tipped hairs, brown macroscopically, but glistening-silvery microscopically; nodes 2--4, not annulate; internodes 2.5--5.5 cm. long, or the very lowest abbreviated to 1 cm. or less; leaves 1--4 pairs, de-
cussate-opposite, sessile, elliptic, 7--14 mm. long, 4--8 mm. wide, obtuse at apex, sharply serrate, subacute or obtuse at base, densely short-pubescent above and white-tomentose beneath; inflorescence capitate, usually two at each of the 1 or 2 upper nodes and a single terminal one; peduncles very slender, 1--3.5 cm. long, densely glandular-pubescent like the stems; heads hemispheric, about 1 cm. long and 1.5 cm. wide, densely many-flowered; bracts large, ovate-elliptic, about 5 mm. long and wide, acute at apex, glandular-pubescent, overlapping; corolla rose, hypocraeteriform, projecting about 5 mm. beyond the bracts, its limb 5 mm. or more wide.

The type of this little species was collected by A. F. M. Glaziou (no. 21891) near the encampment at Corrego do Brejo, Goayaz, Brazil, in March or April, 1883, and is deposited in the herbarium of the Jardin Botanique de l'Etat at Brussels.

LIFFIA SCHLIEBENI Moldenke, sp. nov.

Fruticulus; caulibus ramisque griseis obtuse tetragonis scabrellis; ramulis tetragonis bruneis breviter pubescentibus vel puberulis; foliis oppositis numerosis; petiolis dense puberulis; laminis chartacea ovaris acutis dense serrularatis, as basin acuminatis, supra scabris bullatisque, subtus adpresso-canescento-puberulis; inflorescentiis axillariibus spicatis usque ad 2 cm. elongatis.

Dense bush; stems and branches gray, obtusely tetragonal, scabrellous; twigs tetragonal, short-pubescent or puberulent, brownish; nodes not annulate; leaf-scars elevated, corky; principal internodes 2--15 mm. long on twigs, to 5 cm. long on the main stem; leaves decussate-opposite, numerous; petioles slender, 1--6 mm. long, densely puberulent; blades chartaceous, bright-green above, lighter beneath, ovate, 1.5--3 cm. long, 5--15 mm. wide, acute at apex, densely serrulate, acuminate at base, scabrous and bullate above, appressed canescent-puberulent beneath; midrib slender, deeply impressed above, prominent beneath; secondary slender, 3--5 per side, ascending, not much arcuate, deeply impressed above, prominent beneath; vein and veinlet reticulation beautifully conspicuous and deeply impressed above, prominent beneath; inflorescence axillary, abundant, spicate, 2 per node; peduncles slender, 2--6 cm. long, densely puberulent, glabrescent in age; spikes subcapitate during anthesis, elongate to 2 cm. in fruit, densely many-flowered; bracts ovate, numerous, reflexed during anthesis, about 5 mm. long and 3 mm. wide, attenuate at apex, densely puberulent on both surfaces; corolla hypocraeteriform, white, surpassing the subtending bract by about 3 mm., densely pubescent on the outer surface, its limb about 3 mm. wide

The type of this species was collected by H. J. Schlieben
LIPPIA STROBILIFORMIS Moldenke, sp. nov.

Fruticul5us (?); caulibus gracilibus tetragonis sulcatis strigillosis; ramis paucis brevibus; foliis oppositis; petiolis gracilibus strigosis; laminis ferme chartaceis lanceolatis vel ellipticis acutis regulariter serratulis, ad basin acutis, supra scabris subbullatisque, subtus puberulis resinose-granulatis; inflorescentiis axillaris spicato-strobiliformibus numerosis; bracteis magnis peracutis.

Stems slender, tetragonal, ridged and sulcate, strigillose; branches few, short; nodes not annulate; principal internodes 3.5--6 cm. long; leaves decussate-opposite; petioles slender, 2--5 mm. long, strigose; blades firmly chartaceous, grayish-green on both surfaces, lanceolate or elliptic, 3--6 cm. long, 1--2 cm. wide, acute at apex, regularly serrulate along the margins, acute at base, scabrous and slightly subbullate above, puberulent and resinous-granular beneath; midrib slender, subprominulous above, prominulous beneath; secondaries slender, 6--8 per side, ascending, only slightly arcuate, subimpressed above, prominulous beneath; vein and veinlet reticulation subimpressed above, subprominulous beneath; inflorescence axillary, spicate-strobiliform, 2 per node, abundant; peduncles slender, firm, ascending, 1--3.8 cm. long, tetragonal, strigillose; spikes very densely capitate, to 2 cm. long and 1.5 cm. wide; bracts large and conspicuous, very numerous, very closely imbricate and appressed antorsely, ovate, about 7 mm. long, 4--5 mm. wide, abruptly acute or subacuminate at apex, very densely appressed-pubescent with antorse hairs which project prominently beyond the margins and form what appears macroscopically like a light border to the bracts; corolla hypocrateriform, its tube 7--8 mm. long, densely puberulent outside, the limb about 4 mm. wide.

The type of this handsome species was collected by Captain Storms (no. 3) at Kārema, Tanganyika Territory, and is deposited in the herbarium of the Jardin Botanique de l'Etat at Brussels. The long slender roots are remarkable because of the large number of sessile nodules which they bear. These nodules are 2--4 mm. in diameter.

LIPPIA STROBILIFORMIS var. ACUMINATA Moldenke, var. nov.

Haec varietas a forma typica speciei recedit foliis saepe ternatis, inflorescentiis saepe ternatis, spicis dense capitatis, bracteis valde patentibus non appressis lanceolato-ovatis longe acuminatis dense puberulis.
This variety differs from the typical form of the species in having often ternate leaves and inflorescences and in having the bracts of its dense capitae spikes wide-spread- ing, not appressed, lanceolate-ovate, about 1 cm. long, 4--
4.5 mm. wide, long-acuminate at the apex, densely puberu-

tent, without a light border. The mature spikes are 2 cm.
wide and the peduncles are to 4.5 cm. long.

The type of this variety was collected by Père Hyacinthe
Vandervost (no. 17168) in the region of Panzi, Belgian Congo,
in 1925, and is deposited in the herbarium of the Jardín
Botánico de l'Etat at Brussels.

LIPPIA STROBILIFORMIS var. PARVIFOLIA Moldenke, var. nov.

Haec varietas a forma typica speciei recedit foliis par-
vioribus, petiolaribus 1 mm. longis vel obsolete, laminis ellip-
ticis 1.5--3 cm. longis, 6--14 mm. latiss; bracteis paten-
tibus vel reflexis ovatis non adpressis breviter acuminatis.

This variety differs from the typical form of the species in its smaller leaves, the petioles being 1 mm. long or ob-
selete, the blades elliptic, 1.5--3 cm. long, 6--14 mm.
wide; inflorescences 2--4 per node, 1--5 cm. long; and the
bracts spreading or reflexed, closely imbricate but not ap-
pressed, ovate, 7--8 mm. long, 3--4 mm. wide, short-acumin-
ate at the apex, densely appressed-puberulent, sometimes
subrevolute along the margins, without a lighter margin or
with an obscure one.

The type of this variety was collected by Père Hyacinthe
Vandervost (no. 23423) at Mérero, Belgian Congo, and is de-
posited in the herbarium of the Jardín Botánico de L'Etat
at Brussels.

LIPPIA WOODII Moldenke, sp. nov.

Herba; caulibus plerumque simplicibus dense puberulis;
foliis oppositis paucis; petiolaribus strigosis-puberulis; lam-
inis chartaceis rectis angustis ellipticis supra scabris
subbullatisque, subtus dense puberulis vel breviter pubes-
centibus; inflorescentiis capitato-spicatis multifloris

Herb; stems subterete toward the base, subtetragonal
toward the apex, mostly unbranched, densely puberulent,
less densely so in age; nodes not annulate; principal inter-
nodes 3--14.5 cm. long; leaves decussate-opposite, few, usu-
ally with a very much abbreviated branchlet and a few small
leaves in their axils; petioles slender, 1--5 mm. long,
strigose-puberulent; blades chartaceous, rather grayish-
green on both surfaces, apparently erect on the stem, nar-
rowly elliptic, 4--6 cm. long, 8--12 mm. wide, scabrous and
subbullate above, densely puberulent or short-pubescent be-
neath; midrib slender, impressed above; secondaries very
slender, 4--6 per side, impressed above, ascending, not much
arcuate, prominulous beneath; veinlet reticulation impressed above, prominent beneath; inflorescence capitate-spicate, 2 per node at the uppermost 2 or 3 nodes, about equaling the subtending leaves; peduncles slender, 2--4.5 cm. long, densely short-pubescent with brown hairs; spikes capitate, about 1 cm. long, 1.2--1.4 cm. wide, densely many-flowered; bracts narrowly lanceolate, the lowest about 7 mm. long, 2--2.5 mm. wide, long-acuminate or caudate at apex, densely short-pubescent with subappressed hairs, far surpassing the flowers; corolla hypocrateriform, 3--4 mm. long, densely short-pubescent with whitish hairs outside, the limb 1--1.5 mm. wide.

The type of this species was collected by J. Buchanan (J. Medley Wood 6937) at Blantyre, Nyassaland, and is no. 83375 in the herbarium of the Chicago Natural History Museum.

LYCHNIS COELI-ROSA f. COERULEA Moldenke, f. nov.

Haec forma a forma typica speciei corolla coeruleis recedit. - This form differs from the typical form of the species in its sky-blue corollas.

The type was collected by me (no. 10021) from cultivated plants at Villa Elsinore, Watchung, Somerset Co., New Jersey on July 31, 1937, and is deposited in the Britton Herbarium at the New York Botanical Garden.

MENTHA GENTILIS f. VARIEGATA Moldenke, f. nov.

Haec forma a forma typica speciei foliis albo-variegatis recedit. - This form differs from the typical form of the species in having its leaf-blades variegated with white.

The type was collected by me (no. 8648) from cultivated plants at Leonia, Bergen Co., New Jersey, on July 15, 1935, and is deposited in the Britton Herbarium at the New York Botanical Garden.

NICOTIANA ALATA var. GRANDIFLORA f. RUBELLA Moldenke, f. nov.

Haec forma a forma typica varietatis corolla rubellis recedit. - This form differs from the typical form of the variety in its pink corollas.

The type was collected by me (no. 8122) from cultivated plants at Villa Elsinore, Watchung, Somerset Co., New Jersey, on July 25, 1934, and is deposited in the Britton Herbarium at the New York Botanical Garden.

NIGELLA DAMASCENA f. PLENIFLORA Moldenke, f. nov.

Haec forma a forma typica speciei corollis plenis recedit. - This form differs from the typical form of the species in its "doubled" corollas.

The type was collected by me (no. 3038) from cultivated plants at Villa Elsinore, Watchung, Somerset Co., New Jer-
sey, on August 9, 1926, and is deposited in the Britton Herbarium at the New York Botanical Garden.

NOLANA ATRIPICIFOLIA f. ALBA (Fletcher) Moldenke, combinov.

X ROSA DAWSONI Moldenke, nomine nov.
Rosa multiflora Thunb. x R. borboniana Desp. ex Rehd.,
Man. Cult. Trees & Shrubs, ed. 2, 445. 1940

X ROSA FELICITA Moldenke, nomine nov.
Rosa sempervirens L. x R. chinensis Jacq. ex Rehd., Man.
Cult. Trees & Shrubs, ed. 2, 448. 1940.

RUDBECKIA HIRTA f. FLÉNIFLORA Moldenke, f. nov.
Haec forma a forma typica speciei capitulis minusve
toto ligulatis recedit. - This form differs from the typical
form of the species in having its flower-heads with several
to many supernumerary series of rays.
The type was collected by me (no. 2058) in a grassy field
in the valley between the First and Second Mountains, Watch-
ing, Somerset Co., New Jersey, on July 27, 1924, and is de-
posited in the Britton Herbarium at the New York Botanical
Garden.

SANVITALIA PROCUMBENS f. FLÉNIFLORA Moldenke, nomine nov.
Sanvitalia procumbens var. flore-pleno Hort. ex Barclay

STACHYTARPEA AMPLEXICAULIS Moldenke, ap. nov.
Herba suffrutescens; caulibus ut videtur simplicibus ter-
etibus dense puberulis; foliis oppositis amplexicaulis;
laminis chartaceis brunnescentibus ovatis, ad apicem attenua-
atis vel acuminatis, serratis, ad basin abrupte angustatis,
supra minute pulverulis vel glabrescentibus, subtus dense
puberulis; inflorescentiis solitariis spicatis densifloris.
Suffrutescent herb; stems apparently simple, terete,
densely puberulent, straight; principal internodes 9–10 cm.
long; leaves decussate-opposite, amplexicaul at base; blades
chartaceous, dark-green on both surfaces, brunnescence in
drying, ovate, 4.5–8.5 cm. long, 1.9–4 cm. wide, attenuate
or acuminated at apex, serrate along the margins with appres-
sed rounded very regular teeth, abruptly narrowed at base
into a broadly winged petiole about 1 cm. long and 8 mm.
wide, cordate-claaping around the stem, the auricles of the
opposite leaves overlapping each other, minutely and very
inconspicuousely puberulent or glabrescent above, densely
puberulent beneath; midrib slender, plane above, very incon-
spicuously prominent beneath; secondaries very slender, about 5 per side, arcuate-ascending, obscure above, slightly prominent and densely puberulent beneath; vein and veinlet reticulation indiscernible above, the secondaries only prominent beneath; inflorescence terminal, solitary, spicate; peduncles short, 1–2 cm. long, puberulent-pulverulent; spikes (immature) 6–11 cm. long, densely flowered; rachis puberulent, shallowly sculptured in age, ridged; bractlets lanceolate, about 1 cm. long, long-attenuate or caudate at apex, puberulent; calyx tubular, about 12 mm. long, puberulent, irregularly toothed at apex, the teeth 1–2 mm. long, triangular, sharply acute; corolla hypocrateriform, blue, the tube projecting 5 mm. or more from the calyx, glabrous.

The type of this very distinct species was collected by Auguste François Marie Glaziou (no. 13063) at Congonhas do Campo, Minas Gerais, Brazil, in June or July between 1861 and 1895, and is deposited in the herbarium of the Jardin Botanique de l'Etat at Brussels.

TECTONA GRANDIS var. GLABRIFOLIA Moldenke, var. nov.

Haec varietas a forma typica speciei recedit foliis subtus ut videtur glabris valde pallidis subargentis.

This variety differs from the typical form of the species in having the puberulence on the lower leaf-surface so closely appressed and obscure as to impart to the leaves a glabrous appearance except under the microscope. The lower leaf-surfaces are also very pale, almost silvery.

The type of the variety was collected by John W. Gillespie (no. 4544) on the overland trail to the other side of the island, in the mountains south of Levuka, Ovalau, Fiji Islands, at an altitude of 250 meters, on January 31, 1928, and is deposited in the Britton Herbarium at the New York Botanical Garden. The collector states that the plants were doubtless introduced.

TITHYMALOFSIS IPECACUANHAE f. LINEARIS Moldenke, f. nov.

Haec forma a forma typica speciei foliis linearibus rubrosis recedit. - This form differs from the typical form of the species in its linear and red leaf-blades.

The type was collected by me (no. 10478) in sand along a roadside at Smithtown, Suffolk Co., New York, on May 29, 1938, and is deposited in the Britton Herbarium at the New York Botanical Garden.

VERBENA HUNZIKERI Moldenke, sp. nov.

Herba brachiata, ad basin sublignossa; caulibus procumbentibus; remis numerosis gracilibus adscendentibus irregulatiter laxeque piloso-pubescentibus glabrescentibus; petiolis elongatis gracillimis dense patento-pubescentibus; lam-
inis deltoideo-ovatis, ad apicem attenuatis, ad basin truncatis, crasse dentatis supra parce pilosis subtus dense piloso-pubescentibus; inflorescentiis terminalibus depresso-spicatis multifloris.

Branching herb, somewhat woody at the base; stems procumbent; branches numerous, slender, ascending, irregularly and loosely pilose-pubescent with whitish hairs of various lengths and standing out almost at right angles to the stems, glabrescent in age, tetragonal; nodes annulate; principal internodes 1.5--5 cm. long; leaves decussate-opposite; petioles elongate, very slender, 6--13 mm. long, densely spreading-pubescent like the younger branches; blades thin-chartaceous, rather uniformly bright-green on both surfaces or slightly lighter beneath, deltoid-ovate, 1.8--3.5 cm. long, 9--18 mm. wide, regularly narrowed from the broad base to the attenuate apex, truncate at base, coarsely and rather irregularly sharp-toothed along the margins with antrorse teeth, sparsely pilose above, densely pilose-pubescent beneath, less densely so in age and the hair then mostly concentrated on the larger venation; midrib very slender, plane above, slightly prominent beneath; secondaries very slender, 4--6 per side, ascending, only slightly arcuate, obscure or very slightly subimpressed above, obscure or slightly prominent beneath; inflorescence terminal, depressed-spicate, many-flowered; peduncles slender, continuous with the stem, rather densely pilose-pubescent like the stems, often with some gland-tipped hairs, 2--3 cm. long; spikes up to about 3 cm. long and 3.5 cm wide in anthesis; bractlets narrowly lanceolate, about 4 mm. long and 1 mm. wide, glabrate except for the long-ciliate margins, sharply attenuate at apex; calyx tubular, about 8 mm. long, short-pilose on 4 parallel ribs, otherwise subglabrate, the sharply acute teeth 1--1.5 mm. long, irregular; corolla-tube 1.3--1.8 cm. long, more or less puberulent outside, its limb to 1.3 cm. wide, the lobes deeply cordate.

The type of this species was collected by Armando T. Hunziker (no. 6812) -- in whose honor it is named -- in the alder formation along the highway between Alto del Clavillo and Alpachiri, Tucumán, Argentina, on September 16, 1946, and is deposited in the Britton Herbarium at the New York Botanical Garden. The species is obviously related to V. phlogiflora Cham. and V. incisa Hook. whose densely pubescent calyces at once distinguish them.

VERBENA LINDBERGI Moldenke, sp. nov.

Herba; caulibus 1 m. altis brachistis obtuse tetragonis reflexo-hispidulis; ramis adscendentibus tetragonis sulcatis hispidulis; petiolis 1--2 mm. longis breviter hispidulis vel obsoletis; laminis chartaceis oblongo-lanceolatis acutis, ad
basin abrupte acutis vel subtruncatis, remote serrulatis, supra strigilloso-scarbis, subus secus venulis sparsiusculse hispidulis; inflorescentiis spicatis paniculatis paucifloris juventute conglobatis, senectute usque ad 1.5 cm. elongatis.

Herb; stamia 1 m. or more tall, branched above, obtusely tetragonal, hispidulous with reflexed hairs about 1 mm. long, wearing off at the base of the stem in age; branches decussate-opposite, slender, ascending, tetragonal, sulcate in drying, hispidulous like the stems; nodes annulate; principal internodes 5.5--14 cm. long; leaves rather sparse, decussate-opposite, sessile or subsessile; petioles, when present, 1--2 mm. long, short-hispidulous; blades chartaceous, dark-green above, slightly lighter beneath, oblong-lanceolate, 2--4 cm. long, 6--11 mm. wide, acute at apex, abruptly acute or subtruncate at base, rather remotely serrulate along the margins, the points of the appressed teeth 4--5 mm. apart on mature leaves, strigillosa-scarbrous with whitish antrorse bulbous-based hairs above, rather sparsely short-hispidulous along the venation beneath; midrib indiscernible above, very inconspicuously prominulous beneath, very slender; secondaries very slender, about 3 per side, ascending, indiscernible above, very indistinctly prominulous beneath; vein and veinlet reticulation indiscernible above, obscure beneath; inflorescence spicata, terminating each lateral branch and in a panicle of about 6 branches at the apex of the stem; peduncles slender, tetragonal, sulcate in drying, hispidulous, 1--7.5 cm. long, those terminating the branches usually quite short; spikes rather few-flowered, densely conglobate when young, elongating to about 1.5 cm. in fruit and the lower fruits then imbricate but not especially densely so; bracts in the terminal panicle foliaceous, lanceolate, 0.5--2 cm. long, 1--5 mm. wide, attenuate to the sharp apex, short-hispidulous on both surfaces, sessile, in decussate-opposite pairs; bractlets lanceolate, about 2.5 mm. long and 1 mm. wide, sparsely puberulent, the margins often ciliolate, attenuate at apex, about half as long as the fruiting-calyx; calyx tubular, 4--5 mm. long, short-toothed, spreading-puberulent with antrorse hairs; corolla-tube about 5 mm. long, its limb about 1.5 mm. wide.

The type of this species was collected by Gösta A. Lindberg (no. 136) -- in whose honor it is named -- in swamps at Ribeiro dos Bugriss, in the neighborhood of Caldas, Minas Gerais, Brazil, on November 1, 1854, and is deposited in the herbarium of the Jardin Botanique de l'Etat at Brussels.

**XEREBENA OSTEIN** Moldenke, hybr. nov.

Planta hybrida naturalis; caulibus gracilibus plusminusve dense breviterque pubescentibus, novellis patento-pubes-
centibus vel hirsutulis; pedunculis ca. 1.5 cm. longis vel suboboletis dense patenti-hirtellis; capitulis dense pauci-
floris; bracteolis lanceolatis longe attenuatis ciliatis.

A natural hybrid between V. peruviana (L.) Britton and V.
platensis Spreng., with intermediate characters; stems slen-
der, more or less densely short-pubescent, the younger parts
spreading-pubescent or hirtellous; pedicels about 1 mm.
long, hirtellous; blades small, ovate, 1-1.5 cm. long, 4-9
mm. wide, coarsely dentate, pubulate-scabrous and very
sparingly or more densely trigose-hirsutulous above, scat-
tered-pubescent or hirsutulous beneath, especially on the
larger venation; peduncles about 1.5 cm. long or almost ob-
solete, densely spreading-hirtellous with hair of several
lengths; heads densely rather few-flowered; bractlets lance-
olate, 5-6 mm. long, long-attenuate, densely short-pubes-
cent, long-ciliate on the margins; calyx about 1 cm. long,
densely hirsutulous, irregularly apiculate; corolla light-
red, its tube glabrous, about 15 mm. long, its limb about 15
mm. wide.

The type of this natural hybrid was collected by Cornel.
Osten -- in whose honor it is named -- between plants of the
parent species at Coquimbo, dept. Soriano, Uruguay, on Nov-
ember 16, 1894, and is deposited in the herbarium of the
Museo de Historia Natural at Montevideo.

VERBENA PERUVIANA f. ROSEA Moldenke, f. nov.
Haec forma a forma typica speciei corollis rossis recedit.
This form differs from the typical form of the species in
having pink instead of bright-scarlet corollas.

The type was collected by Cornel. Osten at Arroyo Grande,
dept. Soriano, Uruguay, on October 3, 1895, and is deposited
in the herbarium of the Museo de Historia Natural at Monte-
video.

XANTHOXALIS EUROPAEA var. ATROFURPURA (Planch.) Moldenke,
comb. nov.

Oxalis corniculata var. atropurpurea Planch., Fl. Serres
12: 47. 1857.

XYLOPHACOS FURSHII var. INTERIOR (M. E. Jones) Moldenke,
comb. nov.

Astragalus purshii var. interior M. E. Jones, Astragalus
222. 1923.

XYLOPHACOS FURSHII var. LEUCOLOBUS (M. E. Jones) Moldenke,
comb. nov.

Astragalus purshii var. leucolobus M. E. Jones, Contrib.