

CONTRIBUTIONS TO THE FLORA OF EXTRA-TROPICAL SOUTH AMERICA

I

BY HAROLD N. MOLDENKE

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RESUMEN

Contribuciones a la flora de Sudamérica extratropical. I. — En el presente trabajo, además del autor, 19 especialistas de distintas familias estudiaron unos 5000 ejemplares del Herbario Krukoff, citando en él, 1335 de ellos, correspondientes a 27 familias. Se discuten 270 géneros distintos, especies, variedades y formas. Se proponen setenta nombres nuevos, correspondiendo uno de ellos a un género, 19 a especies y 42 a combinaciones nuevas; los restantes a variedades, formas, etc. El material citado pertenece en una gran parte a Argentina.

Herewith I begin a series of papers on the flora of extra-tropical South America. The present contribution is a partial report on the 5000-sheet B. A. Krukoff herbarium, which has recently been turned over to me for study and identification. Various families have been assigned to specialists in those groups, who have graciously offered their services and to whom I wish to make public acknowledgement herewith. Some of their reports are presented in this paper. The names of the specialists responsible for the identification of various families are given in parentheses after the family name in these notes. Groups not so accredited have been contributed by the present writer. Abbreviations of herbarium names employed herein to indicate where the specimens are deposited are as follows: A = Arnold Arboretum, Jamaica Plain, Mass.; B = Botanisches Museum, Berlin; Bm = British Museum (Natural History),

London; Br = Jardin Botanique de l'Etat, Brussels; C = Columbia University, New York City; Ca = University of California, Berkeley; Cb = Delessert Herbarium, Conservatoire Botanique, Geneva; Cp = Universitetets Botaniske Museum, Copenhagen; Dc = De Candolle Herbarium, Conservatoire Botanique, Geneva; E = Missouri Botanical Garden, St. Louis; Ed = Royal Botanic Garden, Edinburgh; F = Field Museum of Natural History, Chicago; G = Gray Herbarium of Harvard University, Cambridge, Mass.; K = Royal Botanic Gardens, Kew; L = Jardin Botanique Principal, Leningrad; La = University of California at Los Angeles; M = Meisner Herbarium, New York Botanical Garden; Mu = Botanisches Museum, Munich; N = Britton Herbarium, New York Botanical Garden; Ol = Universitetets Botaniske Museum, Oslo; P = Muséum National d'Histoire Naturelle, Paris; Po = Pomona College, Claremont, Calif.; S = Naturhistoriska Riksmuseet, Stockholm; Sp = Instituto Biológico de Defesa Agrícola e Animal, São Paulo; T = Torrey Herbarium, New York Botanical Garden; Ur = University of Illinois, Urbana; V = Naturhistorisches Museum, Vienna; W = United States National Herbarium, Washington; X = Herbier Boissier, Université de Genève; and Z = H. N. Moldenke herbarium, Watchung, N. J.

ELODEACEAE

by Harold St. John

Egeria densa Planch. — ARGENTINA : « Chana », Delta, January, 1914, A. Scala 40 (N-3).

BROMELIACEAE

by Lyman B. Smith

Bromelia serrata Griseb. — ARGENTINA : Growing in the interior, among the mountains, Monte alto, Orán, Salta, December 6, 1913, D. Rodríguez 1165 (N), flowers clear blue.

Puya Lilloi Castellanos — ARGENTINA : La Hoyada, Tafí, Tucumán, November 23, 1921, Schreiter 588 [Herb. Mus. Argent. Cienc. Nat. 27/2345] (N), *isotype*.

Puya spathacea (Griseb.) Mez — ARGENTINA: Guanchín, La Rioja, November 21, 1927, A. Castellanos s. n. [Herb. Mus. Nac. Hist. Nat. Buenos Aires 27/1902] (N), cited by Castellanos in *Anal. Mus. Nac. B. A.* 36: 54. 1929.

Tillandsia Duratii Vis. — ARGENTINA: Taco Pozo, Chaco, July 13, 1933, A. L. Cabrera 3170 (G, N), epiphyte.

Tillandsia retorta Griseb. — ARGENTINA: Salsipuedes, Colón, Córdoba, January, 1938, G. Dawson 171 (N).

Tillandsia usneoides L. — ARGENTINA: Andean region, Catamarca, Collector undesignated s. n. (N), determined by A. P. Rodrigo; Río Barca Grande, delta of the Paraná, Buenos Aires, January 20, 1931, A. L. Cabrera 1635 (N), epiphyte, determined originally as *T. usneoides* var. *ferruginea* André.

Tillandsia xiphioides Ker-Gawl — ARGENTINA: Valle de Cafayate, Salta, January 7, 1914, D. Rodríguez 1252 (N), adhering tree-trunks, flowers white; La Florida, Tucumán, December, 1896, C. Bruch s. n. (N), determined as *T. Lorentziana* Griseb. by A. P. Rodrigo.

Vriesia procera (Mart.) Wittm. — PARAGUAY: in woods, Pirapá, December 5, 1876, N. Alboff s. n. (N).

ORCHIDACEAE

by Louis O. Williams

Asarca glandulifera Poepp. et Endl. — ARGENTINA: Isla Victoria, Río Negro, región del Lago Nahuel Huapi, January 9, 1935, A. L. Cabrera et M. M. Job 160 (N).

Asarca lutea (Comm.) Skottsb. — ARGENTINA: Cerro López, alt. 1200 m, Río Negro, January 15, 1935, A. L. Cabrera et M. M. Job 320 (N), corolla yellow.

Bipinnula taltalensis I. M. Johnst. (?) — CHILE: La Ventana, Quintero, Valparaiso, alt. about 10 m, September, 1923, E. Werdermann 1824 (N). The flowers of this specimen are much smaller than those of the type.

Chloraea magellanica Hook. f. — CHILE : Volcán Llaima, alt. about 1300 m, Cautín, February, 1927, E. Werdermann 1233 (N).

Habenaria bractescens Lindl. — ARGENTINA : on dunes in wet valleys, Juancho, Buenos Aires, January 3, 1933, A. L. Cabrera 2710 (N), originally distributed as *H. Burkartiana* Hoehne; among rushes, San Clemente, Partido de General Lavalle, Buenos Aires, January 31, 1939, A. L. Cabrera 4951 (N), originally distributed as *H. Burkartiana* Hoehne.

Stenorrhynchus bonariensis (Lindl.) Cogn. — ARGENTINA : in very wet places near the river, Punta Lara, cerca de La Plata, Buenos Aires, April 28, 1931, A. L. Cabrera 1724 (N), determined also as this species by Cabrera.

PIPERACEAE

by William Trelease

Peperomia Theodori Trelease sp. nov.

Peperomia reflexa longilimba Auct., in part, as to Argentine material.

Herba parviuscula ; caulis puberulus ; foliis elongato ellipticis, utrinque obtusis vel subacute, glabris subrevolutis ; bracteis rotundato-peltatis.

A moderately small, spreading, forking herb; stem 2 mm thick, somewhat puberulent; leaves commonly 4 or 5 at a node, elongate-elliptic, obtuse or subacute at both ends, 6.8×12.22 mm, not observably nerved, glabrous, granular beneath, somewhat revolute, drying green; petiole 1 mm long, glabrate; spikes terminal, straight, 1×20 mm; peduncle 5-10 mm long, velvety; bracts round-peltate; rachis honeycombed, slightly velvety on the ridges. Named in honor of Theodore Stuckert.

ARGENTINA: Yerba Buena, Tucumán, Lillo 22.510 (Cb), type; Alemania, alt. 1400 m, Salta, December 15, 1929, S. Venturi 9974 (N), plants epiphytic, flowers rose.

Piper Lorentzii Trelease, sp. nov.

Frutex (?) ; foliis late ellipticis usque ad ovatis acuminatis, ad basim subaequilateraliter obtusis vel partim subacutis, 7-nervatis; petiolis ad basim alatis; bracteis subpeltatis.

A shrub (?) ; leaves broadly elliptic to ovate, acuminate, sub-equilaterally obtuse at base or with one side subacute, 8×12 - 14 cm, 7-nerved, the axes and nerves (at least toward the base) puberulent; petiole 10-20 mm long, winged below; spikes 3, becoming $5 \times$ some 40-50 mm; bracts subpeltate; berries ovoid, subapiculate; stigmas 3, sessile.

ARGENTINA : Orán, Salta, Lorentz et Hieronymus 383 (De), type; shrub 3 m tall, El Cedral, Orán, Salta, October 27, 1918, D. Rodriguez 1060 (N); no locality, 1873, Lorentz s. n. (P), called « yerba del soldado ».

SALICACEAE

by Carlton R. Ball

Salix fragilis L. — ARGENTINA : Isla Santiago, along the La Plata, Buenos Aires, October 12, 1931, A. L. Cabrera 1784 (N), a tree; arroyo and serranías of Bravard, along the road to Pigüé, Buenos Aires, November 15, 1928. A. C. Scala s. n. (N-2). Introduced from Europe.

Salix Humboldiana Willd. — According to Schneider (*Bot. Gaz.* 65 : 5-9 1918), the principal South American literature and synonymy of this willow are as follows :

S. Humboldiana Willd., *Sp. Pl.* 4 : 657. 1805 ; Kunt, in *Humb. et Bonpl.*, *Nov. Gen. Pl.* 2 : 19, pl. 99 et 100. 1817 ; *Syn. Pl. Aequin.* 1 : 364. 1822 ; Gay, *Hist. Chile Bot.* 5 : 384. 1849 ; Leybold in Mart., *Fl. Bras.* 4 (1) : 227, pl. 71. 1855 ; Andersson, *Kon. Sven. Vet. Akad. Handl.* 6 : 16 [*Monog. Sal.*]. 1867 ; Philippi, *Cat. Pl. Vasc. Chile* 267. 1881 ; Hieron., *Pl. Diaph. Fl. Argent.* 271. 1882 ; Macloskie in *Princeton Univ. Exped. Patagonia* 8 (1) : *Bot.* 325 [*Fl. Pat.*]. 1903-1906.

S. chilensis Molina (*Saggio Storia Nat. Chile* 169. 1782) as understood by Morong and Britton in *Ann. N. Y. Acad. Sci.* 7 : 231

[*Enum. Pl. Morong Paraguay*]. 1892. Schneider thinks that Molina's plant was not a species of *Salix*.

S. magellanica Poir. in Lam., *Encycl. Suppl.* 5 : 66. 1817.

S. falcata H. B. K., *Nov. Gen. et Sp. Pl.* 2 : 23. 1817 [not. Pursh]; Andersson, *loc. cit.* p. 17 (as quasi species).

Salix Humboldtiana belongs to the Section *Nigrae* Loudon, containing also *S. nigra* Marshall and *S. Gooddingii* Ball of temperate North America. This Section is not represented in the Old World. It belongs, however, to the Group *Pleonandrae* von Seemen, tree willows with many stamens which occur chiefly in the warm temperate and subtropical lowlands of both hemispheres, from the Philippini Islands to the Americas. Of the dozen or more species of this Group in North America, *S. Humboldtiana* is the only one to penetrate Central and South America. It occurs from northern Mexico down both sides of the Cordilleran axis to southern South America. Its distribution as a native species is not well understood. In the West Indies and in many parts of Central and South America it obviously has been extensively planted. Photographs of cultivated plants commonly show tall and slender trees with narrow tops, somewhat like Lombardy poplars in habit, and thus resembling the related *S. nigra* and *S. Gooddingii* when growing in thickets.

Our species is characterized by linear leaves, finely serrulate, acuminate, and green on both surfaces. A variety *Martiana* (Leybold) Andersson (in DC., *Prodr.* 16 (2) : 199. 1868) occurs in the upper Amazon valley. It is distinguished by larger capsules, sometimes pubescent when young, and with pubescent pedicels.

Following is a list of the specimens collected in Argentina, but it is not known which, if any, were native plants and which were cultivated: Arroyo Chanacito, Delta, Buenos Aires, 1914, A. C. Scala 513 (N), pistillate; Punta Lara, Buenos Aires, October 25, 1931, A. L. Cabrera 1810 (N), staminate tree; Río Sauce Grande, Sierra de la Ventana, Partido de Tornquist, Buenos Aires, November 6, 1938, A. L. Cabrera 4665 (N), staminate, previously determined as *S. chilensis* Mol. by Cabrera; Punta Lara, Partido La Plata, Buenos Aires, December 1,

1938, A. P. Rodrigo 2223 (N), pistillate; Territ. del Chubut, Collector undesignated s. n. [Univ. Nac. Mus. de La Plata] (N), pistillate, determined as this species also by A. P. Rodrigo; Esquina, on the banks of the Río Corrientes, Prov. Corrientes, December, 1936, A. P. Rodrigo 990 (N), previously determined as *S. chilensis* Mol. by A. P. Rodrigo, vernacular names are «sauce criollo» and «sauce colorado»; Island across from town of Corrientes, northern Chaco territory, November 5, 1896, N. Alboff s. n. (N), staminate; Paraná Guajá, Entre Ríos, Delta del Paraná, November 6, 1929, A. C. Scala 8722 (N), tree, previously determined and distributed as *S. chilensis* Mol.

URTICACEAE

by Ellsworth P. Killip

Parietaria debilis Forst. — ARGENTINA: Bosque de La Plata, Buenos Aires, September 11, 1939, A. L. Cabrera 5266 (N).

Phenax hirtus (Sw.) Wedd. — ARGENTINA: San Pedro, Sierra Santa Bárbara, alt. 750 m, Jujuy, October 13, 1929, S. Venturi 9684 (N), shrub 3 m tall, flowers white, originally distributed as *Acalypha communis* Müll. Arg.

Urera baccifera (L.) Gaud. — ARGENTINA: Vinalito, Yuto, Sta. Bárbara, Jujuy, July 7, 1937, A. L. Cabrera 4069 (N), herb. 1,5 m tall, also determined as this species by Cabrera.

Urtica magellanica Poir. — ARGENTINA: Puerto Meyer, región del Lago Nahuel Huapi, Neuquén, January 10, 1935, A. L. Cabrera et M. M. Job 213 (N).

Urtica urens L. — ARGENTINA: Bosque de La Plata, Partido La Plata, Buenos Aires, July 2, 1938, A. L. Cabrera 4520 (N).

ARISTOLOCHIACEAE

by Ellsworth P. Killip

Aristolochia trilobata L. ? — PARAGUAY: woods between San Pedro and Tabicuary, December 7, 1896, N. Alboff s. n. (N).

BRASSICACEAE

by Reed C. Rollins

Brassica juncea (L.) Coss. — ARGENTINA: Punta Lara, Buenos Aires, November 1, 1939, A. L. Cabrera 5418 (N).

Brassica napus L. — ARGENTINA: Vivero del Bosque, La Plata, Buenos Aires, July 19, 1938, A. L. Cabrera 4529 (N-2); Valle de Tafí, Tucumán, 1908, C. Bruch 12.427 (N), previously determined as *B. campestris* L. ? by A. P. Rodrigo.

Cakile maritima (L.) Scop. — ARGENTINA: on dunes, San Clemente del Tuyú, Lavalle, Buenos Aires, January 29, 1939, A. L. Cabrera 4919 (N).

Cardamine flaccida C. et S. — ARGENTINA: border of arroyo, Isla Santiago, Buenos Aires, October 13, 1935, A. L. Cabrera 3366 (N), perhaps a variety.

Cardamine hirsuta L. — ARGENTINA: lugares sombreados, Vivero del Bosque, La Plata, Buenos Aires, July 19, 1938, A. L. Cabrera 4527 (N-5) : La Parvas, alt. 2900 m, Dept. Chivilcoy, Tucumán, November, 1926, S. Venturi 4618 (N), flowers white.

Cardamine macrostachya Phil. — ARGENTINA: mallines, alt. 1500 m, Cerro López, Río Negro, January 15, 1935, A. L. Cabrera et M. M. Job 334 (N).

Descurainia appendiculata (Griseb.) O. E. Schulz. — ARGENTINA: Valle de Tafí, Tucumán, 1908, C. Bruch. 12.428 (N), previously determined as *D. canescens* (Nutt.) Prantl by A. P. Rodrigo.

Descurainia argentina O. E. Schulz. — ARGENTINA: Bajo Grande, Córdoba, August 9, 1939, R. Maldonado B. 106 (N).

Eruca sativa (L.) Coss. — ARGENTINA: Carmen de Patagones, Partido de Patagones, Buenos Aires, July 29, 1938, A. L. Cabrera 4533 (N).

Lepidium bonariense L. — ARGENTINA: field along the banks of the Riacho Antey, Río Paraná, Antequera, Chaco, Oc-

tober 1933, A. G. Schulz 869 (N); Puerto de La Plata, Buenos Aires, October 15, 1932, A. L. Cabrera 2331 (N).

Penellia petraea (Phil.) O. E. Schulz. — ARGENTINA: Valle de Tafí, Tucumán, 1908, C. Bruch 10.403 (N).

Rorippa nasturtium-aquaticum (L.) Schinz et Thel. — ARGENTINA: at edge of lake, Bariloche, Río Negro, January 5, 1935, A. L. Cabrera et M. M. Job 47 (N).

Sisymbrium frutescens Gill. — ARGENTINA: quebrada los Sauces, Sierra Velazco, Dept. Capital, La Rioja, February, 1939, A. P. Rodrigo 2064 (N), flowers white.

Sisymbrium officinale (L.) Scop. — ARGENTINA: at edge of lake, Bariloche, Río Negro, January 5, 1935, A. L. Cabrera et M. M. Job 92 (N); Estancia Bell, Buenos Aires, October 24, 1939, G. Dawson 792 (N).

ROSACEAE

by Rogers Mc Vaugh

Acaena cylindrostachya R. et P. — ARGENTINA: along shore of lake, Bariloche, Lago Nahuel Huapi, Río Negro, May 1, 1935, A. L. Cabrera et M. M. Job 35 (N).

Acaena ovalifolia R. et P. vel aff. — CHILE: Volcán Yates, alt. 1400 m, Llanquihue, March, 1925, E. Werdermann 660 (N). ARGENTINA: Cerro de La Ventana, Partido de Tornquist, Buenos Aires, November 9, 1938, A. L. Cabrera 4747 (N); alt. 1000 m, Cerro Curumalal Grande, Sierra de Curamalal, Partido de Saavedra, Buenos Aires, November 5, 1939, A. L. Cabrera 5523 (N).

Acaena pinnatifida R. et P. — ARGENTINA: Cerro Bunge, region of Lago Nahuel Huapi, Río Negro, May 1, 1935, A. L. Cabrera et M. M. Job 78 (N).

Duchesnea indica (Andr.) Focke. — CHILE: Corral, alt. about 7 m, Valdivia, January, 1929, A. Hollermayer s. n. [E. Werdermann 1917] (N).

Fragaria chiloensis Duchesne. — CHILE: Panguipulli, alt. about 220 m., Valdivia, November, 1927, A. Hollermayer s. n. [E. Werdermann 1904] (N). ARGENTINA: Cerro Otto, alt. 1300 m, region of Lago Nahuel Huapi, Río Negro, January 7, 1935, A. L. Cabrera et M. M. Job. 137 (N).

Geum magellanicum Comm. — ARGENTINA: Lago del Miní, Delta, Buenos Aires, January, 1914, A. C. Scala 137 (N).

Margyricarpus pinnatus (Lam.) Kuntze. — ARGENTINA: Chapatmalal, Buenos Aires, April 8, 1939, G. Dawson 694 (N), originally distributed as *M. setosus* R. et P.

Rosa micrantha Sm. — ARGENTINA: ubiquitous at Barileche, region of Lago Nahuel Huapi, Río Negro, January 5, 1935, A. L. Cabrera et M. M. Job 119 (N). A native of Europe.

Rubus rosaefolius Sm. vel aff. — ARGENTINA: along the highway and railroad, alt. 400 m, Acheral, Monteros, Tucumán, August 25, 1927, S. Venturi 5231 (N), flowers white. A Japanese species.

FABACEAE

by Boris A. Kruckoff

Erythrina crista-galli L. — ARGENTINA: Isla Santiago, Buenos Aires, December 1, 1935, A. L. Cabrera 3416 (N), tree with red flowers.

PASSIFLORACEAE

by Ellsworth P. Killip

Passiflora caerulea L. — ARGENTINA: Arroyo La Granja, Buenos Aires, October 22, 1939, G. Dawson 771 (N); 5 km north of Capital, Corrientes, November, 1936, A. P. Rodrigo 934 (N), called «mburucuyá», determined also as this species by A. P. Rodrigo; Cosquín, Dept. Punilla, alt. 720 m, Córdoba, July, 1939, A. P. Rodrigo 2249 (N).

Passiflora mooreana Hook. f. — ARGENTINA: Las Breñas, F. C. C. N., alt. 250 m, Chaco, November 14, 1929, S. Ven-

turi 9752 (N), erect, on campos, 60 cm tall, flowers white and blue; Agua de Oro, Dept. Colón, Córdoba, March 10, 1939, G. Dawson 615 (N), originally distributed as *P. coerulea*.

MELASTOMACEAE

by H. A. Gleason

Miconia jucunda (DC.) Triana. — PARAGUAY: in thickets along the road between San Pedro and Tabicuary, December 4, 1896, N. Alboff s. n. (N).

Tibouchina paratropicum Griseb. — ARGENTINA: Valle de Tafí, Tucumán, 1908, C. Bruch s. n. (N); Valle de Tafí, Tucumán, S. Roth s. n. (N).

OENOTHERACEAE

by P. A. Munz

Epilobium brasiliense Hausskn. — ARGENTINA: Paraná Guajú, Buenos Aires, January, 1914, A. C. Scala 114 (N-2); Frente recreo Tiburón, Delta, Río Carabelas, November, 1925, A. C. Scala s. n. (N-2); Delta, Río Chaná, Buenos Aires, January, 1914, A. C. Scala 114 (N); Delta, Largo del Miní, Buenos Aires, January, 1914, A. C. Scala 305 (N); Delta del Paraná, Río Ceibo, Entre Ríos, November 23, 1931, A. L. Cabrera 1945 (N).

Epilobium denticulatum Ruiz et Pav. — ARGENTINA: Valle de Tafí, Tucumán, 1908, C. Bruch s. n. (N-2), previously determined as *E. brasiliense* Hausskn. by A. P. Rodrigo.

Epilobium glaucum Philippi. — ARGENTINA: Río Pico, Territ. del Chubut, S. Roth s. n. (N), previously determined as *E. pedicellare* Presl. by A. P. Rodrigo.

Fuchsia magellanica Lam. — ARGENTINA: Puerto Blest, Territ. del Neuquén, January, 1898, C. Bruch s. n. (N), previously determined as *F. macrostemma* R. et P. by A. P. Rodrigo; Territ. del Neuquén, Collector undesignated s.

n. (N-2), previously determined as *F. macrostemma* R. et P. by A. P. Rodrigo; Puerto Meyer, Territ. del Neuquén, January 10, 1935, A. L. Cabrera et M. M. Job 210 (N); highway from Bariloche to Correntoso, Territ. del Neuquén, March. 20, 1939, A. L. Cabrera 5044 (N).

Jussiaea bonariensis Micheli. — ARGENTINA: Punta Lara, Buenos Aires, February 21, 1939, G. Dawson 384 (N-3, Po); Arroyo Tuyuparé, Delta, Buenos Aires, January, 1914, A. C. Scala 295 (N).

Jussiaea lagunae Morong var. **paraguayensis** (Chodat) Munz. — ARGENTINA: opposite Corrientes, southern Chaco Territory, November 5, 1896, N. Alboff s. n. (N-2).

Jussiaea longifolia DC. var. **major** Micheli. — ARGENTINA: along the highway between S. Ana and Candelaria, Misiones, 1896, N. Alboff s. n. (N); Isla Santiago, frequent along the shores of the La Plata, April 12, 1931, A. L. Cabrera 1712 (N), apparently var. *major*.

Jussiaea longifolia DC. var. **typica** Hassler. — ARGENTINA: Punta Lara, Buenos Aires, February 21, 1939, G. Dawson 384, in part (N); Delta, Largo del Miní, Buenos Aires, January, 1914, A. C. Scala 287 (N).

Jussiaea peruviana L. — ARGENTINA: Punta Lara, Buenos Aires, February 21, 1939, G. Dawson 385 (N).

Jussiaea repens L. var. **peploides** (H. B. K.) Griseb. — ARGENTINA: Arroyo Pay-ubre Grande, Mercedes, Corrientes, November, 1936, A. P. Rodrigo 696 (N), flowers lemon-yellow; Vinalito, Yuto, Dept. Sta. Bárbara, Jujuy, July 9, 1937, A. L. Cabrera 4115 (N); shores of the river, alt. 730 m, Cosquín, Córdoba, January-February, 1936, A. P. Rodrigo 306 (N), aquatic.

Jussiaea sericea Camb. var. **genuina** Munz. — ARGENTINA: neighborhood of Posadas, Colonia Candelaria, Misiones, November 15, 1896, N. Alboff s. n. (N).

Jussiaea uruguayensis Camb. var. **genuina** Munz. — ARGENTINA: lake southeast of praderas, alrededores de La Pla-

ta, Buenos Aires, December 21, 1932, A. L. Cabrera 2650 (N).

Oenothera (Lavauxia) acaulis Cav. — CHILE : Panguipulli, alt. about 140 m, Valdivia, December, 1927, A. Hollermayer s. n. [E. Wedermann 1905] (N).

Oenothera (Raimannia) affinis Camb. — ARGENTINA : thickets at Punta Lara, Buenos Aires, December 12, 1939, G. Dawson 854 (N-2); Hudson, Buenos Aires, December 5, 1938, G. Dawson 391 (N); Paraná Guajú, Delta, Buenos Aires, January, 1914, A. C. Scala 115 (N); Punta Lara, Buenos Aires, February 21, 1939, G. Dawson 381 (N); Andalgalá Río frente al Cerro Duraznos, Catamarca, January, 1937, M. M. Job 1316 (N); highway at Pay-ubre Grande, Mercedes, Corrientes, November, 1936, A. P. Rodrigo 711 (N), flowers lemon-yellow; Frente recreo Tiburón, Río Carabelas, Delta, November, 1925, A. C. Scala s. n. (N).

Oenothera (Euoenothera) campylocalyx Koch et Bouché. — ARGENTINA : Valle de Tafí, Tucumán, 1908, C. Bruch s. n. (N-2); Salsipuedes, Dept. de Colón, Córdoba, March, 1938, G. Dawson 84, in part (N).

Oenothera (Sphaerostigma) contorta Dougl. var. *divaricata* (Gay) Munz. — ARGENTINA : Río Pico, Territ. del Chubut, S. Roth s. n. (N), previously determined as *O. chilensis* Dietr., by A. P. Rodrigo.

Oenothera (Raimannia) indecora Camb. — ARGENTINA : sandy soil, Isla Santiago, Partido de La Plata, Buenos Aires, November 24, 1935, A. L. Cabrera 3406 (N-2), flowers yellow; La Granja, Alta Gracia, Córdoba, February 12, 1937, M. Biraben 1 (N); opposite Corrientes, southern Chaco Territory, November 5, 1896, N. Alboff s. n. (N); highway from Tancacha to Río, Córdoba, December, 1924, A. Scala s. n. (N); Monte Hermoso, Buenos Aires, 1916, E. Carette s. n. (N); banks of the Río Corrientes, Esquina, Corrientes December, 1936, A. P. Rodrigo 979 (N), flowers clear yellow.

Oenothera (Raimannia) mollissima L. — ARGENTINA : Río Tipamayo, alt. 1200 m, Dept. Trancas, Tucumán, April 17,

1926, S. Venturi 4218 (N), flowers salmon, originally distributed as *O. affinis* Camb.; on dunes, San Clemente, Partido de General Lavalle, Buenos Aires, January 29, 1939, A. L. Cabrera 4921 (N); Juancho, on dunes, Buenos Aires, January 15, 1933, A. L. Cabrera 2715 (N); on dunes, Quequén, Buenos Aires, April 8, 1939, G. Dawson 662 (N-2), approaching *O. odorata* Jacq.

Oenothera (Raimannia) odorata Jacq. — ARGENTINA : Territ. del Chubut, Collector undesignated s. n. (N), previously determined as *O. mollissima* L., by A. P. Rodrigo.

Oenothera (Raimannia) Parodiana Munz. — ARGENTINA : Salipuedes, Dept. Colón, Córdoba, March, 1938, G. Dawson 84, in part (N); Unquillo, Córdoba, 1926, C. Bruch s. n. (N-2); highway from Reconquista to Romany, Santa Fe, January-February, 1936, M. M. Job 974 (N), flowers yellow,

ERICACEAE

by W. H. Camp

Pernettya mucronata Gaud. — CHILE : S. José de La Mariquina, alt. about 50 m, Valdivia, November, 1925, E. Werdermann 1171 (N).

Pernettya mucronata var. **angustifolia** Sleum. — CHILE : Piruquina, island of Chiloë, Prov. Chiloë, March, 1924, E. Werderman 1612 (N). Number cited by Sleumer.

Pernettya prostrata var. **Pentlandii** Sleum. — CHILE : S. José de La Mariquina, alt. about 50 m, Valdivia, April, 1926, E. Werdermann 1212 (N).

Pernettya prostrata var. **purpurea** Sleum. — ARGENTINA : Tilcara, alt. 3500 m, Jujuy, February 1926, S. Venturi 6643 (N). Number cited by Sleumer.

LOGANIACEAE

by Lyman B. Smith

Buddleja brasiliensis Jacq. — ARGENTINA : Orán, Dept. Orán, Salta, September 15, 1938, A. L. Cabrera 4576 (N); San

Lorenzo, Dept. Capital, May 28, 1933, A. L. Cabrera, 3073 (N), flowers yellow.

Buddleja cordobensis Griseb. — ARGENTINA: Unquillo, Córdoba, 1926, C. Bruch 1437 (N).

Buddleja grandiflora Cham. et Schlecht. — ARGENTINA: highway from Reconquista to Barros Pazos, Santa Fe, January-February, 1936, M. M. Job 811 (N), flowers orange; El Tostado, Estancia « La Carreta », Santa Fe, January-February, 1936, M. M. Job 1165 (G, N); Villa Angela, Chaco, February, 1930, P. Boffa 1039 (N).

Buddleja Lucae Niederlein. — ARGENTINA: La Florida, Tucumán, December, 1896, C. Bruch s. n. (N), previously determined as *Buddleia cordobensis* Griseb. by A. P. Rodrigo.

Buddleja stachyoides Cham. et Schlecht. — ARGENTINA: along highway to Pay-ubre Grande, Mercedes, Corrientes, November, 1936, A. P. Rodrigo 700 (N), flowers blue at top; Puerto Aguirre, Misiones, July, 1938, J. Frenguelli 4 (N); highway to La Plantadora, San Ignacio, Misiones, July, 1927, A. Scala s. n. (N).

Buddleja thyrsoidea Lam. — URUGUAY: dunes at Riachuelo, Dept. Colonia, October 30, 1938, A. L. Cabrera 4622 (N), a shrub. ARGENTINA: dunes on Isla Martín García, Río de La Plata, September, 1935, A. L. Cabrera 3356 (G, N), a shrub with white flowers; Paraná Guazú, Delta, Buenos Aires, A. C. Scala 168 (N); on the dunes, Isla Martín García, Río de La Plata, October, 1934, A. L. Cabrera 2870 (N).

Buddleja tucumanensis Griseb. — ARGENTINA: hills around Jujuy, Dept. Capital, Jujuy, September 11, A. L. Cabrera 4555 (N), a shrub; Capilla de los Remedios, Córdoba, August 19, 1939, R. Maldonado B. 115 (N); Vespucio, Sierra de Aguaray, Dept. Orán, Salta, July 14, 1937, A. L. Cabrera, 4192 (N), a shrub; ravines of the Río Carapari, Dept. Orán, Salta, July 15, 1937, A. L. Cabrera 4209 (N); ravines of Lules, Dept. Famaillá, Tucumán, August, 1922, Venturi 2015 (N), a shrub 1-3 m, tall, with yellowish flowers;

Barranca Colorada, alt. 650 m, Dept. Capital, Tucumán, July 9, 1920, S. Venturi 847 (N), shrub 1,5-2 m tall, with clear yellow flowers.

CONVOLVULACEAE

by C. A. O'Donell

Bonamia sericea (Griseb.) Hallier f. — (N). ARGENTINA; Tucumán : Dept. Cruz Alta, Las Cejas, alt. 400 m, leg. Venturi (2074), X-1923, flowers white.

Ipomoea minuta R. E. Fries. — (N) ARGENTINA : Tucumán, Valle de Tafí, leg. Bruch (s. n.) 1908.

Evolvulus arizonicus A. Gray. — (N) ARGENTINA : Tucumán, Dept. Burruyacu, Cerro del Campo, alt. 800 m, leg. Venturi (7689) 3-XII-1928 ; Tucumán, leg. S. Roth. (s. n.)

Evolvulus sericeus Sw. — (N) ARGENTINA : Jujuy, Tumbaya, Volcán, alt. 2300 m, leg. Venturi (4917) II-1927.

Evolvulus sericeus (Sw.) var. **elongatus** (Choisy) O'Donell nov. comb.

Syn. *Evolvulus incanus* Pers. var. *elongatus* Choisy *Mem. Soc. Phys. Genève* VIII (1837), 75.

(N) ARGENTINA : Salta, Cerro Negro, alt. 800 m, Antillas, leg. Venturi (10.381) 27-V-1930, flowers lilac.

Calystegia sepium (L.) R. Br. var. **americana** (Sims) O'Donell nov. comb.

Syn. *Convolvulus sepium* L. var. *americanus* Sims, *Bot. Mag.* XIX (1804), tab. 732.

(N) ARGENTINA : Buenos Aires, frente recreo Tiburón, Delta, Río Carabelas, leg. Scala (s. n.), XI-1925.

POLEMONIACEAE

by Edgar T. Wherry

Collomia biflora (Ruiz et Pav.) Brand., approaching var. *erythraeoides* (Griseb.) Brand. — ARGENTINA : Río Pico, Te-

rrit. del Chubut, Collector undesignated s. n. (N), previously determined as *C. coccinea* Lehm. by A. P. Rodrigo.

Gilia laciniata Ruiz et Pav. — ARGENTINA: S. Ventana, Buenos Aires, November 21, 1895, N. Alboff 244 (N); S. Ventana, Buenos Aires, November 22, 1895, N. Alboff s. n. (N).

HYDROPHYLACEAE

by Rogers Mc Vaugh

Hydrolea elatior Schott. — ARGENTINA: Colonia Benítez, Chaco, February, 1930, A. G. Schulz 24 (N). As far as I can tell from the collections here in Washington this species is uncommon or even rare in Argentina, as there are no specimens from there in the National Herbarium.

Nama undulatum H. B. K. — ARGENTINA: Andean region, Catamarca, Hauthal 169 (N), previously determined as *N. echinoides* Griseb. by A. P. Rodrigo.

Phacelia artemisioides Griseb. — ARGENTINA: Sierra Central, S. Ventana, Buenos Aires, November 23, 1895, N., Alboff 202 (N).

Phacelia magellanica (Lam.) Cov. — ARGENTINA: Patagonia, Herb. Univ. Nac. Mus. La Plata s. n. (N), previously determined as *P. circinata* Jacq., by A. P. Rodrigo; San Sebastián, Tierra del Fuego, April, 1896, N. Alboff s. n. (N), previously determined as *P. circinata* Jacq., by A. P. Rodrigo; Valle de Tafí, Tucumán, 1908, C. Bruch s. n. (N).

Phacelia pinnatifida Griseb. — ARGENTINA: in pastures, alt. 4000 m, Cerro de Incahuasi, Cochinoca, Jujuy, March 3, 1930, S. Venturi 10.187 (N); Cerro de Caspala, alt. 3000 m, Humahuaca, Jujuy, March, 1929, S. Venturi 8600 (N), flowers blue.

VERBENACEAE

Herewith are presented notes on certain genera and species of Verbenaceae as they occur in Argentina, Paraguay, Uru-

guay, Bolivia, and Andean Perú. Monographs of these genera are now in preparation and the following notes are to be regarded as merely preliminary to full discussions which will appear in my formal monographs.

Acantholippia deserticola (R. A. Phil.) Moldenke, comb. nov.

Lippia deserticola R. A. Phil., *Anal. Univ. Chil.* 2 : 350. 1865.

ARGENTINA: Potrero Grande, Los Andes, December 6, 1897, G. F. Gerling s. n. (N); Cazadero, Catamarca, January 28, 1930, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 30/601] (N), originally distributed as *Lippia riojana* Hieron. BOLIVIA: Condri, alt. 3100 m, July 3, 1894, O. Kuntze s. n. (N). CHILE: Cord. Volcán Llullaillaco, alt. 3500 m, Dept. Talfal, Antofagasta, February, 1926, E. Werdermann 1024 (N).

Acantholippia hastulata Griseb., *Abh. K. Gesell. Wiss. Götting.* 19 : 244. 1874.

Lippia hastulata (Griseb.) Hieron., *Bol. Acad. Nat. Córdoba* 4 : 407. 1881; Molino, *Trab. Inst. Bot. y Farm. Buenos Aires* 54 : 112. 1935; Latzina, *Lilloa* 1 : 189. 1937.

ARGENTINA: Andalgalá, Campo del Arenal, Catamarca, April, 1914, P. Jörgensen 1736 [Herb. Mus. Argent. Cienc. Nat. 23.986] (N); San Antonio de los Cobres, Los Andes, February, 1930, Budin s. n. [Herb. Mus. Argent. Cienc. Nat. 30/1037] (N); between Chuscalesna and Senador Pérez, Jujuy, January 21, 1921, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 23.900] (N); San José de Tilcara, Jujuy, June 15, 1870, G. Hieronymus 713 (N); shrub 1-2 m tall, with white flowers, Sierra de Zenta, Humahuaca, alt. 2800 m, February 28, 1929, S. Venturi 8300 (N).

Acantholippia seriphiooides (A. Gray) Moldenke, comb. nov.

Lippia seriphiooides A. Gray, *Proc. Am. Acad.* 6 : 49. 1862.

Verbena rubiginosa Hook. ex A. Gray, *Proc. Am. Acad.* 6 : 50, in syn. 1862.

Lippia foliolosa R. A. Phil., *Anal. Univ. Chil.* 36-37 : 192-193. 1870.

Verbena rubiginosa Gill. ex Ball, *Journ. Linn. Soc. Lond.* 21 : 230, in syn. 1884.

Vernacular names : tomillo del campo, tomillo hembra.

C. Houard in *Zoocéd. Pl. Amer. Sud.* 345-350 (1933) states that this species is often infested with the galls of *Misospatha lippiae* Kieff. et Jörgensen in Argentina.

ARGENTINA : Mendoza, 1916, E. Carette s. n. (N); Mendoza, December, 1906, E. Carette s. n. [Herb. Mus. Argent. Cienc. Nat. 23.923] (N); sandy places along Río Diamante between Fortín Nuevo and Monte Gorro, Mendoza, January 14-16, 1892. F. Kurtz 7049 (N), abundant, with white flowers; western Pampas, 34°, January, 1892, O. Kuntze s. n. (N); western Pampas, January, 1894, O. Kuntze s. n. (N); Patagonia, 50-53°, 1882-1884, Moreno et Tonini 180 (N); La Pampa between Santa Isabel and La Pastoril, March 19, 1938, A. L. Cabrera 4383 (N); Río Negro, northern Patagonia, 1838-1842, United States Exploring Expedition [Wilkes] s. n. (N-isotype, T-isotype); Río Negro, Territ. Río Negro, January, 1916, A. C. Scala 96 (N-2); Alto Pencoso, San Luis, February, 1914, C. Bruch et E. Carette s. n. (N-2), originally distributed as *Lippia trifida* Remy; Praderas Altas del Cañadón Grande, Vuelta del Senguer, Territ. del Chubut, November 10, 1927, A. L. Cabrera 31 (N-2); Char lone, San Luis, January, 1933, M. A. Vignati 284 (N); Meseta de Espinosa, Santa Cruz, November 25, 1929, Feruglio s. n. [Herb. Mus. Argent. Cienc. Nat. 30/1891] (N); Cañadón de las Plumas, Santa Cruz, February 19, 1932, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 6185] (N); Pico Salamanca, Territ. del Chubut, January 25, 1932, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 6183] (N); Chischaca, San Luis, December 13, 1925, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 25/2936] (N).

Acantholippia trifida (C. Gay) Moldenke, comb. nov.

Lippia trifida C. Gay, *Fl. Chil.* 5 : 29. 1849.

ARGENTINA : Santa Cruz, alt. 300 m, November 24, 1928, A. Donat 52 (N); vicinity of General Roca, Río Negro, alt. 250-360 m, September, 1914, to February, 1915, W. Fischer 12 (N, Ur), originally distributed as *Lippia trifida* Remy; Parque San

Martín, Mendoza, October, 1916, A. Ruiz s. n. [Herb. Mus. Argent. Cienc. Nat. 25/2212] (N).

Aloysia Castellanosi Moldenke, sp. nov.

Frutex; ramulis gracilibus canescendo-puberulis glabrescentibus; petiolis obsoletis vel usque ad 1 mm longis dense patentopubescentibus; laminis crassis oblongis utrinque obtusis, supra valde bullatis dense pubescentibus, subtus dense tomentosis, marginibus valde crenato-dentatis, dentibus patentibus rotundatis, revolutis; inflorescentiis terminalibus dense multifloris; bracteolis valde conspicuis ovatis.

Shrub; branchlets and twigs slender, canescent-puberulent when young, glabrescent in age; principal internodes abbreviated, especially on the twigs; leaves opposite, crowded on short twigs through the abbreviation of the internodes; petioles very slender, to 1 mm long or obsolete, densely spreading-pubescent, the pubescence more or less glandular; blades thick, oblong, dark-green above, canescent beneath, 5-18 mm long, 1-5 mm wide, obtuse at both ends, the margins very strongly crenately dentate with wide-spreading roundish lobe-like teeth and revolute, the upper surface very strongly bullate and densely pubescent, subscabrous, the lower surface densely tomentose; midrib and lesser venation deeply impressed above and very prominent beneath; inflorescence terminal, spicate; spikes about 3 cm long, densely many-flowered; peduncles very slender, 5-8 mm long, densely spreading-pubescent; bractlets conspicuous, sessile, ovate, about 6 mm long and 2 mm wide acuminate at apex, rounded at base; calyx tubular-campanulate, about 3 mm long, densely hirsute, its lobes about 1 mm long, slightly unequal; corolla 6-7 mm long, glandular-pubescent on the outer surface.

The species is named in honor of Alberto Castellanos, whose extensive work on Argentine plants has added so very much to our knowledge of the flora of this vast country.

ARGENTINA: Quebrada del Zonda, San Juan, February 28, 1926, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 26/602] (N-type).

Aloysia chacoensis Moldenke, sp. nov.

Frutex; ramulis gracilibus obtuse tetragonis ubique dense canescentio-puberulis; foliis opositis; petiolis ca. 1 mm longis dense adpresso-puberulis; laminis tenuibus ellipticis vel obovatis, ad apicem acutis vel mucronulatis, ad basin acutis vel breviter acuminatis, supra scabris, subtus dense adpresso-puberulis canescentibus resinoso-glandulosis, marginibus ad medium 2-6 serratis; inflorescentiis axillaribus dense multifloris; bracteolis inconspicuis minutis caducis.

Shrub, 1-2 m tall; branchlets and twigs slender, obtusely tetragonal, densely canescent-puberulent throughout; leaves opposite; petioles very slender, about 1 mm long, densely appressed-puberulent; blades thin, lighter beneath, elliptic or obovate, 5-11 mm long, 3-8 mm wide, acute or mucronulate at apex, acute or short-acuminate at base, the margins with 1-3 antrorse teeth on each side near the middle, the upper surface scabrous, the lower surface densely appressed-puberulent with canescent hairs and resinous-glandular; midrib and secondaries very slender, slightly impressed above, prominulous beneath; inflorescence axillary, spicate; spikes numerous, solitary in the upper leaf-axils, 1.4-4.5 cm long, densely many-flowered; peduncles very slender, 5-13 mm long, densely canescent-puberulent; bractlets inconspicuous, scale-like, about 1 mm long, acuminate, densely puberulent, soon caducous.

ARGENTINA : Formosa, Gob. Formosa, September, 1918, P. Jörgensen 2473 [Herb. Mus. Argent. Cienc. Nat. 23.904] (N); Fontana, Chaco, January, 1938, T. Meyer 2671 (N); Arbol Solo, Chaco, February 26, 1939, T. Meyer 2944 (N); Colonia Benítez, Chaco, September, 1931, A. G. Schulz 130 [Herb. Mus. Argent. Cienc. Nat. 6467] (N); abundant shrub, 1-2 m tall, in fertile soil on side of high mountain, Villa Berthet, Chaco, February, 1937, A. G. Schulz 1492 (N), flowers white, previously determined as *A. ligustrina* (Lag.) Small; shrub 1-2 m tall, with oily peculiarly fragrans foliage and white flowers, on side of mountain, Tirol, Chaco, February, 1934, A. G. Schulz 1494 (N-type), previously determined as *A. ligustrina* (Lag.) Small.

Aloysia chamaedryfolia Cham., *Linnaea* 7: 234. 1832; Herter, *Revist. Sudam. Bot.* 4: 185. 1937.

- Aloysia chamaedryoides* Steud., *Nom. Bot.*, ed. 2, 1: 62. 1840.
Lippia chamaedryoides Steud., *Nom. Bot.*, ed. 2, 1: 62, nom. nud. 1840.
Aloysia chamaedrifolia Cham. ex Steud. *Nom. Bot.*, ed. 2, 2: 54. 1841; Schau. in A. DC., *Prodr.* 11: 574, in syn. 1847: Moldenke, *Prelim. Alph. List.* 56. 1940.
Lippia chamaedrifolia Steud., *Nom. Bot.*, ed. 2, 2: 54. 1841; Schau. in A. DC., *Prodr.* 11: 573. 1847; *Svensk. Bot. Tidsk.* 32: 23. 1938.
Lippia chamaedryfolia Steud. ex Schau. in Mart., *Fl. Bras.* 9: 222. 1851.
Verbena dentata Visian., *Ort. Bot. Pav.* 150. 1842.

URUGUAY: Tacuarembo, Arechavaleta 4 Cb, (N-photo, Z-photo); Galego, alt. 250 m, Rivera, December 2-4, 1933, W. G. Herter 1654 [Herb. Herter 94.158] (N).

Aloysia Fiebrigii (Hayek) Moldenke, *Revist. Sudam. Bot.* 4: 15. 1937.

- Lippia Fiebrigii* Hayek in Engl., *Jahrb.* 42: 165. 1908.

BOLIVIA: Paicho, April 2, 1904, K. Fiebrig 3036 [Herb. Inst. Biol. S. Paulo 33.509] (N-photo, Sp, Z-photo). PERÚ: Calca, Cuzco, January, 1937, C. Vargas 248 (N).

Aloysia ligustrina (Lag.) Small, *Fl. SE. U. S.*, ed. 1, 1013. 1903; Moldenke, *Suppl. List. Comm. Names* 2. 1940.

- Verbena ligustrina* Lag., *Gen. et Sp. Nov.* 18. 1816.
Aloysia lycioides Cham., *Linnaea* 7: 237. 1832.
Lippia lycioides Steud., *Nom. Bot.*, ed. 2, 2: 54. 1841; Molfino, *Trab. Inst. Bot. y Farm.* 54: 79. 1935; Latzina, *Lilloa* 1: 189. 1937; Herter, *Revist. Sudam. Bot.* 4: 185-186. 1937; *Svensk. Bot. Tidsk.* 32: 231. 1938.
Lippia ligustrina Kuntze, *Rev. Gen. Pl.* 3: 2, 252. 1898; *Darwiniana* 3: 52. 1937.

Vernacular names: azahar del campo, cedrín, cedronella, citronella, niño rupá, romerillo, usillo.

ARGENTINA: Arroyo Frías, around Rosario, Santa Fe, October 6, 1929, A. L. Cabrera 924 (N); road from Reconquista to

Barro Pazos, Santa Fe, Juanuary-February, 1936, M. M. Job 835 (N), a very small-leaved form; El Tostado, Río Salado, Santa Fe, January-February, 1936, M. M. Job 1072 (N), the normal-leaved form; Arroyo Saladillo, Rosario, growing with *Atriplex*, Santa Fe, January-February, 1936, M. M. Job 573 (N), small-leaved form; S. de Calchaquí, Santa Fe, January 4, 1927, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 19.615] (N); shrub 1-2 m tall, with fragrant white flowers, Colonia Benítez, Chaco, March, 1930, A. G. Schulz 5 (N); Villa Angela, Chaco, February, 1930, P. Boffa s. n. (N); Chaco, A. G. Schulz 1492 (N); Chaco, A. G. Schulz 1494 (N); abundand shrub, 1-2,5 m tall, with fragrant white flowers, Colonia Benítez, Chaco, April, 1937, A. G. Schulz 1493 (N); shrub, Dept. Capital, Salta, May, 30, 1933, A. L. Cabrera 3046 (N); Cosquín, alt. 730 m, flowers white, Córdoba, January-February, 1936, A. P. Rodrigo 240 (N); frequent shrub, 1,5-2 m tall, Río Grande, Córdoba, January, 1939, M. M. Job 485 (N); shrub to 2 m tall, with white flowers. Ascochinga, alt. 700 m, Córdoba, October 20, 1936, N. S. Troncoso 299 (N); abundant in thickets, to 2 m tall, Copacabana, Córdoba, December 26, 1889, F. Kurtz 6674 (N); Córdoba, December, 1891, O. Kuntze s. n. (N); near Cassaffousth, Córdoba, September 9, 1915, J. N. Rose et P. G. Russel 21.056 (N); Unquillo, Córdoba, 1926, C. Bruch 2830 (N-2); in the vicinity of Córdoba, Córdoba, October 6, 1876, G. Hieronymus s. n. (N); San Javier, La Barranca, Córdoba, January 14, 1939, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 31.192] (N), flowers; San Francisco, Córdoba, September, 1934, Ragonese 56 [Herb. Mus. Argent. Cienc. Nat. 23.998] (N); San Javier, Córdoba, December 15, 1927, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 11.670] (N); Salsipuedes, Córdoba, February 1, 1939, L. A. Dawson 40 (N), flowers; Catamarea, Molino s. n. [Herb. Facult. Cienc. Méd. B. Aires 1020; Herb. Inst. Biol. S. Paulo 25.781] (Sp); La Plata, Mendoza, 1916, E. Carette 3046 [Herb. Inst. Biol. S. Paulo 37.393] (Sp); Luján, Mendoza, January 25, 1919, A. Ruiz s. n. [Herb. Mus. Argent. Cienc. Nat. 25/2192] (N); Valle de Tafí, Tucumán, 1908, C. Bruch s. n. (N-2); shrub, 2 m tall, with white flowers, Trancas, alt. 700 m, Tucumán, December 10, 1913, D.

Rodríguez 1175 (N); Tucumán, S. Venturi 4291 (N); Tucumán, C. Bruch s. n. [Herb. Inst. Biol. S. Paulo 36.989] (Sp); Cerro del Campo, alt. 800 m, Dept. Burruyacu, Tucumán, December, 1928, S. Venturi 7656 (N); Tapia, Tucumán, October 19, 1911, D. Rodríguez 6 [Herb. Mus. Argent. Cienc. Nat. 23.889] (N). to 2,5 m tall, Sierra de San Luis, Bajo de Velis, January 25, 1895, F. Kurtz 8486 (N); Telén, La Pampa, March 16, 1938, A. L. Cabrera 4368 (N); Sierra Ventana, Buenos Aires, December, 1936, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 19.062] (N); Otamendi, Buenos Aires, October 26, 1928, Pérez Moreau s. n. [Herb. Mus. Argent. Cienc. Nat. 13.577] (N); Cerro de la Ermita, Sierra de Curumalal, Partido de Saavedra, Buenos Aires, November 4, 1939, A. L. Cabrera 5461 (N); Salto Grande, Río Uruguay, Entre Ríos, February 5, 1931, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 31/1286] (N); Entre Ríos, Frenguelli 19 (N); Concepción del Uruguay, Entre Ríos, November 28, 1934, A. L. Cabrera 3179 (N-2). URUGUAY: shrub 2 m tall, with creamy-white flowers, Paysandú, November 12, 1937, Rosengurtt B. 2245 (N). PARAGUAY: E. Hassler 2635 (V). BOLIVIA: shrub 80 cm tall, on stony slopes, alt. 2760 m, Cerro Machs, Sucre, Chuquisaca, April, 1933, M. Cardenas 637 (N); Samaipata, Santa Cruz, October 14, 1928, J. Steinbach s. n. [Herb. Mus. Argent. Cienc. Nat. 29/681] (N); valley of Cochabamba, alt. 2600 m, Cochabamba, December 16, 1928, J. Steinbach 8768 (N); shrub, with white flowers, Río Tapacasi, alt. 3000 m, March 19, 1892, O. Kuntze s. n. (N); Cochabamba, 1889, M. Bang s. n. (C); Cochabamba, February 26, 1920, Prof. et Mrs. E. W. D. Holway 326 (N); Parotani, alt. 2400 m, March 20, 1892, O. Kuntze s. n. (N); shrub, with white flowers, by Cochabamba, alt. 3000 m, March 26, 1892, O. Kuntze s. n. (N); shrub 4-5 ft. tall, flower-spikes white, on dry sandy hillsides at 8300 ft., Cochabamba, G. E. Wolstenholme 24 (N).

Aloysia ligustrina var. **paraguariensis** (Briq.) Moldenke, *Phytologia* 1: 167. 1935.

Lippia ligustrina var. *paraguariensis* Briq., *Ann. Conserv. et Jard. Bot. Genève* 7-8 : 305. 1904.

Lippia ligustrina var. *lasiodonta* Briq., *Ann. Conserv. et Jard. Bot. Genève* 7-8 : 305. 1904.

ARGENTINA: Posadas, Misiones, March 10, 1930, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 30/2059] (N); Santa Ana, Misiones, December 3, 1912, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 23.848] (N); El Brete, around Paraná, on the shores of the river, Entre Ríos, October 11, 1937, J. Frenguelli 19 (N), previously determined as typical *A. ligustrina* (Lag.) Small. PARAGUAY: P. Jörgensen 3781 (N), previously determined as typical *A. ligustrina* (Lag.) Small; Virgen de Itacuá, November 20, 1896, N. Alboff s. n. (N-2), previously determined as typical *A. ligustrina* (Lag.) Small; slender shrub 6 feet tall, with sweet-scented white flowers and aromatic leaves, lower portion of stem thorny, Bureau of Plant Industry at Játacá, 8 km north of Villa Rica, December 16, 1936, W. A. Archer 4678 (N), previously determined as typical *A. ligustrina* (Lag.) Small.

***Aloysia Looseri* Moldenke, sp. nov.**

Frutex; ramulis dense adpresso-pubescentibus; nodis annulatis; petiolis 1,5-5 mm longis canaliculatis dense adpresso-pubescentibus; laminis ellipticis subacutis, ad basim acuminatis, marginibus adpresso-serratis, supra scabridis, subtus dense canescentio puberulis; inflorescentiis axillaribus laxe multifloris; bracteolis inconspicuis minutis caducis.

Shrub; branchlets slender, obtusely tetragonal, densely appressed-pubescent; nodes annulate; leaves opposite; petioles slender, 1,5-5 mm long, deeply canaliculate above, densely appressed-pubescent with antrorse canescent hairs; blades firm, lighter beneath, elliptic, 1-2,5 cm long, 4-9 mm wide, subacute at apex, acuminate at base and protracted into the petiole, finely serrate above the middle to the apex with small appressed teeth, slightly revolute, scabridous above, densely canescent-puberulent beneath; midrib slender, somewhat puberulent and impressed above, prominent beneath; secondaries impressed above, prominent beneath; inflorescence axillary, spicate; spikes slender, 5,5-12 cm long, to 9 mm wide, rather loosely many-flowered, solitary in the upper axils, 2 from each node; peduncles slender, 2-8 mm long, densely short-pubescent with

spreading hairs, often bearing 1 or 2 abbreviated secondary spikes at its apex; rachis densely short-pubescent with spreading hairs: bractlets inconspicuous, scale-like, to 1 mm long, densely pubescent, soon caducous.

The species is named in honor and appreciation of Dr. Gualterio Looser, who has done such noteworthy work on the flora of Chile and who has been so generous to me with valuable help freely given.

Vernacular name: ilang-ilang.

CHILE: small shrub cultivated in gardens in Santiago, December 15, 1925, G. Looser 4008 (N-type).

Aloysia Meyeri Moldenke, sp. nov.

Frutex; ramulis dense breviterque pubescentibus glabrescentibus; petiolis 2-4 mm longis dense adpresso-pubescentibus canaliculatis; laminis utrinque viridibus ellipticis vel subobovatis, ad apicem acutis vel rotundatis et minute mucronulatis, ad basim cuneato-attenuatis, marginibus 2-14 dentatis (dentibus magnis patentibus) utrinque sparse breviterque pilosis; venis secundariis et venulis supra obscuris; inflorescentiis axillaribus alternatim dispositis laxe multifloris; bracteolis inconspicuis minutis caducis.

Shrub, 1.5-2 m tall; branchlets and twigs slender, tetragonal, densely short-pubescent when young, glabrescent in age; leaves opposite; petioles slender, 2-4 mm long, densely appressed-pubescent with appressed antrorse hairs, deeply canaliculate above; blades very thin-textured, uniformly green on both surfaces, elliptic, varying to subobovate, 1.5-4.5 cm long, 0.7-2.5 cm wide, acute or rounded and minutely mucronulate at apex, cuneately attenuate into the petiole at base, coarsely dentate above the middle with 1-7 sharply acute divergent teeth on each margin, very sparsely but uniformly short-pilose on both surfaces; midrib slender, plane above, prominent beneath; secondaries and veinlet reticulation very obscure or indiscernible above, the former slightly prominulous beneath; inflorescence axillary, only one from a node, alternately disposed; spikes 4.5-6 cm long, to 1 cm wide, very loosely many-flowered; peduncles slender, 4-13 mm long, along with the rachis rather sparsely pub-

rulent with very short spreading hairs; bractlets minute, scale-like, less than 1 mm long, densely puberulent, early caducous.

The species is named in honor of Teodoro Meyer, who collected the type specimen and who is such an enthusiastic collector of Argentine plants.

ARGENTINA: shrub 1.5-2 m tall, with white flowers, San Pedro de Colalao, Tucumán, January 4, 1940, T. Meyer 3092 (N-type).

Aloysia ovatifolia Moldenke sp. nov.

Frutex; ramulis griseis dense breviterque pubescentibus glabrescentibus; petiolis 2-5 mm longis dense patent-pubescentibus canaliculatis; laminis ovatis, ad apicem obtusis vel subacutis, ad basin truncatis vel subtruncatis, marginibus crasse dentatis, supra dense breviterque pubescentibus et scabris, subtus dense canescens-to-tomentellis; inflorescentiis axillaribus multifloris, floribus verticillatis; bracteolis conspicuis lanceolatis longe acuminate.

Shrub; branches and twigs slender, obtusely tetragonal, gray, densely short-pubescent with spreading hairs when young, glabrescent in age; leaves opposite; petioles slender, 2-5 mm long, densely pubescent with canescent spreading hairs, deeply canaliculate above; blades thin-textured, ovate, 1.2-2 cm long, 1.1-1.5 cm wide, obtuse or subacute at apex, truncate or subtruncate at base, coarsely dentate from base to apex, densely short-pubescent and scabrous above, densely tomentellous beneath, the pubescence canescent; midrib and secondaries plane or subimpressed above, prominulous beneath; veinlet reticulation indiscernible above; inflorescence axillary, spicate; spikes 3-8 cm long, 8-10 mm wide, many-flowered, the flowers arranged in distinct whorls of about 5, the whorls noticeably separating in fruit by elongation of the internodes of the rachis; peduncles slender, 8-15 mm long, along with the rachis densely pubescent with canescent spreading hairs; bractlets conspicuous, lanceolate, about 4 mm long and 1 mm wide at base, long-acuminate at apex, densely spreading-pubescent.

ARGENTINA: San Javier, La Barranca, Córdoba, February 6, 1939, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 31,193] (N-type), flowers; between Guanchin and Cachiyuyal, La

Rioja, February 5, 1928, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 28/331] (N).

Aloysia polystachya (Griseb.) Moldenke, comb. nov.
Prelim. Alph. List 56, hyponym (March 17, 1940).

Lippia polystachya Griseb., *Abh. K. Gessell. Wiss. Götting.* 19 : 242. 1874.

ARGENTINA : Córdoba, río arriba, May, 1882, G. Hieronymus s. n. (N); General Roca, San Francisco, La Rioja, April 14, 1928, Gómez s. n. [Herb. Mus. Argent. Cienc. Nat. 28/770] (N); Quebrada del Tigre, Dept. San Alberto, Córdoba, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 11. 669] (N).

Aloysia pulchra (Briq.) Moldenke, *Phytologia* 1 : 95. 1934.

Lippia pulchra Briq., *Arkiv. Bot.* 2, n° 10 : 18-19. 1904.

URUGUAY : Paysandú, May, 1927, Augusti s. n. [Herb. Mus. Argent. Cienc. Nat. 27/1805] (N).

Aloysia Reichii Moldenke, sp. nov.

Frutex; ramulis firmis longitudinaliter costulatis ubique dense flavescens-farinaceis; foliis sessilibus; laminis firmis ovatis, at apicem acutis vel subacutis, ad basim rotundatis, integerrimis utrinque dense flavescens-farinaceis; inflorescentiis axillaribus dense multifloris; bracteolis conspicuis ca. 1 mm longis farinaceo-puberulis persistentibus.

Shrub; branchlets medium-slender, firm, obtusely tetragonal, longitudinally ribbed, densely yellowish-farinaceous throughout leaves opposite, sessile; blades firm, ovate, 3-4 mm long, 1,5-3,5 mm wide, acute or subacute at apex, rounded at base, entire, densely yellowish-farinaceous on both surfaces; venation indiscernible on both surfaces; inflorescence axillary, 0,6-2,3 cm long, densely many-flowered; peduncles slender, about 3 mm long, along with the rachis densely farinaceous-puberulent; bractlets conspicuous, scale-like, about 1 mm long, farinaceous-puberulent, persistent.

CHILE: Huanta, Cordillera del Coquimbo, January, 1904, K. Reiche 19 [Herb. Mus. Nac. Santiago] (N-type), originally distributed as *Lippia trifida* Gay.

Aloysia salviaefolia (Hook. et Arn.) Moldenke, comb. nov.

Prelim. Alph. List 56, hyponym (March 17, 1940)

Verbena salviaefolia Hook. et Arn., *Bot. Beech. Voy.* 42. 1830.

Lippia chilensis Schau. in A. DC., *Prodr.* 11 : 573. 1847.

Aloysia chilensis (Schau.) Moldenke, *Rev. Sudam. Bot.* 4 : 15. 1937 ;

Moldenke, *Suppl. List. Comm. Names*, 18. 1940.

Vernacular name: salvia blanca.

CHILE: Rivadavia, Coquimbo, September, 1904, K. Reiche 20 [Herb. Mus. Nac. Santiago] (N), previously determined as *A. chilensis* (Schau.) Moldenke.

Aloysia Schulziana Moldenke, sp. nov.

Frutex; ramulis gracilibus griseis dense breviterque pubescentibus, pilis albis patentibus, glabrescentibus; petiolis 2-3 mm longis dense patento-pubescentibus canaliculatis; laminis firmis ellipticis vel subovoideis, ad apicem acutis, ad basim cuneatis, irregulatiter serratis, supra brevissime puberulis scabrellis, subtus dense canescento-pubescentibus; inflorescentiis axillaribus laxiuscule vel dense multifloris; bracteolis inconspicuis minutis puberulis caducis.

Shrub, 1-2 m tall; branchlets and twigs slender, tetragonal, gray, densely short-pubescent with white spreading hairs when young, glabrescent in age; leaves opposite; petioles slender, 2-3 mm long, densely spreading-pubescent, canaliculate above; blades firm, dark-green above, gray beneath, elliptic or sub-ovoid, 1.2-2.3 cm long, 4-14 mm wide, acute at apex, cuneate at base, rather coarsely and irregularly serrate from the widest part to the apex, very short-puberulent and scabrellous above, densely canescent-pubescent beneath; midrib and secondaries subimpressed above, prominulous beneath; inflorescence axillary, spicate, 4-9 cm long, to 8 mm wide, rather loosely or densely many-flowered; peduncles very slender, 1-1.8 cm long, along

with the rachis densely white-pubescent; bractlets inconspicuous, minute, about 1 mm long, puberulent, soon caducous.

The species is named in honor of and in grateful appreciation of A. G. Schulz, who has collected so extensively in Chaco and adjacent areas and has contributed so much to our knowledge of that region.

ARGENTINA : shrub 1-2 m tall, with white flowers, San Bernardo, alt. 1400 m, Salta, February, 1936. A. G. Schulz 1447 (N-type).

Aloysia scorodonioides (H. B. K.) Cham., *Linnaea* 7: 234. 1832;
Moldenke, *Prelim. Alph. List* 56. 1940.

Lippia scorodonioides H. B. K., *Nov. Gen. et Sp. Pl.* 2: 269. 1818.

PERÚ : Calca, Cuzco, January, 1937, C. Vargas 160 (N). BOLIVIA : M. Bang s. n. (C); Andes, Mandon 521 (T), previously determined and distributed as *Stachys* sp.; near La Paz, alt. 10,000 ft., April, 1885, H. H. Rusby 920 (C); vicinity of La Paz, alt. 10,000 ft., 1889, M. Bang 5 (C); shrub 1-2 m tall, alt. 3,300 m, La Paz, April 14, 1919, O. Buchtien 557 [Herb. Inst. Biol. S. Paulo 33.501] (N, Sp); shrub, Cotaña, alt. 2450 m, November, 1911, O. Buchtien 3242 (N); shrub 1 1/2 m, tall, Cotaña, on the Illimani, alt. 2700 m, November, 1911, O. Buchtien 3240 (N); shrub, 2 m tall, Cotaña, on the Illimani, alt. 2700 m, November, 1911, O. Buchtien 3241 (N).

Aloysia scorodonioides var. **detonsa** (Briq.) Moldenke, *Phytologia* 1: 95. 1934; Moldenke, *Prelim. Alph. List* 56. 1940.

Lippia scorodonioides var. *detonsa* Briq., *Bull. Herb. Boiss.*, sér. 1, 4: 339. 1896.

ARGENTINA : in fertile soil on mountain slope, Sáenz Peña, Chaco, July, 1935, A. G. Schulz 1491 (N), originally distributed as *Lippia urticoides* var. *elliptica* Briq.

Aloysia Sellowii (Briq.) Moldenke, *Rev. Sudam. Bot.* 4: 15. 1937; Moldenke, *Prelim. Alph. List* 56. 1940.

Lippia affinis Briq., *Bull. Herb. Boiss.*, sér. 1, 4: 339. 1896 [not. *L. affinis* Schau. in A. DC., *Prodr.* 11: 576. 1847].

Lippia Sellowii Briq., *Ann. Conserv. et Jard. Bot. Genève* 4: 21. 1900
Aloysia uruguayensis Moldenke, *Phytologia* 1: 167. 1935.

ARGENTINA: 3 m tall, with white flowers, Salta, October, 1892, O. Kuntze s. n. (N), originally distributed as *Lippia ligustrina* Kuntze; 2 m tall, with white flowers, Monte Bello, alt. 1480 m, Tucumán, April 18, 1926, S. Venturi 4291 (N), previously determined as *A. ligustrina* (Lag.) Small; between Los Puestos and El Rey, Dept. Anta, Salta, July, 1934, Ragonese s. n. [Herb. Mus. Argent. Cienc. Nat. 23.993] (N); Volcán, Dept. Tumbaya, Jujuy, February 15, 1927, S. Venturi s. n. [Herb. Mus. Argent. Cienc. Nat. 27/1238] (N), Posadas, Misiones, October 15, 1886, Niederlein s. n. [Herb. Mus. Argent. Cienc. Nat. 23.907] (N); Metán, Río de las Conchas, Salta, July 22, 1930, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 30/1752] (N). BOLIVIA: shrub with white flowers, alt. 2572 m, Cochabamba, M. Cárdenas 729 (W). PARAGUAY: thickets near Cerro, flowers in February, E. Hassler 1904 (N).

***Aloysia triphylla* (L'Hér.) Britton, *Scient. Surv. P. R. and Virg. Isls.* 4: 140. 1925; Herter, *Rev. Sudam. Bot.* 4: 185-186. 1937; Moldenke, *Annot. List* 108. 1939; Moldenke, *Prelim. Alph. List* 54, 55, 56. 1940.**

Verbena triphylla L'Her., *Stirp. Nov.* 21-22, pl. 11. 1784.
Zapania citriodora Lam., *Tabl. Encycl. Méth. Bot.* 1: 59. 1791. *Zapania citriodora* Lam. apud Kuntze, *Rev. Gen. Pl.* 3, 2: 253, in syn. 1893; Hook. f. et Jacks., *Ind. Kew.* 4: 1248, in syn. 1895. *Aloysia citriodora* Ort. ex Pers., *Syn. Pl.* 2: 139. 1807; Parodi, *Rev. Argent. Agron.* 1: 201. 1934. *Aloysia citriodora* Ort. apud. H. B. K., *Nov. Gen. et Sp. Pl.* 2: 269, in syn. 1817.
Lippia citrodora (Lam.) H. B. K., *Nov. Gen. et Sp. Pl.* 2: 269. 1817.
Lippia citriodora H. B. K. apud Hook. f. et Jacks., *Ind. Kew.* 2: 95. 1895; Molino, *Trab. Inst. Bot. y Farm.* 53: 58 and 54: 79. 1935; Latzina, *Lilloa* 1: 188. 1937.
Aloysia triphylla (L'Hér.) Royle, *Illustr. Bot. Himal.* 299, nom. nud. 1839; Hook. f. et Jacks., *Ind. Kew.* 4: 1264, in syn. 1895.
Lippia triphylla (L'Hér.) Kuntze, *Rev. Gen. Pl.* 3, 2: 253. 1893; *Darwiniana* 3: 51. 1937; *Svensk. Bot. Tidsk.* 32: 231. 1938.

Vernacular names: cedrón, salvia limão, eidrinha, herva eidreira.

ARGENTINA: Las Juntas, Salta, December, 1896, C. Bruch s. n. (N); 2,5 m tall, with white flowers, Las Arcas, alt. 2500

m, Dept. Tafí, Tucumán, April 24, 1926 S. Venturi 4262 (N-2); shrub 2 m tall, with white flowers, El Chorro, Cumbres Calchaquíes, alt. 2100 m, Tucumán, December 29, 1913, D. Rodríguez 1214 (N-2); Volcán, on road to Tiracsi, Jujuy, February 28, 1937, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 20.165] (N); Sierra Famatina, Guanchín, La Rioja, January 24, 1928, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 28/327] (N); Cumbres Calchaquíes, El Chorro, Tucumán, December 30, 1913, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 23/847] (N); El Volcán, Jujuy, May 12, 1875, Lorentz et G. Hieronymus 755 (N). URUGUAY: 3 m tall, flowers pale violet, cultivated in gardens, Sayago, alt. 30 m, Dept. Montevideo, January, 1910, W. G. Herter 264^a [Herb. Herter 8966] (N).

Aloysia virgata (Ruiz et Pav.) A. L. Juss., *Ann. Mus. Paris* 7: 73. 1806; Moldenke, *Prelim. Alph. List* 32, 55, 56. 1940.

Verbena virgata Ruiz et Pav., *Fl. Peruv.* 1: 20. 1798.

Aloysia urticoides Cham., *Linnaea* 7: 238. 1832.

Lippia urticoides Steud., *Nom. Bot.*, ed. 2, 2: 54. 1841: Schau. in A. DC., *Prodr.* 11: 573. 1847.

Lippia virgata Steud., *Nom. Bot.*, ed. 2, 2: 751. 1847; Molfino, *Trab. Inst. Bot. y Farm.* 53: 58 and 54: 79. 1935; Latzina, *Lilloa* 1: 189. 1937; *Darwiniana* 3: 52. 1937; Herter, *Revist. Sudam. Bot.* 4: 185-186. 1937.

Lippia virgata var. *platyphylla* Briq., *Ann. Conserv. et Jard. Bot. Génér.* 7-8: 304. 1904.

Vernacular names: niño-urupá, lixa, niño rupá, pau de lixa, paó lixa, cambará, lixeira.

ARGENTINA: Corrientes, Prov. Corrientes, July 20, 1933, A. L. Cabrera 2979 (N); Colonia Benítez, Chaco, June, 1930, A. G. Schulz 4 (N), shrub 2-5 m tall, flowers white, fragrant; Quilitipi, Chaco, February, 1930, A. G. Schulz 3 (N), shrub 1-2 m tall, flowers white, fragrant; Colonia Benítez, Chaco, December, 1936, A. G. Schulz 1490 (N), tree 3-6 m tall, trunk 10-13 cm in diameter, flowers white, previously determined as *Lippia urticoides* var. *platyphylla* Briq., by Osten; on boundary of Gran Chaco and Orán, near Río Bermejo, Dragones, middle of August, 1892, P. G. Lorentz et G. Hieronymus s. n. (N); Pasaje

del Río Juramento, Salta, February, 1873, P. G. Lorentz et G. Hieronymus s. n. (N); Pellegrini, alt. 550 m, Cerro del Remate, Santiago del Estero, January, 1928, S. Venturi 5764 (N), shrub. 2 m tall, flowers white; Alto de Medina, alt. 1000 m, Dept. Burruyacu, Tucumán, January 11, 1924, S. Venturi 2692 (N); Guaycalec, Formosa, February, 1919, P. Jörgensen 2474 [Herb. Mus. Argent. Cienc. Nat. 23.931] (N); Resistencia, Chaco, July 7, 1924, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 24/1292] (N); Tapia, Tucumán, December 19, 1911, D. Rodríguez 545 [Herb. Mus. Argent. Cienc. Nat. 23.890] (N); Santa Ana, Misiones, December 19, 1909, D. Rodríguez 26 [Herb. Mus. Argent. Cienc. Nat. 23/845] (N); Posadas, Misiones, February 8, 1930, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 30/2058] (N); Colonia Benítez, Chaco, May, 1937, T. Meyer 2675 (N). PARAGUAY: Asunción, December 6, T. Morong 242 (C); very common at Villarica, P. Jörgensen 3779 (N), tree to 5 m tall; in thickets and at margins of woods, May, E. Hassler 366 (N), originally distributed as *Lippia virgata* var. *platyphylla* Briq.; E. Hassler 366^a (N); Bureau of Plant Industry at Játatú, 8 km north of Villa Rica, December 16, 1936, W. A. Archer 4677 (N), shrub-like tree, 20 feet tall, flowers white and sweet-scented. BOLIVIA: Río Surutu, Prov. Sara, Santa Cruz, October 8, 1925, J. Steinbach s. n. [Herb. Mus. Arg. Cienc. Nat. 28/1473] (N); Prov. Velasco, alt. 300 m, July, 1892, O. Kuntze s. n. (N-2); Huachi, head of Río Beni, alt. 3000 ft., September 22, 1921, H. H. Rusby 687 (N); Machichoirisi, alt. 3500 ft., August 4, 1902, R. S. Williams 1585 (N), 8 feet tall; Santa Cruz, alt. 1600 m, May, 1892, O. Kuntze s. n. (N); Canamina, alt. 4000 ft., July 28, 1921, O. E. White 413 (N); Canamina, alt. 4000 ft., July 20, 1921, H. H. Rusby 98 (N); growing in soil and mould where the ground has been previously cultivated, Coripati, Yungas, April 27, 1894, M. Bang 2165 (C), plentiful shrub 10-15 ft. tall, «long and thin», flowers white; Río Surutu, Prov. Sara, Santa Cruz, October 8, 1925, J. Steinbach 7274 (N); Guanai, alt. 2000 ft., May, 1886, H. H. Rusby 1403 (C); vicinity of Sorata, San Pedro, alt. 2650-2750 m, temperate Andes, November, 1877, to May, 1878, G. Mandon 522 (N).

Diostea cinerascens (Schau.) Moldenke, *Rivist. Sudam. Bot.* 5 :
1. 1937.

Verbena cinerascens Schau. in A. DC., *Prodr.* 11 : 545. 1847.

CHILE : C. Gay 944 (P-cotype) ; C. Gay s. n. (E-photo of cotype, K-cotype, N-cotype, N-fragment and photo of cotype, P-2 cotypes, Z-photo of cotype) ; Poeppig II. 85 (N-photo of cotype, P-cotype, Z-photo of cotype) ; E. C. Reed s. n. (K) ; Jahuel, alt. 4000-5000 ft., October, 1927, C. Elliot 220 (K, N-fragment), shrub 4 ft. tall, of erect habit, in flower ; Valparaíso, Bridges s. n. (K) ; Coquimbo, July-August, 1856, W. H. Harvey s. n. (K, N-fragment) ; Cumbre, Aconcagua, 1825, Macrae s. n. (K) ; Ovalle, October, Claude-Joseph 4996 (W), in flower.

Diostea juncea (Gill. et Hook.) Miers, *Trans. Linn. Soc. Lond.*
27 : 103. 1871.

Verbena juncea Gill. et Hook., in Hook. *Bot. Misc.* 1 : 162. 1829.

Lippia juncea (Gill. et Hook.) Schau. in A. DC., *Prodr.* 11 : 573.
1847 ; Molino, *Trab. Inst. Bot. y Farm.*, 54 : 79. 1935 ; Latzina,
Lilloa 1 : 189. 1937.

Verbena scirpea R. A. Phil. ex Moldenke, *Prelim. Alph. List.* 48, in
syn. 1940.

Junellia scirpea (R. A. Phil.) Moldenke, *Prelim. Alph. List.* 48 hy-
ponym. 1940.

Vernacular names : retamo, retama.

ARGENTINA : Río Corcovado, Territ. del Chubut, March, 1901,
N. Illin 102 (Br, Ca, N) ; Territ. del Chubut, N. Illin s. n. [Stuc-
kert 18.204] (Cb) ; Patagonia, 50/53°, 1880-1884, Moreno et To-
nini 341 (N) ; Andes of Mendoza, R. A. Philippi s. n. (B-2) ; San-
ta Rosa de los Andes to Uspallata Pass, Mendoza, Moseley s.
n. (Bm, K) ; Villavicencio, Páramo de Mendoza, Herb. Miers s.
n. (Bm) ; on lake shore, Bariloche, Río Negro, January 5, 1935,
A. L. Cabrera et M. M. Job 54 (N), shrub, in flower ; Cerro López,
Río Negro, January 15, 1935, A. L. Cabrera et M. M. Job 313
(N) ; Río Negro, alt. 1030 m, I. R. Cordini 254 (W), flowers first
blue or violet, later white ; Puerto Pañuelo, region of Lago Na-
huel Huapi, Río Negro, February 5, 1928, I. R. Cordini 107
(N) ; Nahuel Huapi, February 6, 1905, O. Buchtien s. n. [Bae-

nitz 1346] (W); San Carlos de Bariloche, Lago Nahuel Huapi, Río Negro, March 11, 1939, A. Chicchi 226 (N), originally distributed as *Dipyrena juncea* (Gill.) Hook.; Pto. Nuevo, Llao-llao, Lago Nahuel Huapi, Patagonia, January 17, 1934, E. Ljungner 675 (N) in flower; Puerto Pañuelo, Lago Nahuel Huapi, Río Negro, February 14, 1934, Burkart 6529 [Herb. Mus. Argent. Cienc. Nat. 12.348] (N); at edge of lake, San Carlos de Bariloche, Lago Nahuel Huapi, February 6, 1905, O. Buchtien s. n. (F, La); Santa Cruz, Moreno et Tonini 341 (N). CHILE: Bridges 45 (B); C. Gay 943 (P); C. Gay s. n. (Cb, P); Cuming 261 (Bm, Ed, K-2); Estación Río Blanco, alt. 1400 m, Aconcagua, April 20, 1930, G. Looser 4005 (N); El Manzano, alt. 800-1000 m, Santiago, November 14, 1926, G. Looser 4006 (N); Terma de Tolhuaca, alt. 1100 m, Malleco, March 17-20, 1933, G. Looser 2743 (N), shrub, 2-3 m tall, flowers white: Valdivia, Lechler 615 (B, Bm, K, N-fragment, Ol, P, X); Hacienda Monte Grande, alt. 1200 m, Curicó, December, 1924, E. Werdermann 545 (B, G, K, N, W), in flower; Cúrarehuel, January, Claude-Joseph 5805 (W), in flower; Mangedehue, alt. 160 m, Valdivia, January, 1927, Hollermayer 1376 (B, K, N, W), in flower, originally distributed as *Verbena scoparia* Gill. et Hook.; Talca, 1888, R. A. Philippi s. n. (B, K, W); Panguipulli, Valdivia, January, Claude-Joseph 2719 (W), in flower; Catemu, Aconcagua, October, Claude-Joseph 2532 (W), in flower; Santiago, November, G. T. Hastings 367 (Ca, W), in flower; valley of the upper Río Manso, Llanquihue, February, 1896, K. Reiche s. n. (B-2, F); Valdivia, C. Gay 174 (E-photo, N-photo, P, Z-photo); Maule, C. Gay 381 (N-photo, P, Z-photo); dry river terrace, Cañón Río Claro, alt. about 1500 m, Cordillera Peteroa-Planchon, Curicó, February, I. Mexia 7878 (N), common many-branched shrub in the open, 2-3,5 m tall, flowers white; Valdivia, R. A. Philippi 807 (L, P); Cordillera de Maule, 1855, Germain s. n. (Bm, Cb-2, E-photo, K, N-2 photos, S-photo, W-photo, X, Z-photo); Las Trancas, Chillán, January, 1877, Herb. Mus. Nac. Santiago 18 (N); near the baths of Tolanca, January 16, 1905, C. S. Sargent s. n. (A); Aconcagua, Poeppig II. 84 (B, Bm, P); near La Guardia, Aconcagua, Gillies s. n. (Bm-isotype, K-type, N-photo of type, Z-photo of type); Río Blanco, Scott-Elliott 420 B, Bm, Ed); Río Blan-

co, C. Elliot 221 (K); Curicó, E. Werdermann 1668 (B); Valdivia 1876, R. A. Philippi s. n. (B-2); Andes of Valdivia, 1888, R. A. Philippi s. n. (B); Linares, A. Philippi 781 (B); Valdivia, 1862, R. A. Philippi s. n. (Cb); Catri-pulli, February 28, 1905, D. S. Bullock s. n. (Bm); Panguipulli, Valdivia, Hollermayer 554 (B); Linares, 1861, R. A. Philippi s. n. (X); Nuble, Berninger 187a (B); Río Negro, Valdivia, C. Gay 2 (K, N-photo, Z-photo); Cordillera, Macrae s. n. (K); Cumbre, Macrae s. n. (K); Semita, E. C. Reed s. n. (K); Quilatata, Germain s. n. (K); Val. Tinguiririca, Wilczek 39 (C); Rengoli, H. F. Comber 553 (Ed, K-2); Baños, Chillam, Francas, Atacama, October 1, 1883, Philippi et Borchers s. n. (Bm); Río Colorado, Los Andes, Atacama, October 1, 1886, Philippi et Borchers s. n. (Bm); Baper Cordillieres, 1833, C. Gay s. n. (Cb); Andes, November 1827, Poeppig s. n. (E); mountains along side of the Río Colorado, Cordillera of Sta. Rosa, November, 1827, Poeppig 557 (V, X); Santiago de Chile, Caldeleux s. n. (Cb); Valparaíso, Bridges 460 (Bm, K-2); Valparaíso, Bridges s. n. (K); Valparaíso, Cuming s. n. (Cp); Copahue, Bío-Bío, F. W. Neger s. n. (Mu); Valdivia, 1862, Philippi s. n. (X); Valdivia, Philippi s. n. (K); Valdivia, Philippi 807 (Bm); Cordilleras, Cuming 225 (Bm, Ed, K-2); Aconcagua, 1882, Ball, s. n. (K); 12 ft. tall, with the habit of *Spartium junceum*.

Diostea scoparia (Gill. et Hook.) Miers, *Trans. Linn. Soc. Lond.*
27 : 104. 1871.

Verbena scoparia Gill. et Hook. in Hook., *Bot. Misc.* 1 : 161, pl. 47.
1829.

Vernacular names : clavelillo del campo, escobilla del campo.
ARGENTINA : Catamarea, February 10, 1917, P. Jörgensen s. n. [Herb. Osten 10.678; Herb. Inst. Biol. S. Paulo 20.062] (N); La Rioja, Hieronymus et Niederlein 614 (K); Catamarca, P. Jörgensen s. n. [Herb. Facul. Cienc. Med. B. Aires 1403; Herb. Inst. Biol. S. Paulo 25.788] (Sp); Mendoza, E. C. Reed 175 (K); Sta. Rosa de los Andes to Uspallata Pass, Mendoza, Moiseley s. n. (K); Aconquija, Tucumán, December, 1863, Pearce s. n. (K); Catamarca, alt. 2500 m, February, S. Venturi 6720 (W), plants 50 cm tall, flowers blue; Andalgalá, Catamarca, P.

Jörgensen 1403 (G-2, N-photo, Z-photo), originally distributed as *Verbena ephedroides* Cham. CHILE: Herb. Bentham s. n. (G); Meyen s. n. (K); C., Elliot 649 (K); Bridges 459 (K); Cuming 226 (K); Valparaíso, Bridges s. n. (K, N-fragment); Cordilleras de Santiago, Germain s. n. (Cb, K); Cortadera, alt. 2600 m, Cordilleras de Santiago, Prov. Santiago, December, 1924, E. Werdermann 488 (K, N); Cordilleras, Drummond 226 (Bm); Cerro Campana, November 15, 1884, F. Philippi et Borchers s. n. (Bm); between S. Jago and Córdoba, Plata, C. Gay s. n. (P); eastern Chile, Herb. Univ. Christian s. n. (Ol); Pucacharrie, Comber 412 (K); Ojos de Agua, Cruickshanks 97 (K, N-fragment); Villavicencio, Gillies s. n. (K-type, N-photo of type, Z-photo of type); Juncal, January, 1928, C. Elliot 158 (K, N-fragment).

Dipyrena glaberrima (Gill. et Hook.) Hook., *Bot. Misc.* 1 : 355 and 356. 1830.

Wilsonia glaberrina Gill. et Hook. in Hook. *Bot. Misc.* 1 : 173, pl. 49. 1829.

Priva glaberrima (Gill. et Hook.) Bocq., *Adansonia* 3 : 212. 1863.

Dipyrena Wilsonia F. Phil., *Cat. Pl. Vasc. Chil.* 2 : 7, sphalm. 1881.

ARGENTINA: P. Jörgensen 185 (Cp-2); Cordillera de Mendoza, R. A. Philippi s. n. (V); Andes of Mendoza, R. A. Philippi s. n. (B-3, Cb, N-fragment, P, V); Leoncito, San Juan, January, 1876, S. Echegaray s. n. (B); Mendoza, Gillies s. n. (G); baths of Villavicencio, Mendoza, Gillies s. n. (G); rocky cañón of Tres Saltos, alt. 1800 m, Villavicencio, south of Mendoza, Prov. Mendoza, January 5, 1936, I. Mexia 4390 (G, N-photo, Z-photo), shrub 1-3 m, tall, flowers waxy-cream, fragrant; in the valleys of the Uspallata range of mountains toward Mendoza and at Cerro Bayo and near Villavicencio, February 28, 1821, Gillies s. n. (Ed-isotype, K-type and isotype, N-photo of type, Z-photo of type); near San Isidro, Mendoza, November 13, 1824, Gillies s. n. (K); Mendoza, 1825, Gillies s. n. (K); alt. 1700 m, Mendoza, November, D. O. King. 141 (Bm), in flower; alt. 1800 m, Mendoza, December, Rimbach 18 (L), in flower; Meudoza, Herb. Ledebour s. n. (L); Mendoza, Gillies 1 (Bm, N-photo); Quebrada del Toro, from Mendoza to Uspallata,

Prov. Mendoza, February 8, 1934, Pérez-Moreau s. n. [Herb. Mus. Argent. Cienc. Nat. 12.705] (N), in fruit.

Duranta Benthami Bricq. in Engl. and Prantl, *Nat. Pflanzenfam.* 4, 3^a: 160, nom. nud. 1895; *Bull. Herb. Boiss.*, sér. 1, 4: 343. 1896.

BOLIVIA: M. Cárdenas 1364 (N); G. Mandon 534 (Cb-2 isotype 2, F-isotype, N-isotype and photo of isotype, Z-photo of isotype).

Duranta Mandoni Moldenke, sp. nov.

Frutex; ramulis acute tetragonis adpresso-puberulis glabrescentibus; foliis ternatis vel oppositis confertis; petiolis 1-3 mm longis sparsissime adpresso-strigillossis; laminis subcoriaceis oblongo-ellipticis vel ellipticis, ad apicem rotundatis vel subemarginatis, integris valde revolutis, ad basim cuneatis, utrinque glabris subitus dense punctatis; calyce ca. 7 mm longo leviter puberulo.

Shrub; branchlets medium-stout, acutely tetragonal, appressed-puberulent when young, glabrescent in age; internodes often greatly abbreviated, especially on the twigs; leaves ternate or opposite, often clustered on much abbreviated or aborted twigs; petioles slender, 1-3 mm long, canaliculate above, very sparsely appressed-strigillose; blades subcoriaceous, oblong-elliptic or elliptic, 0.7-2.3 cm long, 5-12 mm wide, rounded or subemarginate at apex, sometimes minutely mucronulate, entire and strongly revolute along the margins, cuneate at base, glabrous on both surfaces, densely punctate beneath; midrib impressed above, prominent beneath; secondaries and veinlet reticulation obscure or indiscernible above, the former usually discernible beneath; racemes axillary, 2-5 cm long, few-to many-flowered, the flower secund; peduncle and rachis appressed-puberulent; calyx about 7 mm long and 3-4.5 mm wide at apex, lightly puberulent.

BOLIVIA: Vicinity of Sorata, Iminapi, alt. 2650-3300 m, La Paz, January-June, 1860, G. Mandon 533 (F-isotype, M-isotype, N-type), in flower; dry places, Sailapata, Prov. Apopaya, Cochabamba, November, 1935, M. Cárdenas 3357 (N), shrub 3

m tall; flowers lilac-blue; Tunari, Cochabamba, May 4, 1892, O. Kuntze s. n. (N).

Durante recurvistachys Rusby, *Phytologia* 1: 73. 1934.

BOLIVIA: Cochabamba, M. Bang 1798 (C-type and isotype, F-isotype); Simpaya near Yanocachi, south Yungas, December, 1911, O. Buchtien 357 (N), originally distributed as *D. Plumieri* Jacq.; Simpaya near Yanocachi, alt. about 7000 ft., South Yungas, December 6, 1906, O. Buchtien 314 (N), shrub or tree, 4-5 m tall, flowers violet; Okara, alt. 7500 ft., Cochabamba, April 26-29, 1926, G. H. H. Tate 910 (N).

Duranta repens L., *Sp. Pl.*, ed 1, 637. 1753.

Duranta Plumieri Jacq., *Select. Stirp. Am.* 186, pl. 176, f. 76, 1763; *Darwiniana* 3: 56. 1937: *Svensk. Bot. Tidsk.* 32: 23. 1938.

URUGUAY: Arechavaleta 44 (Cb). PARAGUAY: E. Hassler 11.708 (F), originally distributed as *Hyptis* sp.

Duranta serratifolia (Griseb.) Kuntze, *Rev. Gen. Pl.* 3: 2, 251. 1898; Molino, *Trab Inst. Bot. y Farm.* 54: 112. 1935; Latzina, *Lilloa* 1: 188. 1937.

Myrtus serratifolia Griseb., *Abh. K. Gessel. Wiss. Götting.* 19: 139. 1874.

Duranta Lorentzii Griseb., *Abh. K. Gessel. Wiss. Götting.* 24: 280. 1879; Parodi, *Plant. Indig. Aliment. Cult. Argent.* 1: 202. 1934; Molino, *Trab. Inst. Bot. y Farm.* 54: 78. 1935.

BOLIVIA: Apolo, El Beni, alt. 4800 ft., February 21, 1902, R. S. Williams 107 (N), bush 8 ft. tall, originally distributed as *D. Lorentzii* Griseb.; Querma, alt. 9000 ft., July 15, 1921, O. E. White 219 (N), originally distributed as *D. Lorentzii* Griseb.; in wet mould and soil of forest, the roats between rocks where water runs, Coripati, Yungas, La Paz, April 29, 1894, M. Bang 2172 (C, F), in fruit, originally distribute as *D. Lorentzii* Griseb.; Samaipata, alt. 1800 m, Santa Cruz, October 15, 1928, J. Steinbach 8269 (F, N); Cochabamba, alt. 2000 m, January, J. Steinbach 8843 (F), in flower and fruit; alt. 2600 m, Santa Cruz, May, 1892, O. Kuntze s. n. (N). ARGENTINA: cultivated for ornament, San Cosme, Corrientes, November 12, 1934, L.

R. Parodi 12.095 (N), semiscendent shrub, 2-3 m tall; Jujuy, October, 1892, O. Kuntze s. n. (F, N-2); Parque Centenario, Dept. Capital, alt. 450 m, Tucumán, May, 1929, S. Venturi 9059 (N), shrub 2 m tall, flowers rose; Quebrada de San Lorenzo, Dept. Capital, alt. 1200 m, Salta, October, 1926, S. Venturi 5162 (N), small tree, 5 m tall, flowers lilac; Cuesta de la Yerba Huasi between Lules and El Potrero de Las Tablas, Sierra de Tucumán, Tucumán, January 11, 1873, P. G. Lorentz et G. Hieronymus 995 (F, N); Tucumán, P. G. Lorentz et G. Hieronymus 793 (F, N), originally determined as *Solanaceae*; alt. 1000-1500 m, Tucumán, January 22-23, 1924, S. Venturi 2622 (F-2), 4-5 m tall, trunk to 10 cm in diameter, flowers violet; Santa Ana, Misiones, November 20, 1919, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 23.958] (N), in flower; San Pedro de Colalao, Tucumán, December 25, 1913, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 24/1588] (N), in fruit; Sierra Cresta del Gallo, Dept. Anta, Salta, July, 1934, Ragonese 256 [Herb. Mus. Argent. Cienc. Nat. 23.996] (N), in fruit.

JUNELLIA Moldenke, gen. nov.

Frutices parves alpines australes; ramis abbreviatis contortis saepe caespitosis; foliis imbricatis saepe plusminus spinosis, saepe reductis, integerrimis vel partitis; inflorescentiis capitatis vel spicatis terminalibus 2-vel paucifloris vel floribus solitariis.

Small woody shrubs or subshrubs, inhabiting high alpine regions of the Andes of Argentina, Chile, and Peru and neighboring similar areas, with gnarled and tangled, often greatly reduced, branches, often matted or tufted; leaves overlapping, sharp-pointed, often stiff and more or less spinose, sometimes reduced or scale-like, entire or parted; flowers borne in 2- or few-flowered heads or spikes (sometimes solitary) at the ends of the branches; anthers unappendaged.

Junellia Ameghinii (Speg.) Moldenke, comb. nov.

Moldenke, Prelim. Alph. List. 44 and 49, hyponym (March 17, 1940).
Verbena Ameghinii Speg., Rev. Agron. La Plata 3 : 561. 1897.
Verbena Toninii Kuntze, Rev. Gen. Pl. 3 : 2, 258. 1898.

ARGENTINA: alt. 300 m, Patagonia, November 10, 1928, A. Donat 138 (N); Golf S. Jorge, Aest. 1899, C. Ameghino s. n. (N), metatype; Patagonia, 50-53°, 1882-1884, F. P. Moreno et Tonini s. n. (N, type of *Verbena Toninii* Kuntze).

***Junellia aretioides* (R. E. Fries) Moldenke, comb. nov.**

Verbena aretioides R. E. Fries, *Nova Act. Soc. Sci. Upsal.*, ser. 4, 1, no. 1 : 109. 1905.

***Junellia asparagoides* (Gill. et Hook.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List.* 44, hyponym (March 17, 1940).

Verbena asparagoides Gill. et Hook. in Hook., *Bot. Misc.* 1 : 165. 1829.

Verbena bryoides Echeg. ex Hieron., *Sert. Sanjuan.*, 66, in syn. 1881 [not. *V. bryoides* R. A. Phil., *Fl. Atac.* 40. 1860].

***Junellia aspera* (Gill. et Hook.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List.* 44, hyponym (March 17, 1940).

Verbena aspera Gill. et Hook. in Hook., *Bot. Misc.* 1 : 163. 1829.

C. Houard in *Zoocéd. Pl. Amer. Sud.* 345 (1933) states that this species often produces rosettes of leaves caused by galls of *Misospatha verbenae* Kieff. and Jörgensen in Argentina and also sometimes carries galls formed by an unidentified lepidopterous insect in Argentina.

Vernacular name: capo colorado.

ARGENTINA: vicinity of General Roca, alt. 250-360 m, Río Negro, September, 1914, to February, 1915, W. Fischer 89 (K, N, Ur), originally distributed as *Verbena diversifolia*. PERÚ: Pampa, alt. 3660 m, southern slopes of Chachani Mountain, Arequipa, March, 1920, Mr. and Mrs. F. E. Hinkley 54 (N), shrub 6-9 dm tall, stem 12 mm thick, flowers purple; open rocky hill along draw above Arequipa, Dept. Arequipa, alt. 2600-2700 m, April 7-16, 1925, F. W. Pennell 13.187 (N), shrub, corolla «pinard yellow». CHILE: Cord. de Japu, Dept. Tarapacá, alt. 4300 m, Tarapacá, March, 1926, E. Werdermann 1111 (N).

Junellia bryoides (R. A. Phil.), Moldenke, comb. nov.

Moldenke, *Suppl. List Comm. Names* 6 and 17, nom. nud. (Feb. 25, 1940), *Prelim. Alph. List* 45, hyponym (March 17, 1940). *Verbena bryoides* R. A. Phil., *Fl. Atac.* 40. 1860.

Vernacular names: culesoro, pata de perdiz.

CHILE: Encantada, January 25, 1907, Herb. Mus. Nae. Santiago 8 (N).

Junellia caespitosa (Gill. et Hook.) Moldenke, comb. nov.

Moldenke, *Prelim. Alph. List* 45, hyponym (March 17, 1930). *Verbena caespitosa* Gill. et Hook. in Hook., *Bot. Misc.* 1 : 165. 1829.

Junellia cedroides (Sandw.) Moldenke, comb. nov.

Moldenke, *Prelim. Alph. List* 45, hyponym (March 17, 1940). *Verbena cedroides* Sandw., *Kew Bull.* 1927 : 184. 1927.

Junellia chubutensis (Speg.) Moldenke, comb. nov.

Moldenke, *Prelim. Alph. List* 45, hyponym (March 17, 1940). *Verbena chubutensis* Speg., *Anal. Soc. Ci. Argent.* 53 : 245. 1902.

ARGENTINA: Chubut, Nafofo-cahuellu, March 10-12, 1901, N. Illin 240 [Herb. Inst. Biol. S. Paulo 24.002] (N).

Junellia Comberi (Sandw.) Moldenke, comb. nov.

Moldenke, *Prelim. Alph. List* 45, hyponym (March 17, 1940). *Verbena Comberi* Sandw., *Kew Bull.* 1927 : 185. 1927.

Junellia connatibracteata (Kuntze) Moldenke, comb. nov.

Moldenke, *Prelim. Alph. List* 45, hyponym (March 17, 1940). *Verbena connatibracteata* Kuntze, *Rev. Gen. Fl.* 3 : 2, 255. 1898.

ARGENTINA: vicinitiy of General Roca, alt. 250-300 m, Río Negro, September, 1914, to February, 1915, W. Fischer 183 (N, Ur); Patagonia, 50-53°, 1882-1884, F. P. Moreno et Tonini s. n. (N-cotype); Arroyo de los Papagayos, alt. 1650 m, Paso Cruz, 34°, Cordilleras, January, 1892, O. Kuntze s. n. (N-coty-

pe); Cumallo, Río Negro, January 3, 1935, A. L. Cabrera et M. M. Job 18 (N); El Sosneado, alt. 1650 m, Mendoza, January, 1921, E. Carette 335 (N), previously determined as *J. Ameghinii*; Cumallo, Río Negro, December 7, 1938, A. L. Cabrera 4845 (N), flowers rose; Cumallo, Río Negro, December 7, 1938, A. L. Cabrera 4847, (N), flowers white.

***Junellia diversifolia* (Kuntze) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 46, hyponym (March 17, 1940).

Verbena diversifolia Kuntze, *Rev. Gen. Pl.* 3 : 2, 255. 1898.

ARGENTINA: Cerro La Soledad, alt. 3500 m, Jujuy, March 23, 1929, S. Venturi 8605 (N), shrub 30 cm tall, flowers white; Paso Cruz, 34°, alt. 2000 m, O. Kuntze 5 (N-type); Tilcara, alt. 2500 m, Jujuy, February, 1936, A. G. Schulz 1452 (N), aromatic shrub, 30 cm tall, flowers lilac; La Cienaguita, Cumbres Calchaquíes, alt. 2200 m, Tucumán, December 30, 1913, D. Rodríguez 1218 (N), 1 m tall, flowers blue; Quebrada del Chorro, alt. 3000 m, Tafí, Tucumán, April 24, 1926, S. Venturi 4282 (N), 1 m tall; El Molle, Tucumán, January 29, 1935, A. Castellanos s. n. [Heb. Mus. Argent. Cienc. Nat. 14.811]. (N).

***Junellia dolichothysa* (Sandw.) Moldenke, comb. nov.**

Prelim. Alph. List 46, hyponym (March 17, 1940).

Verbena dolichothysa Sandw., *Kew Bull.* 1927 : 186. 1927.

***Junellia Echegarayi* (Hieron.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 46, hyponym (March 17, 1940), comb. nov.

Verbena Echegarayi Hieron., *Bol. Acad. Nat. Córdoba* 4 : 66. 1881.

Verbena Echegarayi Hieron. ex Moldenke, *Prelim. Alph. List* 46, in syn. 1940.

ARGENTINA: Mendoza [labelled «Chili» in error], Cruicks-hank 96 (K, N-photo, Z-photo), flowers light blue; Luján, Mendoza, January 25, 1919, A. Ruiz 668 [Herb. Mus. Argent. Cienc. Nat. 25/2194] (N). **PERÚ:** Airampal, Arequipa to Puno, E. Weberbauer 1396 (B).

***Junellia erinacea* (Gill. et Hook.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 46, hyponym (March 17, 1940).

Verbena erinacea Gill. et Hook. in Hook., *Bot. Misc.* 1 : 164, pl. 48.
1829.

ARGENTINA : Patagonia, 50-53°, 1882-1884, F. P. Moreno et Tonini 336 (N); Patagonia, Santa Cruz, January 1, 1929, A. Donat 143 (N); Patagonia, 50-53°, 1882-1884, F. P. Moreno et Tonini 284 (N); Cumallo, Río Negro, December 7, 1938, A. L. Cabrera 4846 (N), flowers rose.

***Junellia glauca* (Gill. et Hook.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 46, hyponym (March 17, 1940).

Verbena glauca Gill. et Hook. in Hook., *Bot. Misc.* 1 : 163. 1829.

CHILE : C. Gay s. n. (N); 1828-1834, C. Gay 293 (N).

***Junellia glauca* var. *cisandina* (Niederlein) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 46, hyponym (March 17, 1940).

Verbena glauca var. *cisandina* Niederlein ex Moldenke, *Prelim. Alph. List* 46, in syn. 1940.

ARGENTINA : Río Diamante, alt. 2500 m, Mendoza, January, 1921, E. Carette 5 (N); Paso Cruz, 34°, alt. 1700 m, O. Kuntze 4 (N); Paso Cruz, alt. 1700 m, January, 1892, O. Kuntze s. n. (N).

***Junellia Hayekii* Moldenke, nom. nov.**

Verbena aretioides Hayek in Engl., *Bot. Jahr.* 42 : 163-164. 1908
[not *V. aretioides* R. E. Fries, *Nova Act. Soc. Sci. Upsal.*, ser 4,
1 : n° 1 : 109. 1905].

Juellia aretioides (Hayek) Moldenke, *Prelim. Alph. List* 44, hyponym.
1940.

***Junellia juniperina* (Lag.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 46, hyponym (March 17, 1940).
Verbena juniperina Lag., *Gen. et Sp. Nov.* 19. 1816 : Molino, *Trab. Inst. Bot. y Farm.* 54 : 112. 1935 : Latzina, *Lilloa* 1 : 189. 1937.
? *Verbena juniperina* Gill. et Hook., in Hook., *Bot. Misc.* 1 : 163.
1829.

ARGENTINA : frequent in dry places, Guasapampa, Córdoba, February 30, 1890, F. Kurtz 6788 (N-2), originally distributed as *Verbena juniperina* var. *charoides* Hieron.; La Cienaguita, Cumbres Calchaquíes, alt. 2200 m, Tucumán, December 29, 1913, D. Rodríguez 1223 (N), 1 m tall, flowers clear-blue.

***Junellia juniperina* var. *grisea* (I. M. Johnst.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 46, hyponym (March 17, 1940).

Verbena juniperina var. *grisea* I. M. Johnst., *Contrib. Gray Herb.* 81: 96, 1928.

Vernacular name: pomera.

PERÚ: ravines, alt. 3355 m, southern slopes of Chachani Mountain, north of Arequipa, March, 1920, Mr. and Mrs. F. E. Hinkley 76 (N-isotype), 2.5-3 dm tall, stem 6 mm thick, medicinal; open rocky slopes, alt. 3500-3700 m, Nevado de Chachani, Arequipa, April 14, 1925, F. W. Pennell 13.259 (N), low and very dense shrub, corolla deep-lavender.

***Junellia lavandulaefolia* (R. A. Phil.) Moldenke, comb. nov.**

Verbena lavandulaefolia R. A. Phil., *Anal. Univ. Chil.* 521. 1873.

Verbena lavandulifolia R. A. Phil. ex Moldenke, *Prelim. Alph. List* 47, in syn. 1940.

Junellia lavandulifolia (R. A. Phil.) Moldenke, *Prelim. Alph. List* 47, hyponym. 1940.

CHILE: Cord. Volcán Peteroa, alt. 1800 m, Curicó, January, 1925, E. Werdermann 577 (N).

***Junellia Lorentzii* (Niederlein) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 47, hyponym (March 17, 1940).

Verbena Lorentzii Niederlein ex Hieron. *Bol. Acad. Nac. Córdoba* 3: 370. 1879.

ARGENTINA: vicinity of General Roca, alt. 250-360 m, Río Negro, September 1914, to February, 1915, W. Fischer 25 (K, N, Ur), the Kew sheet of this collection consists of two stems, one with the leaves very pubescent, the other less so, broader, and far more nitid than is typical in the species, ori-

ginally distributed as *Verbena aspera* Gill. et Hook.; Mesetas Altas, alt. 500 m, Santa Cruz, January 2, 1930, A. Donat 220 (K, N), in flower, originally distributed as *Verbena ligustrina* Lag.; Santa Cruz, June 26, 1928, A. Donat 56 (K, N), originally distributed as *Verbena thymifolia* Lag.; Territ. del Chubut, N. Illin 1124 (K), the leaves on this specimen are very narrow and very pubescent on both surfaces, like part of the Kew sheet of W. Fischer 25; Puerto Deseado, C. Darwin 226 (K); Puerto Madryn, eastern Patagonia, December 13, 1904, P. Dusén 5333 (K, N-fragment), in flower and fruit; El Sosneado, alt. 2200 m, Mendoza, January, 1921, E. Carette 330 (N-2), originally distributed as *Verbena niconcinna* Briq. by Hicken; Patagonia, 50-53°, 1882-1884, F. P. Moreno et Tonini 340 (N), originally distributed as *Verbena aspera* Gill. et Hook.; Mendoza, Stuckert 7466 (Cb); Cumallo, Río Negro, December 7, 1938, A. L. Cabrera 4802 (N), shrub 1,5 m tall, flowers yellow, fragrant.

***Junellia minima* (Meyen) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 47, hyponym (March 17, 1940).

Verbena minima Meyen, *Reise* 1 : 451. 1834 ; *Nov. Act. Acad. Caes. Leopold.-Carol. Nat. Cur.* 19 : suppl. 1 : 379. 1843.

Vernacular name : kohtta.

BOLIVIA : Omasuyos, vicinity of Sorata, Laracaja, alt. 4200 ft., November, 1888, G. Mandon 526 (M, N, T); in dense clumps 2 feet across, alt. 12.600 ft., Lake Titicaca, August 28, 1901, R. S. Williams 2402 (N), flowers white or bluish, originally distributed as *Azorella rosulata* Rusby; Tiahuanuco, alt. 3850 m, December, 1913, O. Buchtien 434 (N); Tiahuanuco, alt. 3850 m, December, 1912, O. Buchtien s. n. (La); Unduavi, alt. 10.000 ft., October, 1885, H. H. Rusby 2670 (C). PERÚ : dry uplands, Pomata, Prov. Julé, in the vicinity of Lake Titicaca, alt. 3125 m, Puno, November 26, 1919, Mrs. R. S. Shepard 26 (N), flowers light-purple. CHILE : Taena, alt. 4300 m, Dept. Taena, April, 1926, E. Werdermann 1120 (N).

***Junella minutifolia* (R. A. Phil.) Moldenke, comb. nov.**

- Moldenke, *Prelim. Alph. List* 47, hyponym (March, 17, 1940).
Verbena microphylla R. A. Phil., *Liunaea* 29 : 21. 1857 [not. *V. microphylla* H. B. K., *Nov. Gen. et Sp. Pl.* 2 : 272, pl. 133. 1818].
Verbena minutifolia R. A. Phil., *Anal. Univ. Chil.* 90 : 614. 1895.
Verbena micrantha R. A. Phil., *Anal. Univ. Chil.* 90 : 615. 1895.
Junellia micrantha (R. A. Phil.) Moldenke, *Prelim. Alph. List* 47, hyponym. 1940.
Verbena Philippiana Kuntze ex Moldenke, *Prelim. Alph. List* 47, in syn. 1940.

ARGENTINA: Patagonia, 50-53°, 1882-1884, F. P. Moreno 308 (N), originally distributed as *Verbena thymoides* Phil.; Valle Cabezas de Vacas, March 5, 1901, N. Illin 56 [Herb. Inst. Biol. S. Paulo 24.003] (N); Mesetas Altas, alt. 600 m, Patagonia, Santa Cruz, January 1, 1930, A. Donat 201 (N); Patagonia, alt. 300 m, Santa Cruz, December 18, 1928, A. Donat 124 (N); Patagonia, February, 1898, C. Ameghino s. n. (N), labelled as a metatype of *Verbena serpyllifolia* Speg.; Cumallo, Río Negro, December 7, 1938, A. L. Cabrera 4833 (N), flowers rose. CHILE: Herb. Mus. Nac. Santiago 10 (N); Pablo, 1873-1874, Herb. Mus. Nac. Santiago 11 (N).

***Junellia nubigena* (Speg.) Moldenke, comb. nov.**

- Moldenke, *Prelim. Alph. List* 47, hyponym (March, 17, 1940).
Verbena nubigena Speg., *Comm. Mus. Buenos Aires* 1 : 137. 1898.

ARGENTINA: Cerro de Cachi, Salta, January, 1897, Spegazzini s. n. (N).

***Junellia patagonica* (Speg.) Moldenke, comb. nov.**

- Moldenke, *Prelim. Alph. List* 47, hyponym (March, 17, 1940).
Verbena patagonica Speg., *Anal. Soc. Cient. Argent.* 15 : 114. 1883.
Verbena Morenonis Kuntze, *Rev. Gen. Pl.* 3,2 : 256, in syn. 1898.
Verbena thymoides Phil. ex Kuntze, *Rev. Gen. Pl.* 3,2 : 256, in syn. 1898.
Verbena bonariensis Rendle, *Journ. Bot.* 42 : 370. 1904 [not. *V. bona-riensis* L., *Sp. Pl.*, ed. 1, 20. 1753].
Verbena patagonica Moldenke, *Phytologia* 1 : 171. 1935.

ARGENTINA: Patagonia, 50-53°, 1882-1884, F. P. Moreno et Tonini 176 (N, type of *Verbena Morenonis* Kuntze); Patagonia A. Donat 187 (N); Chubut-Carrenleofu, Patagonia, March 1, 1900, N. Illin s. n. (N), metatype.

***Junellia selaginoides* (Kunth) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 48, hyponym (March 17, 1940).

Verbena selaginoides Kunth ex Walph., *Repert.* 4: 15. 1845.

Verbena alternifolia Hort. ex Walp., *Repert.* 4: 15, in syn. 1845; Schau. in A. DC., *Prodr.* 11: 544. in syn. 1847.

CHILE: between La Torre and Orshe, alt. 20 m, Coquimbo, August 20, 1917, C. Skottsberg et I. Skottberg 909 (N); Taltal, Dept. Taltal, alt. 500 m, Antofagasta, October, 1925, E. Werdemann 848 (N); Panulcillo, Coquimbo, Herb. Mus. Nac. Santiago 9 (N).

***Junellia seriphiooides* (Gill. et Hook.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 48, hyponym (March 17, 1940).

Verbena seriphiooides Gill. et Hook., in Hook. *Bot. Misc.* 1: 164. 1829.

Verbena echinata R. A. Phil., *Anal. Univ. Chil.* 35: 191. 1870.

C. Houard in his *Zoocéd. Pl. Amer. Sud* 345 (1933) states that this species often has small leaves formed by galls of *Misospatha oreiplana* Kieff. and Jörgensen in Argentina.

ARGENTINA: Mendoza, 1916, E. Carette 3045 (N-3); vicinity of General Roca, alt. 250-360 m, Río Negro, September, 1914, to February, 1915, W. Fischer 24 (N, Ur); Pampas, 34°, January, 1892, O. Kuntze s. n. (N-2); Ascotan, alt. 3900 m, August 13, 1892, O. Kuntze s. n. (N); Chilcas, near Mendoza, Mendoza, October, 1896, F. Kurtz 10.012 (N); frequent on sandy shores, Arroyo Papagayos, Mendoza, December 26, 1892, F. Kurtz 7417 (N); Travesía, between Santa Isabel and La Pastoril, La Pampa, March 19, 1938, A. L. Cabrera 4382 (N); Buenos Aires, L. R. Parodi 4834 (V), shrub, 50-80 cm tall.

Junellia serpyllifolia (Speg.) Moldenke, comb. nov.

Moldenke, *Prelim. Alph. List* 48, hyponym (March 17, 1940).
Monopyrena serpyllifolia Speg., *Rev. Agron. La Plata* 3 : 559. 1897.
Verbena serpyllifolia (Speg.) Speg., *Anal. Soc. Cient. Argent.* 53 : 243. 1902, cited as *Speg. Nov. Add. Fl. Patag.* 2 : repr. 66. 1902 in
the *Index Kewensis*.

ARGENTINA : Patagonia, alt. 300 m, Santa Cruz, December 22, 1929, A. Donat 111 (N).

Junellia Silvestrii (Speg.) Moldenke, comb. nov.

Moldenke, *Prelim. Alph. List* 48, hyponym (March 17, 1940).
Verbena Silvestrii Speg., *Comm. Mus. Buenos Aires* 1 : 137. 1898 ;
Anal. Soc. Científ. Argent. 53 : 243. 1902 ; Speg., *Nov. Add. Fl. Patag.* 2 : repr. 66. 1902.

ARGENTINA : Meseta al W. del Colhuapi, Territorio del Chubut, Collector undesignated s. n. (N), metatype.

Junellia spathulata (Gill. et Hook.) Moldenke, comb. nov.

Moldenke, *Prelim. Alph. List* 48, hyponym (March 17, 1940).
Verbena spathulata Gill. et Hook. in Hook., *Bot. Misc.* 1 : 162. 1829 ;
K. Grandjot, *Verh. Deutsch. Wissen. Ver. Santiago* 3 : 56. 1936.

ARGENTINA : Alrededores del Arroyo Chacay-có, Neuquén, February 3, 1939, A. Chicchi 43 (N). CHILE : mountain meadow, alt. 5000 ft, Río Colorado, February 15, 1902, G. T. Hastings 548 (N), originally distributed as *Verbena spathulata* Gill.; 1828-1834, C. Gay s. n. (N-3); 1839, C. Gay s. n. (N), originally distributed as *Verbena spathulata* Hook.; Cordill. de S. Yago, R. A. Philippi s. n. (M); Alverjalito, upper Río Salado, Mendoza, February 2, 1892, F. Kurtz 7137 (N), frequent, flowers blue, rose or white; Paso Cruz, alt. 2300 m, January, 1892, O. Kuntze s. n. (N); Cordillera de Santiago, December, 1872, Herb. Mus. Nac. Santiago 3 (N).

Junellia spissa (Sandw.) Moldenke, comb. nov.

Moldenke, *Prelim. Alph. List* 48, hyponym (March 17, 1940).
Verbena spissa Sandw., *Kew Bull.* 1927 : 187. 1927.

***Junellia succulentifolia* (Kuntze) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 49, hyponym (March 17, 1940).
Verbena succulentifolia Kuntze, *Rev. Gen. Pl.* 3,2 : 257. 1898.

ARGENTINA : Patagonia, 50-53°, 1882-1884, F. P. Moreno et Tonini 335 (N-type).

***Junellia tridactylites* (Lag.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 49, hyponym (March 17, 1940).
Verbena tridactylites Lag., *Gen. et Sp. Nov.* 19. 1816.

ARGENTINA : Mesetas Altas, alt. 600 m, Patagonia, Santa Cruz, January 7, 1930, A. Donat 221 (N); western slopes of Cerro Anecón Grande, alt. 1400 m, Río Negro, December 14, 1938, E. Ferruglio 63 (N).

***Junellia tridens* (Lag.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 49, hyponym (March 17, 1940).
Verbena tridens Lag., *Gen. et Sp. Nov.* 19. 1816.
Verbena carroo Speg., *Anal. Soc. Cient. Argent.* 15 : 112. 1883.

Vernacular name ; mata negra.

ARGENTINA : Cañadón Grande, Vuelta del Senguer, Territ. del Chubut, November 5, 1927, A. L. Cabrera 22 (N); Puerto San Julián, Santa Cruz, 1915, E. Carette 4032 (N); Puerto San Julián, Santa Cruz, 1915, E. Carette s. n. (N); Santa Cruz, alt. 500 m, Santa Cruz, January 1, 1929, A. Donat 108 (N); Patagonia, 50-53°, 1882-1884, F. P. Moreno et Tonini 338 (N); Sa. Bagualeo, southern Patagonia, March 25, 1899, O. Borge s. n. (N); Patagonia, Santa Cruz, 1891-1892, Beaufils 608 (N); Santa Cruz, Spegazzini s. n. (N, isotype of *Verbena carroo* Speg.); Meseta de Espinosa, Santa Cruz, November 25, 1929, Ferruglio s. n. [Herb. Mus. Argent. Cienc. Nat. 38/1886] (N).

***Junellia ulicina* (R. A. Phil.) Moldenke, comb. nov.**

Moldenke, *Prelim. Alph. List* 49, hyponym (March 17, 1940).
Verbena ulicina R. A. Phil., *Anal. Univ. Chil.* 90 : 611 : 1895.

CHILE : Herb. Mus. Nac. Santiago 5 (N).

Junellia uniflora (R. A. Phil.) Moldenke, comb. nov.Moldenke, *Prelim. Alph. List.* 49, hyponym (March 17, 1940).*Verbena uniflora* R. A. Phil., *Linnæa* 29 : 20. 1857.

ARGENTINA : Paso Cruz, 34°, alt. 3000 m, Cordillera, 1892, C. Kuntze 48 (N).

Junellia uniflora* var. *glabriuscula (Kuntze) Moldenke, comb. nov.Moldenke, *Prelim. Alph. List* 49, hyponym (March 17, 1940).*Verbena uniflora* var. *glabriuscula* Kuntze, *Rev. Gen. Pl.* 3, 2 : 258. 1898.

ARGENTINA : Patagonia, 50-53°, 1882-1884, F. P. Moreno et Tonini 219 (N-cotype); Patagonia, 50-53°, 1882-1884, F. P. Moreno et Tonini 294 (N-cotype).

Lantana achyranthifolia Desf., *Cat. Hort. Par.*, ed. 3, 392, 1829.*Lippia fimbriata* Rusby, *Mem. Torrey Club* 4 : 244. 1895.

PARAGUAY : E. Hassler 11.027 (Cb). ARGENTINA : Güemes, Salta, June 6, 1934, T. Meyer s. n. [Herb. Mus. Argent. Cienc. Nat. 13,348] (N).

Lantana aristata (Schau.) Briq., *Arkiv. Bot.* 2, n° 10 : 17. 1904.*Lippia aristata* Shau. in A. DC., *Prodr.* 11 : 581. 1847.

PARAGUAY : E. Hassler 9876 (V).

Lantana aristata* var. *angustifolia (Kuntze) Moldenke, *Phytologia* 1 : 170. 1935.*Lippia aristata* var. *angustifolia* Kuntze, *Rev. Gen. Pl.* 3, 2 : 251. 1898.

PARAGUAY : wet campo at edge of woodland island, between Río Apa and Río Aquidaban, November, 1908, K. Fiebrig 4008 (N-photo, V, Z-photo), flowers white and yellow. ARGENTINA : Alemania, alt. 1300 m, Salta, December 12, 1929, S. Venturi 9898 (N), shrub 80 cm, tall, flowers white; Cuesta del Periquillo, Sierra de Tucumán, January 18, 1873, P. G. Lorentz et G. Hieronymus 1067 (N-type).

Lantana aristata var. **Cabrerae** Moldenke, var. nov.

Haec varietas a forma typica speciei recedit foliorum laminis membranaceis adpresso-serratis densiore pubescentibus, ad basin attenuato-acuminatis; inflorescentiis capitatis longe pedunculatis; bracteolis densiore pubescentibus.

This variety differs from the typical form of the species in its leaf-blades being much thinner in texture, attenuate-acuminate at base, appressed serrate with often blunt teeth, more densely pubescent; inflorescence more regularly capitate, long-pedunculate, its bractlets more densely pubescent; and its southern distribution.

ARGENTINA : Vespucio, Dept. Orán, Salta, July 14, 1937, A. L. Cabrera 4169 (N), shrub; Vespucio, Dept. Orán, Salta, July 13, 1937, A. L. Cabrera 4145 (N-2), shrub; Co. San Bernardo, alt. 1400 m, Salta, February, 1936, A. G. Schulz 1457 (N), shrub 1 m tall, flowers lilac; Capital, alt. 1000 m, Jujuy, February, 1936, A. G. Schulz 1455 (N), shrub 80-100 cm tall, flowers white; Cerro San Bernardo, Capital, Salta, May 27, 1933, A. L. Cabrera 3018 (N-type), aromatic shrub, flowers white; Metán, Salta, July 21, 1930, A. Castellanos s. n. [Herb. Mus. Arg. Cienc. Nat. 30/1755] (N); Río Salí, Dept. Capital, Tucumán, April, 1920, S. Venturi s. n. [Herb. Mus. Argent. Cienc. Nat. 23.881] (N); Río Piedras, Orán, Salta, November 5, 1911, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 23.811] (N); Sierra Cresta del Gallo, Dept. Anta, Salta, July, 1934, Ragonese s. n. [Herb. Mus. Argent. Cienc. Nat. 23.995] (N); Cerro Maldonado, Sierra González, Dept. Anta, Salta, June, 1934, Ragonese 69 [Herb. Mus. Argent. Cienc. Nat. 23.565] (N); Quebrada de Lules, Tucumán, September 10, 1939, T. Meyer 3047 (N); Tartagal, Salta, June 2, 1934, T. Meyer 918 (N), plants 1.5-2 m tall, flowers; Tucumán, January 4, 1940, T. Meyer s. n. (N), mixed with *Lippia Grisebachiana* Moldenke.

Lantana aristata var. **pluripedunculata** (Kuntze) Moldenke, *Phytologia* 1: 170. 1935.

Lippia aristata f. *pluripedunculata* Kuntze, *Rev. Gen. Pl.* 3, 2: 251. 1898.

ARGENTINA : hillsides, Capital, alt. 1200 m, Jujuy, February, 1936, A. G. Schulz 1456 (N), shrub 0.5-1 m tall, flowers white.
BOLIVIA : East Velasco, alt. 200 m, July, 1892, O. Kuntze s. n. (N-2).

Lantana Balansae Briq., *Ann. Conserv. et Jard. Bot. Genève* 7-8 : 300. 1904.

Lantana Balansae var. *peduncularis* Briq., *Bull. Herb. Boiss.*, sér. 2, 4 : 1063. 1904.

ARGENTINA : Río Grande, La Falda, Córdoba, January, 1936, M. M. Job 470 (N), flowers lilac; highway from Reconquista to Barros Pazos, Santa Fe, January-February, 1936, M. M. Job 798 (N), frequent, corolla lilac; Cosquín, Pan de Azúcar, alt. 1000-2000 m, Córdoba January-February, 1936, A. P. Rodrigo 558 (N), flowers rose; Isla Martín García, Río de La Plata, October, 1934, A. L. Cabrera 2907 (N), originally distributed as *L. Sellowiana* Link et Otto; Giménez, El Charco, Santiago del Estero, 300 m alt., February 25, 1930, S. Venturi 10.201 (N), flowers white; Ascochinga, Córdoba, November 29, 1936, N. S. Troncoso 370 (N); Sáenz Peña, Chaco, July, 1935, A. G. Schulz 1461 (N), abundant branched shrub, 50-90 cm tall, flowers lilac; Colonia Benítez, Chaco, October, 1935, A. G. Schulz 1460 (N), branched shrub, 1 m tall, foliage aromatic, flowers lilac-violet; Colonia Benítez, Chaco, November, 1936, A. G. Schulz 1462 (N), flowers white, determined by C. Osten as *L. Balansae* var. *peduncularis* f. *albiflora*; Santa Ana, Corrientes, November, 1934, L. R. Parodi 12.039 (N), Andalgalá, Cerro Duraznos, alt. 1600 m, Catamarca, January, 1937, M. M. Job 1375 (N), flowers rose; Loma Bolá, Dept. San Javier, Córdoba, January 29, 1939, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 31.200] (N); Cerro de Zapla, Jujuy, November 14, 1925, Schreiter s. n. [Herb. Mus. Argent. Cienc. Nat. 26/1336] (N); Otamendi, Buenos Aires, October 26, 1928, Pérez-Moreau s. n. [Herb. Mus. Argent. Cienc. Nat. 13.576] (N); Itaimbé, Misiones, December 12, 1934, D. Rodríguez 424 [Herb. Mus. Argent. Cienc. Nat. 16.282] (N); Concordia, Arroyo Arrebata Capa, Entre Ríos, January 28, 1931, A. Castellanos s. n. [Herb. Mus. Argent. Cienc.

Nat. 31/1275] (N); Yacanto, Dept. San Javier, Córdoba, December 5, 1927, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 11.666] (N). PARAGUAY : P. Jörgensen 3783 (Cp); Hiati, December, 1929, P. Jörgensen 3782 (Cp, N-2); very common at Villa Rica, P. Jörgensen 3778 a (N), shrub 1-3 m tall, flowers pale-rose; Rio Verde, Chaco, July, 1929, Herb. Herter 84.979 (N); Puerto Yataybá, September 14-15, 1928, Daguerre s. n. [Herb. Mus. Argent. Cienc. Nat. 289/92] (N); San Bernardino, August 21, 1916, C. Osten s. n. [Herb. Mus. Argent. Cienc. Nat. 24.1058] (N); Asunción, May 17, 1874, Balansa 1034 (N-isotype); Cerro Luis, E. Hassler 988 (N-cotype); near San Bernardino, July, E. Hassler 328 (N-cotype). BOLIVIA : Cochabamba, M. Cárdenas 3049 (K); Cochabamba, alt. 2700 m, Dept. Cochabamba, December 16, 1928, J. Steinbach 8771 (Cb, N); Lower Obrajes, 3300 m, La Paz, April 14, 1919, O. Buchtien 558 (N), shrub, 20 cm tall; Cotaña on the Illimani, alt. 2500 m, La Paz, November, 1911, O. Buchtien 643 (N), shrub 1 m tall; Cotaña on the Illimani, alt. 2500 m, La Paz, November, 1911, O. Buchtien 3238 (N-2); Cotaña on the Illimani, alt. 2500 m, La Paz, November, 1911, O. Buchtien 3239 (N); Cerro Tres Cruces, Santa Cruz, October 8, 1928, J. Steinbach s. n. [Herb. Mus. Argent. Cienc. Nat. 29/684] (N). URUGUAY : Dept. Minas, November 2, 1921, C. Osten s. n. [Herb. Mus. Argent. Cienc. Nat. 24/994] (N).

Lantana Cabrerae Moldenke, sp. nov.

Frutex ; ramulis obtuse tetragonis dense albido-strigosis glabrescentibus ; foliis oppositis ; petiolis dense albido-strigosis ; laminis ellipticis, ad apicem acutis, ad basim acuminato-cuneatis, regulariter arguteque serratis utrinque sparsiuscule albido-strigosis ; pedunculis elongatis acute tetragonis strigosis ; capitulis elongatis densissime multifloris ; bracteolis conspicuous ovatis attenuato-acuminatis albido-strigosis.

Shrub; branchlets rather slender, obtusely tetragonal, densely appressed-strigose with white antrorse hairs when young, glabrescent in age; leaves opposite; petiolis slender, 5-13 mm long, canalicular above, densely white-strigose like the young branchlets; blades thin-textured, dark-green above, lighter be-

neath, elliptic, 3-6 cm long, 1-3,5 cm wide, acute at apex, regularly and sharply serrate from near the base to the apex, acuminate cuneate at base, rather sparsely but uniformly white-strigose on both surfaces with antrorse hairs similar to those on the petioles; midrib and secondaries plane or subimpressed above, prominent beneath; inflorescence axillary, elongate-capitate, long-pedunculate; peduncles 9-12,5 cm long, acutely tetragonal, sulcate between the angles, white-strigose like the petioles; heads to 3,5 cm long and 2 cm wide, very densely many-flowered; bractlets conspicuous, ovate, imbricate, the lowermost to 16 mm long and 6 mm wide, attenuate-acuminate at apex white-strigose; corolla white.

The species is named in honor and appreciation of my good friend, Dr. A. L. Cabrera, whose prodigious labors and collections of Argentine plants have added so very much to our knowledge of this flora.

ARGENTINA : alrededores, Dept. Capital, Salta, May 30, 1933, A. L. Cabrera 3078 (N-type), flowers white; hillside, Cerro San Bernardino, alt. 1400 m, Salta, A. G. Schulz 1458 (N), leaves with a disagreeable odor, flowers white.

Lantana Camara L., *Sp. Pl.*, ed. 1, 627. 1753; Schau. in A. DC., *Prodr.* 11: 598. 1847; Briq., *Arkiv Bot.* 2, n° 10: 14. 1904; Domin, *Bibl. Bot.* 89, 6: 1105-1106. 1928; *Trab. Inst. Bot. y Farm.* 54: 79. 1935; *Darwiniana* 3: 55-56. 1937; *Lilloa* 1: 188. 1937; Herter, *Beih. Bot. Centralbl.* 59: 275. 1939.

Vernacular name : taputamu de flor colorada.

ARGENTINA : Tucumán, December 6-22, 1872, P. G. Lorentz et G. Hieronymus s. n. (N), originally distributed as *Camara lilacina* f. *grandiflora* Kuntze. BOLIVIA : Pampas, Rosario Hacienda, near Lake Rogagua, alt. 1000 ft, November 4, 1921, H. H. Rusby 1614 (N), originally distributed as *Lantana nivea* Vent.; Buenavista, alt. 200 m, Santa Cruz, February 21, 1921, J. Steinbach 5353 (Cb, N).

Lantana Camara var. **mista** (L.) L. H. Bailey, *Cycl. Am. Hort.* 884. 1900.

Lantana mista L., *Syst. Nat.*, ed. 12, 417. 1767.

CHILE : in irrigation ditches, Tacna-Arica region, April, 1922, Mrs. R. S. Shepard 282 (N), shrub 12 feet tall, flowers yellow and red.

Lantana Chamissonis (D. Dietr.) Benth. in Benth. et Hook. f., *Gen. Pl.* 2 : 1142. 1876.

Riedelia lippoides Cham., *Linnaea* 7 : 240. 1832 (not *Lantana lippoides* Hook. et Arn., *Bot. Beech. Voy.* 305. 1838).

Lippia Chamissonis D. Dietr., *Syn. Pl.* 3 : 598. 1843.

PARAGUAY : Ubnnera, in woods, February, P. Jörgensen 3784 (N), originally distributed as *L. aristata* Sch.; at edge of woods, near Sapucay, December, E. Hassler 1552 (N). BOLIVIA : Bolivian plateau, La Paz, 1891, M. Bang 1726 (C), originally identified as *Lippia lippoides* (Cham.) D. Dietr.; between Tipuani and Guanai, December, 1892, M. Bang 1726 (C), originally distributed as *Lippia lippoides* (Cham.) D. Dietr. ARGENTINA : Primer Misionera, Misiones, March, 1914, Niederlein 534 (N); Itaimbé, Misiones, February 14, 1935, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 16.284] (N); Buenos Aires, Hauthal 627 (N), originally distributed as *Lantana montevicensis*?

Lantana cordobensis Moldenke, *Phytologia* 1 : 279. 1938.

Tamonopsis spicata Griseb., *Abh. K. Ges. Wiss. Götting.* 19 : 246. 1874.

Lantana spicata (Griseb.) Benth. et Hook. ex Kuntze, *Rev. Gen. Pl.* 2 : 504, in syn. 1891 (not *L. spicata* Vell., *Fl. Flum.* 254. 1825).

Camara spicata (Griseb.) Kuntze, *Rev. Gen. Pl.* 2 : 504. 1891.

Tamonopsis spicata Griseb. ex Kuntze, *Rev. Gen. Pl.* 2 : 504, in syn. 1891.

ARGENTINA : Córdoba, December, 1891, O. Kuntze s. n. (N), originally distributed as *Camara spicata* Kuntze; Villa Angela Chaco, February, 1937, A. G. Schulz 1463 (N), shrub to 80 cm tall, flowers and fruit white; Las Breñas, Chaco, December, 1932, A. G. Schulz 1464 (N), shrub 0.5-1 m tall, fruit white, previously determined as *L. micrantha* Briq. by C. Osten; Ascochinga, Córdoba, December 1, 1936, N. S. Troncoso 350 (N), shrub to 1 m tall, flowers white; Lomas de Segura, San Javier,

Córdoba, January 26, 1939, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 31.198] (N); Sierra de San Luis, Cuesta de Los Picazos, San Luis, February 21, 1925, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 25/934] (N); La Cocha, Córdoba, February 15, 1926, A. Castellanos s. n. Herb. Mus. Argent. Cienc. Nat. 26/352] (N).

Lantana cujabensis Schau. in A. DC., *Prodr.* 11: 599. 1847.

Lantana tenuifolia Rusby, *Phytologia* 1: 74. 1934.

BOLIVIA: cataracts of the Bopi River, alt. 3000 ft., September 6, 1921, H. H. Rusby 715 (N), originally distributed as *L. tiliaceifolia* C. et S.; Mapiri, alt. 2000 ft., Cordillera Real, March 30 to April 9, G. H. H. Tate 469 (N); vicinity of Cochabamba, 1891, M. Bang 2034 (C), originally distributed as *L. Bangii* Rusby; Bopi River valley, alt. 3000 ft., September 11, 1921, H. H. Rusby 653 (N, type of *L. tenuifolia* Rusby); San Bartolomé, near Calisaya, basin of Río Bopi, Prov. S. Yungas, La Paz, alt. 750-900 m, July 1-22, 1939, B. A. Krukoff 10.542 (N), originally distributed as *L. Bangii* Rusby.

Lantana foetida Rusby, *Bull. N. Y. Bot. Gard.* 4: 431. 1907.

PERÚ: Machupicchu, Cuzeo, October, 1931, F. L. Herrera 3193 (N), originally distributed as *L. Camara* L.; Amazonian slope of the Andes, alt. 10,000-11,000 ft, 1927, B. Ehle s. n. (N), previously determined as *L. Camara* var. *mista* (L.) L. H. Bailey. ARGENTINA: Brazo Largo, Delta, November 3, 1929, A. C. Scala 2002 (N); Arroyo Tuyuaparé, Delta del Paraná, Buenos Aires, January, 1914, A. C. Scala 377 (N), previously determined as *L. Camara* var. *mista*; Misiones, December 17, 1919, D. Rodríguez 25 [Herb. Mus. Argent. Cienc. Nat. 23.778] (N); Capital, Tucumán, February, 1919, S. Venturi s. n. [Herb. Mus. Argent. Cienc. Nat. 23.814] (N); Formosa, May, 1918, P. Jörgensen s. n. [Herb. Mus. Argent. Cienc. Nat. 23.822] (N); Posadas, Misiones, April 16, 1930, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 30/2066] (N); Monte Alto, Dept. Orán, Salta, December 1, 1913, D. Rodríguez 1148 (N), shrub to

1,5 m tall, flowers clear-red, previously determined as *L. Camara*; San Ignacio, Misiones, July 31, 1913, Quiroga s. n. [Herb. Mus. Argent. Cienc. Nat. 23.826] (N); Punta Lara, Buenos Aires, April 28, 1931, A. L. Cabrera 1725 (N), shrub about 3 m tall, previously determined as *L. Camara* var. *mista*; Isla Santiago, Buenos Aires, April 24, 1932, A. L. Cabrera 2150 (N), previously determined as *L. Camara*; along the La Plata, Isla Santiago, Buenos Aires, November 1, 1932, A. L. Cabrera 2443 (N-2), previously determined as *L. Camara*; Bosque de La Plata, Buenos Aires, September 18, 1939, A. L. Cabrera, 5254 (N), previously determined as *L. Camara*; Punta Lara, along the La Plata, Buenos Aires, March 3, 1930, A. L. Cabrera 1358 (N-2), previously determined as *L. Camara*. URUGUAY: Rio Verde, Chaco, July 29, 1929, Herb. Herter 84.980 (N), previously determined as *L. Camara* var. *mista*; Cerro de Animas, January 20, 1938, Rosengurtt B. 2433 (N), originally determined as *L. Camara*. PARAGUAY: in thickets near San Bernardino, May, E. Hassler 334 (N), originally distributed as *L. Camara*; very common at Villa Rica, P. Jörgensen 3785 (N), shrub 1-3 m tall, corolla orange, originally determined as *L. Camara* by E. Hassler; E. Hassler 1417 (N), originally distributed as *L. Camara*; Luque, December, 1888, T. Morong 344 (C), a beautiful orange and yellow lantana, originally distributed as *L. Camara*. BOLIVIA: M. Bang 2034 (C-type and isotype); Tunari, alt. 2000 m, April, 1892, O. Kuntze s. n. (N), originally distributed as *Camara aculeata* var. *subinermis*; Millugnaya, alt. 1300 m, North Yungas, December, 1917, O. Buchtien 718 (N), originally distributed as *L. glutinosa* Poepp.; Yungas, 1890, M. Bang 469a (C), originally distributed as *L. Camara*; Mapiri, alt. 1600 ft., September 18, 1901, R. S. Williams 788 (N), 5 ft. tall, flowers red; Yungas, 1890, M. Bang 469 (C), originally distributed as *L. Camara*?; Guanai, alt. 2000 ft., May, 1886, H. H. Rusby 924 (C), originally distributed as *L. tiliifolia* Cham.; Guanay, alt. 1800 ft., Cordillera Real, April 14-16, 1926, G. H. H. Tate 587 (N); Río Chimate, alt. 1900 ft., Cordillera Real, April 10-14, 1926, G. H. H. Tate 608 (N).

Lantana fucata Lindl., *Bot. Reg.* 10; pl. 798. 1824.

Lantana lilacina Desf., *Cat. Hort. Par.*, ed. 3, 392. 1829; Schau. in A. DC., *Prodr.* 11: 604. 1847; Herter, *Revist. Sudam. Bot.* 4: 185. 1937.

Vernacular names: cambará, cambará legítimo, cambará roxa.

BOLIVIA: M. Bang 2533 (C), originally distributed as *L. lilacina*; M. Bang 2532 (C); Andes, G. Mandon 528 (T); Cerro Tres Cruces, alt. 1400 m, Sahta Cruz, October 8, 1928, J. Steinbach (Cb); Cochabamba, alt. 2600 m, March, 1892, O. Kuntze s. n. (N-2), 1 m tall, flowers violet, originally distributed as *Camara lilacina*; Cochabamba, alt. 2600 m, March, 1892, O. Kuntze s. n. (N), 1 m tall, flowers white; Cochabamba, February, 1931, Quack s. n. [Herb. Herter 87.207] (N); Canamina, alt. 4000 ft, July 19, 1921, O. E. White 202 (N); San Pedro, vicinity of Sorata, Prov. Larecaja, alt. 2600-2800 m, May 8, 1859, G. Mandon 529 (M); Sorata, alt. 8000 ft, February, 1886, H. H. Rusby 925 (C); vicinity of Cochabamba, 1891, M. Bang 2049 (C-2); near La Paz, alt. 11.000 ft, October, 1885, H. H. Rusby 923 (C), originally distributed as *L. velutina* Mart. et Gal.; Yungas, 1890, H. H. Rusby 585 (C), originally distributed as *L. velutina*; Yungas, alt. 6000 ft., 1885, H. H. Rusby 922 (C), originally distributed as *L. velutina*. ARGENTINA: Diamante, Entre Ríos, July 15, 1929 Herb. Herter 84.793 (N), flowers violet; Campana, Buenos Aires, October, 1935, N. S. Troncoso 230 (N-2), flowers violet; Puerto Aguirre, Misiones. July, 1938, J. Frenguelli 73 (N). URUGUAY: Valle Edén, Tacuarembó, alt. 150 m, September, 1928, Herb. Herter 83.921 (N), flowers lilac-purple, originally distributed as *L. Sellowiana*; Gruta de los Helechos, Tacuarembó, alt. 300-400 m, August, 1907, Herb. Herter 10.403 (N), originally distributed as *L. lilacina*; Arequita, Dept. Minas, November, 1926, Herb. Herter 81.270 (N); Paysandú, Dept. Paysandú, alt. 50 m, November, 1927, Herb. Herter 82.931 (N), flowers lilac; Valle Eden, Tacuarembó, alt. 150 m, September, 1928, W. G. Herter 1146 [Herb. Herter 83.925] (N), foliage fragrant, flowers lilac-purple; Fray Bentos, 0-10 m alt., November, 1933, W. G. Herter 1146a [Herb. Herter 94.383] (N), originally distributed as *L. lilacina* f. *rotundifolia*. PARAGUAY:

Asunción, November, 1888, T. Morong 50 (C), originally distributed as *L. lilacina*; Concepción, November, 1892, O. Kuntze s. n. (N), flowers lilac, originally distributed as *Camara lilacina* var. *parvifolia* Kuntze.

Lantana Hassleri Briq., *Bull. Herb. Boiss.*, sér, 2, 4: 1064. 1904.

PARAGUAY: in the vicinity of Caaguazú, March, 1905, E. Hassler 9253 (Cb, N-2 photos, Z-2 photos).

Lantana Jorgensenii Moldenke, sp. nov.

Frutex; ramulis gracilibus tetragonis puberulis vel breviter pubescentibus; foliis ternatis; petiolis ca. 2 mm longis dense breviterque pubescentibus; laminis firmis ellipticis vel lanceolatis acutis dense serratis (dentibus parvis obtusis), ad basim acuminatis, supra breviter pilosis scabris, subtus pilosis vel breviter pubescentibus dense resinoso-punctatis; inflorescentiis ternatis capitatis; pedunculus gracillimus; capitulis parvis valde albido-villosis.

Bush, 1-4 m tall; branchlets slender, tetragonal, puberulent or short-pubescent, especially when young, the pubescence longer and denser at the nodes; leaves ternate; petioles slender, about 2 mm long, densely short-pubescent; blades firm-textured, elliptic or lanceolate, 1-4 cm long, 0,4-2,2 cm wide, acute at apex, densely serrate from almost the base to the apex with regular small rounded teeth, acuminate at base, short-pilose and seaceous above, scattered-pilose or short-pubescent and densely resinous-punctate beneath, more or less bullate above when mature; midrib, secondaries, and veinlet reticulation impressed above, prominent beneath; inflorescence axillary, ternate, capitate; peduncles very slender, 0,8-1,5 cm long, short-pubescent or puberulent, varying to glabrescent; heads small, many-flowered, 7-8 mm wide, conspicuously white-villous among the bractlets; bractlets small, lanceolate, about 2 mm long, lightly short-pubescent with brownish hairs.

The species is dedicated to Dr. Pedro Jörgensen, distinguished collector of the plants of Paraguay and valued contributor to our knowledge of this region.

PARAGUAY: very common at Villa Rica, July, 1932, P. Jörgensen 3778 (N-type and isotype), bush 1-4 m tall, petals pale-

yellow or pale-rose, originally distributed as *Lippia Balansae* Briq.; Villa Rica, P. Jörgensen s. n. (Herb. Mus. Argent. Cienc. Nat. 28/2070) (N).

Lantana Junelliana Moldenke, *Phytologia* 1: 279. 1938.

Lippia lantanifolia var. *crenata* Griseb., *Abh. K. Ges. Wiss. Götting.* 19: 243. 1874.

Lippia crenata (Griseb.) Kuntze, *Rev. Gen. Pl.* 3: 2, 251. 1898.

ARGENTINA: Dique, Córdoba, December, 1891, O. Kuntze s. n. (N-2), originally distributed as *Lippia crenata* Kuntze; Sierra Chica Córdoba, January 14, 1876, G. Hieronymus s. n. (N), originally distributed as *Lippia lantanifolia* var. *crenata*; Unquillo, 1926, C. Bruch 8233 (N); Ascochinga, Córdoba, October 10, 1936, N. S. Troncoso 302 (N), shrub 1-1.5 m tall, flowers lilac; Loma Bola, Dept. San Javier, Córdoba, January 29, 1939, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 31.199] (N), in flower; Quebrada de Yacanto, Dept. San Javier, Córdoba, January 3, 1927, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 11.667] (N); San Javier, Córdoba, November 15, 1927, A. Castellanos s. n. [Herb. Mus. Argent. Nat. 11.668] (N).

Lantana Lamiana Moldenke, sp. nov.

Caules braciates; ramulis virgatis obtuse tetragonis dense incano-strigosis; foliis oppositis; petiolis obsoletis vel usque ad 3 mm longis; laminis firme membranaceis rigidis saepe conduplicatis anguste lanceolatis vel oblanceolatis utrinque incano-strigosis; inflorescentiis capitatis; capitulis subglobosis ubique incanis.

Stems branching, the branches virgate, medium-slender, obtusely tetragonal, densely incanous with short closely appressed strigose white hairs, less densely so toward the base in age; nodes very obscurely annulate; principal internodes 1.5-3.8 cm long, mostly abbreviated; leaves numerous, decussate-opposite; petioles obsolete or to 3 mm long, flattened and winged, incanous-strigose; blades firmly membranous, stiff, ascending, often conduplicate, narrow-lanceolate or -oblanceolate, incanous on both surfaces, 4-7.5 cm long, 9-10 mm wide, acute at both ends,

subentire or remotely dentate near the apex, densely strigose on both surfaces with short white hairs; midrib slender, subimpressed above, prominulous beneath; secondaries numerous, slender, short, 5-9 per side, ascending, not much arcuate; vein and veinlet reticulation fine, not prominulous, mostly obscure or indiscernible above; inflorescence capitate; heads subglobose, solitary in the uppermost axils, 1 or 2 pairs per branch, much shorter than the subtending leaves, incanous throughout.

The species is named in honor of my respected colleague and friend, Dr. H. J. Lam, who has done such noteworthy work on the Verbenaceae of the Pacific region.

PARAGUAY: on high plateau and declivities of Sierra de Amambay, December, 1907, T. Rojas s. n. (E. Hassler 9901) [N-fragment and photo of type, V-type, Z-photo of type].

Lantana micrantha Briq., *Ann. Conserv. et Jard. Bot. Genève*.
7-8: 299. 1904.

BOLIVIA: Bermejo, K. Fiebrig 2163 [Herb. Inst. Biol. S. Paulo 30.744] (Sp). PARAGUAY: Río Verde, Chaco, July, 1929, Herb. Herter 84.978 (N); in hedges, Villa Rica, P. Jörgensen 3783 (N), shrub 1-2 m tall, flowers rose. ARGENTINA: hillside, Colonia Benítez, Chaco, November, 1935, A. G. Schulz 1459 (N), plants unarmed, foliage with a disagreeable odor, flowers lilac, not varying; Cerro San Bernardo, alt. 1400 m, Salta, February, 1936, A. G. Schulz 1450 (N), 0.5-1 m tall; Colonia Benítez, Chaco, May, 1930, A. G. Schulz 7 (N), shrub 2-3 m tall, flowers clear-lilac; Capital, Tucumán, January 2, 1940, T. Meyer 3095 (N); Alemania, Dept. Guachipas, Salta, December 19, 1929, S. Venturi 9918 (N), previously determined as *L. Camara* var. *mista* (L.) L. H. Bailey.

Lantana mollis Moldenke, sp. nov.

Frutex; caulis ramisque crassiusculis obtuse tetragonis longe hirsutis; foliis oppositis; petiolis crassiusculis albido-hirsutis; laminis subcoriaceis ovatis, ad apicem acutis vel obtutis, ad basim obtusis vel subcordatis, marginibus crenatis, supra bullatis dense

albido-strigosis, subtus dense tomentosis; capitulis elongatis cylindricis dense multifloris.

Shrub; stems and branches rather stout, obtusely tetragonal, brown, hirsute with rather long white hairs; nodes not annulate; principal internodes 3-6 cm long; leaves decussate-opposite; petioles rather stoutish, 2-7 mm long, white-hirsute; blades subcordiaceous, dark-green above, very light-green beneath, ovate, 2-6 cm long, 1.8-3.6 cm wide, acute or obtuse at apex, crenate from base to apex with abundant rounded teeth, obtuse or subcordate at base (the immature leaves often acute), bullate and densely and harshly strigose with whitish hairs above, densely soft-tomentose with flavescent hairs beneath; midrib slender, deeply impressed above, prominent beneath; secondaries slender, 4-8 per side, irregular, arcuate-ascending, the lower ones elongate, deeply impressed above, prominulous beneath; vein and veinlet reticulation abundant, deeply impressed above, each larger vein and secondary terminating in the sinus between two teeth (no veins or veinlets extending visibly into the teeth); heads elongate, cylindric, 0.6-2 cm long, 7-5 mm wide, densely many-flowered, solitary in the upper axils, shorter than the subtending leaves.

PARAGUAY: high plateau and declivities of Sierra de Amambay, December, 1907, T. Rojas s. n. [E. Hassler 9899] (N-fragment and photo of type, V-type, Z-photo of type).

Lantana montevidensis (Spreng.) Briq., *Ann. Conserv. et Jard. Bot. Genève* 7-8: 301. 1904; Herter *Revist. Sudam. Bot.* 2: 185. 1937.

Lippia montevidensis Spreng., *Syst. Veg.* 2: 751. 1825.

Lantana Sellowiana Link et Otto, *Ic. Pl. Sel. Berol.* 107, pl. 50. 1826; Parodi, *Plant. Indig. Aliment. Cult. Argent.* 201. 1934: *Trab. Inst. Bot. y Farm.* 54: 79. 1935; *Darwiniana* 3: 56. 1937; *Lilloa* 1: 188. 1937; Herter, *Beih. Bot. Centralbl.* 59: 275. 1939. *Camara Sellowiana* (Link et Otto) Kuntze, *Rev. Gen. Pl.* 2: 504. 1891.

Camara montevidensis (Spreng.) Kuntze, *Rev. Gen. Pl.* 3: 2, 250. 1898.

BOLIVIA: M. Bang. s. n. (C). URUGUAY: Maldonado, alt. 300 m, October, W. G. Herter 10.387 (N); Rio Yí and Arroyo

Matanzas, November, 1936, Rosengurtt B. 620 (N); Sta. Teresa, Rocha, November, 1931, Herb. Herter 87.813 (N); Cerro Pan de Azúcar, May 18, 1937, Rosengurtt B. 1829 (N); Artigas, November, 1927, W. G. Herter 1018 a [Herb. Herter 82.655] (N); San Javier, Río Negro, November, 1927, W. G. Herter 1018 [Herb. Herter 82.834] (N-2); Valle Edén, Tacuarembó, September, 1928, Herb. Herter 83.713 (N); Pan de Azucar, Maldonado, September 20, 1930, Herb. Herter 86.121 (N); Sierra de Solís, November, 1892, O. Kuntze s. n. (N), originally distributed as *Camara montevidensis*; Yerbal, Treinta y Tres, April, 1928, Herb. Herter 83.310 (N). ARGENTINA: by Buenos Aires, 1891, R. Hauthal 627 (N), originally distributed as *Camara aculeata* f. *obtusifolia* Kuntze; Campiñas de América, Misiones, December 15, 1886, Niederlein s. n. [Herb. Mus. Argent. Cienc. Nat. 23.786] (N).

Lantana trifolia L., *Sp. Pl.*, ed. 1, 626. 1753; Schau. in A. DC., *Prodr.* 11 : 606. 1847; Briq., *Arkiv Bot.* 2, nº 10 : 16. 1904; Briq. *Ann. Conserv. et Jard. Bot. Genève*. 7-8 : 303. 1904.
Lantana trifolia var. *vulgata* Briq., *Ann. Conserv. et Jard. Bot. Genève*. 7-8 : 303. 1904.

Vernacular name: cambará.

ARGENTINA: El Cedral, Orán, Salta, October 21, 1913, D. Rodríguez 1037 (N); Capital, alt. 1200 m, Jujuy, February, 1936, A. G. Schulz 1454 (N), shrub 0.8-1 m tall, flowers rose-lilac; Río Pescado, Orán, Salta, September 17, 1938, A. L. Cabrera 4578 (N-2); Cerro de Zapla, Jujuy, November 13, 1925, Schreiter s. n. [Herb. Mus. Argent. Cienc. Nat. 26/1340] (N); Orán, Salta, October 20, 1913, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 24/1528] (N); Itaimbé, Misiones, December 6, 1934, D. Rodríguez 412 [Herb. Mus. Argent. Cienc. Nat. 16.280] (N); Humahuaca, Sierra de Zenta, alt. 2800 m, Jujuy, February 25, 1929, S. Venturi 8374 (N-2), previously determined as *L. Chamissonis* (D. Dietr.) Benth. BOLIVIA: M. Bang 2044 (C-3); Hacienda El Choro, region of Coripata, North Yungas, June 28, 1930, O. Buchtien 8168 (N); Yungas, 1890, M. Bang 219 (C); Sirupaya, North Yungas, December 3, 1906, O. Buchtien 311 (N); Millugnaya, alt. 1300 m, Nort Yungas, De-

ember, 1917, O. Buchtien 4047 (N); Charopampa, alt. 1600 ft, September 19, 1901, R. S. Williams 762 (N), flowers lilac; Buena Vista, alt. 500 m, Prov. Sara, Santa Cruz, November 11, 1920, J. Steinbach 5053 (Cb, N); Mapiri, alt. 1600 ft, September 17, 1901, R. S. Williams 802 (N), flowers lilac; Santa Cruz, J. Steinbach 5956 (Cb); Millugnaya, O. Buchtien s. n. [Herb. Inst. Biol. S. Paulo 30.745] (Sp); Guanai, alt. 2000 ft, May, 1886, H. H. Rusby 921 (C); Polo-Polo, by Coroico, North Yungas, alt. 1100 m, October-November, 1912, O. Buchtien s. n. (N); La Joya, alt. 5900 ft, April 25-26, 1926, G. H. H. Tate 1036 (N), originally distributed as *L. nivea* var. *variabilis* Hort.; Canamina, alt. 4000 ft, July 19, 1921, O. E. White 506 (N); Hacienda «Anaeuri», Prov. North Yungas, June 4, 1920, E. W. D. and M. W. Holway 711 (N); Sirupaya, vicinity of Yanacachi, alt. 2100 m, South Yungas, November 21, 1906, O. Buchtien 312 (N). PARAGUAY: E. Hassler 11.245 (Cb); common at Villa Rica, P. Jörgensen 3777 (N), shrub 1-2 m; railroad tracks, Cabellero, central Paraguay, January 20, 1889, T. Morong 599 (C-2); Concepción, September, 1892, O. Kuntze s. n. (N), 1 m tall, flowers lilac, originally distributed as *Camara trifolia*.

Lantana trifolia var. **rigidiuscula** Briq., *Ann. Conserv. et. Jard. Bot. Genève.* 7-8 : 303. 1904.

PARAGUAY; high plateau and declivities of Sierra de Amanbay, December, 1907, E. Hassler 9898 (N-photo, S-photo, V, Z-photo).

Lantana xenica Moldenke, sp. nov.

Fruticulus humilis; *caulibus ramibusque tetragonis dense adpresso-puberulis*; *foliis oppositis confertis*; *petiolis gracillimis adpresso-puberulis*; *laminis ellipticis vel lanceolatis acutis crasse dentatis*, *ad basim longe auminateis vel cuneato-attenuatis*, *utrinque dense puberulis*; *inflorescentiis longe pedunculatis*; *capitulis dein elongatis dense multifloris*; *bracteolis conspicuis ovatis longe acuminatis dense breviterque albido-pubescentibus*.

Shrubby, low; stems and branches slender, tetragonal, densely appressed-puberulent; leaves opposite, crowded on abbre-

viated twigs; petiole very slender, 3-8 mm long appressed-pubescent; blades chartaceous, dark-green above, lighter beneath, elliptic or lanceolate, 1-5 cm long, 0,3-2,2 cm wide, acute at apex, long-acuminate or cuneate-attenuate at base, coarsely serrate from almost the base to the apex with antrorse and sharply acute teeth, densely puberulent on both surfaces, the pubescence subcanescent on immature leaves; inflorescence abundant, showy; peduncles abundant, 3-7,5 cm long, puberulent; heads elongate to 1,5 cm long, 1-1,5 cm wide, very densely many-flowered; bractlets large, conspicuous, ovate, 4-5 mm long, long-acuminate at apex, densely short-pubescent with white appressed hairs; corolla rose.

ARGENTINA: Merced de Tacana, Santiago del Estero, May 27, 1939, J. Frenguelli 140 (N-type); Turena, Dept. Robles, Santiago del Estero, October 5, 1939, R. Maldonado B. 186 (N-2).

Lippia alba (Mill.) N. E. Br. in Britton and P. Wils., *Scient. Surv. P. R.* 6 : 141. 1925; Herter, *Revist. Sudam. Bot.* 4 : 185-186. 1937.

Lantana alba Mill., *Gard. Dict.*, ed. 8, no. 8. 1768.

Verbena globiflora L'Her., *Stirp. Nov.* 23, pl. 12. 1786.

Lippia geminata H. B. K., *Nov. Gen. et Sp. Pl.* 2 : 266. 1818; Parodi, *Rev. Argent. Agron.* 1 : 201. 1934.

Lippia globiflora (L'Her.) Kuntze, *Rev. Gen. Pl.* 3 : 2, 251, 1898.

Vernacular name: herva cidreira.

URUGUAY: dunes, Arenal Grande, Dept. Soriano, November 29, 1932, A. L. Cabrera 2581 (N-3); San Javier, Río Negro, November, 1927, W. G. Herter 747 [Herb. Herter 82.833] (N-2); Sta. Rosa Cuareim, Artigas, November, 1927, W. G. Herter 747a [Herb. Herter 82.658] (N); Salto Chico, Salto, November 30, 1934, Herb. Herter 95.310 (N); Santa Lucía, Dept. Canelones, alt. 20-50 m, March 6, 1910, Herb. Herter 10.053 (N), flowers and fruit; Canelones, Sta. Rosa, June 15, 1937, Rosengurtt B. 1959 (N); Salto Río Uruguay, and Arroyo San Antonio, January 22, 1937, Rosengurtt B. 950 (N). ARGENTINA: Chaco, November, 1917, P. Jörgensen s. n. [Herb. Mus. Argent. Cienc. Nat. 23.944] (N); Tucumán, January 7, 1873,

P. G. Lorentz et G. Hieronymus 1174 (N), originally distributed as *L. globiflora* var. *geminata* f. *grabriuscula* Kuntze; Mocoví, Santa Fe, November 13, 1903, S. Venturi s. n. [Herb. Mus. Argent. Cienc. Nat. 23.767] (N); Colonia Benítez, Chaco, September, 1931, A. G. Schulz 134 [Herb. Mus. Argent. Cienc. Nat. 6471] (N); Guadalupe, Santa Fe, January, 1936, Ragonesse s. n. [Herb. Mus. Argent. Cienc. Nat. 19.776] (N); Santa Ana, Misiones, September 14, 1912, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 23.771] (N); Entre Ríos, November 4, 1929, A. C. Scala s. n. (La); island in front of the port, Esquina, December, 1936, A. P. Rodrigo 952 (N), flowers lilac-rose; highway from Santa Fe to Laguna Stubal o Guadalupe, January-February, 1936, M. M. Job 650 (N); Rio Paraná, old canal from Santa Fe to Colastiné, Santa Fe, January-February, 1936, M. M. Job 748 (N-2), originally distributed as *Lantana* sp.; Delta del Paraná, Río Paranacito, Cerro Malambo, Entre Ríos, November 4, 1929, A. C. Scala 2003 (N-3); Colonia Benítez, Chaco, November, 1933, A. G. Schulz 1501 (N), subshrub, 1-2 m tall; Colonia Benítez, Chaco, September, 1932, A. G. Schulz 1500 (N); Tucumán, S. Venturi 4294 (N); Dragones, Orán, G. Hieronymus s. n. (N); by Dragones, Orán, August, 1873, O. Kuntze s. n. (N), originally distributed as *L. globiflora* var. *lanceolata* f. *incana* Kuntze; Buenos Aires, Commerson s. n. (N). PARAGUAY: Concepción, O. Kuntze s. n. (N), cotype of *L. globiflora* var. *normalis* f. *lilacina* Kuntze; Concepción, September, 1892, O. Kuntze s. n. (N), originally distributed as *L. globiflora* var. *normalis* Kuntze; in swamp near Cerro Luis, September, E. Hassler 960 (N), originally distributed as *Mikania Hassleriana* f. *cuneifolia* Hassler. BOLIVIA: near Covendo, alt. 2000 ft., August 26, 1921, O. E. White 905 (N); junction of the rivers Beni and Madre de Dios, August, 1886, H. H. Rusby 916 (C).

Lippia angustifolia Cham., *Linnaea* 7 : 377. 1832.

PARAGUAY: E. Hassler 9117 (V); between Río Apa and Río Aquidaban, January, 1909, K. Fiebrig 4684 (Cb-2, N, N-photo, Z-photo).

Lippia Arechavaletae Moldenke ex Herter, sp. nov.

Herter, *Revist. Sudam. Bot.* 4 : 185-186, nom. nnd. (1937).

Herba perennis; caulibus dense puberulis et strigosis; foliis oppositis sessilibus; laminis crassiusculis ellipticis parvis acutis integris, ad basim obtusis vel rotundatis, supra strigillosis et puberulis, subtus dense puberulis (venatio strigoso); inflorescentiis axillaribus erectis.

Perennial herb, woody at base; stems slender, densely puberulent with very minute appressed hairs and densely strigose with much longer appressed albidous hairs covering the lower puberulence; leaves decussate-opposite, sessile; blades firmly chartaceous, rather thick and stiff, elliptic, 5,5-20 mm long (or the lowest still more reduced), 2-8 mm wide, acute at apex, entire, often slightly subrevolute along the midribs, obtuse or rounded at base, rather sparsely strigillose and also puberulent above, more densely puberulent on the lamina beneath and strigose on the venation; secondaries numerous, subparallel, ascending, almost straight, impressed above; inflorescence axillary, abundant, solitary, opposite, erect, 1-3,5 cm long, surpassing the subtending leaves; peduncles very slender, 0,6-2,6 cm long, puberulent and strigose.

The species is named in honor of J. Arechavaleta, who has done such splendid work on the flora of Uruguay.

ARGENTINA : Colón, Entre Ríos, October 2, 1907, Herb. Herter 4481 (N). URUGUAY : Salto, December, 1898, J. Arechavaleta 11 (Cb-type and isotype, N-fragment and photo of type, Z-photo of type); San Javier, Río Negro, January, 1938, W. G. Herter 60.165 (N), flowers golden-yellow.

Lippia asperrima Cham., *Linnaea* 7 : 215. 1832; Briq., *Ann. Conserv. et Jard. Bot. Genève*. 7-8 : 311. 1904; Gallinal, Bergalli, Campal, Aragone, and Rosengurtt, *Stud. Nat. Mead. Urug.* 81. 1938.

PARAGUAY : E. Hassler 2359 (Cb); Fiebrig 4777 (Cb); South Paraguay, September, 1892, O. Kuntze s. n. (N); Villa Rica, P. Jörgensen 3775 (N), petals yellow, originally distributed as

L. turnerifolia Cham.; vicinity of Caaguazú, March, 1905, E. Hassler 9312 (N-fragment and photo, V, Z-photo); Villa Rica, P. Jörgensen s. n. [Herb. Mus. Argent. Cienc. Nat. 28/2067] (N). URUGUAY: J. Arechavaleta 14 (Cb); J. Arechavaleta 16 (Cb); J. Arechavaleta 17 (Cb-2); Palleros, Río Negro, Dept. Cerro Largo, December, 1937, Rosengurtt B. 2356 (N), flowers yellow. ARGENTINA: Aurelia, near Santa Fe, Feddersen s. n. (Cp); Ceres, October, 1892, O. Kuntze s. n. (N); Villa San Lorenzo, Salta, December 4, 1934, A. Ringuelet 115 (N); highway from Reconquista to Barros Pazos, Santa Fe, January-February, 1936, M. M. Job 801 (N); Colonia Benítez, Chaco, September, 1937, A. G. Schulz 1497 (N); La Criolla, Dept. San Justo, Santa Fe, January 4, 1937, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 19.614] (N); Itaimbé, Misiones, December 4, 1934, D. Rodríguez 409 [Herb. Mus. Argent. Cienc. Nat. 16.278] (N); Fontana, Chaco, November, 1938, T. Meyer 2674 (N).

***Lippia asperrima* var. *longipedunculata* Moldenke, var. nov.**

Haec varietas a forma typica speciei recedit pedunculis 4-5 usque ad 11,5 cm longis.

This variety differs from the typical form of the species in that its peduncles far surpass the leaves during anthesis. The peduncles are 4,5-11,5 cm long. The branchlets and peduncles are finely glandular-puberulent and also strigose with white appressed hairs as on the upper leaf-surfaces. The leaf-blades are cuneate, 1,1-4 cm long, 0,8-1,8 cm wide, acute at apex, cuneate at base, coarsely serrate with large triangular and acute teeth from the middle to the apex.

URUGUAY: J. Arechavaleta 15 (Cb); Salto, September, 1898, J. Arechavaleta 12 (Cb-type and isotype, N-fragment of isotype and photos of type and isotype, Z-photos of type and isotype). ARGENTINA: Arroyo Las Garzas, highway to La Feria, Corrientes, November, 1936, A. P. Rodrigo 604 (N), flowers yellow, previously determined as *Phyla nodiflora* var. by A. L. Cabrera.

Lippia boliviensis Rusby, *Mem. Torrey Club* 4 : 243. 1895.

BOLIVIA : M. Bang 2531 (C); rocky soil, Cochabamba, alt. 2580 m, M. Cárdenas 746 (W), 80 cm tall, flowers white; Parotani, alt. 2400 m, March 20, 1892, O. Kunze s. n. (N); Tupiza, K. Fiebrig 3111 [Herb. Inst. Biol. S. Paulo 33.504] (Sp); on the Río Tapacari, alt. 3000 m, March 19, 1892, O. Kunze s. n. (N); vicinity of Cochabamba, 1891, M. Bang 979 (C-type).

Lippia Grisebachiana Moldenke, *Phytologia* 1 : 279. 1938.

Lippia lantanifolia Griseb., *Abh. K. Ges. Wiss. Götting.* 19 : 242. 1874 [not. *L. lantanifolia* F. Müll., *Fragm.* 6 : 151. 1868].

Vernacular name : salva morada.

ARGENTINA : Valle de Tafí, Tucumán, 1908, C. Bruch s. n. (N); Río Tacanas, Dept. Trancas, Tucumán, alt. 1400 m, April 17, 1926, S. Venturi 4290 (N-2), flowers violet; El Alisal, Sierra del Cajón, alt. 2800 m, Salta, January 11, 1914, D. Rodríguez 1281 (N); Alto de Medina, alt. 1000 m, Dept. Burruyacu, Tucumán, January 11, 1924, S. Venturi 2689 (N); Catamarea, February, 1916, P. Jörgensen s. n. [Herb. Facult. Cienc. Med. B. Aires 1025; Herb. Inst. Biol. S. Paulo 25.778] (N-photo, Sp, Z-photo); San Javier, La Barranca, Córdoba, January 14, 1939, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 31.196] (N); Dept. Trancas, Tucumán, April 17, 1926, S. Venturi s. n. [Herb. Mus. Argent. Cienc. Nat. 27/1414] (N); Guanchín, La Rioja, November 21, 1927, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 27/2024] (N); Quebrada de Cafayate, Salta, January 7, 1914, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 23.770] (N); Sierra Famatina, Guanchín Viejo, La Rioja, January 25, 1928, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 28/325 (N); La Criolla, Tucumán, February 27, 1912, D. Rodríguez s. n. [Herb. Mus. Argent. Cient. Nat. 23.891] (N); Tafí del Valle, Tucumán, January 27.1935, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 14.815] (N); Puerto Viejo; Velazco, La Rioja, January, 1934, A. S. de Yépes s. n. [Herb. Mus. Argent. Cienc. Nat. 18.855] (N); San Pedro de Colalao, Tucumán, January 4, 1940, T. Meyer s. n. (N), mixed with

Lantana aristata var. *Cabrerae*; San Pedro de Colalao, Tucumán, January 4, 1940, T. Meyer 3090 (N).

Lippia Hassleriana Chod., *Bull. Herb. Boiss.*, sér. 2, 2 : 821. 1902.

PARAGUAY: Caaguazú, November 7, 1874, Balansa 1030 (N-fragment).

Lippia heterophylla Briq., *Ann. Conserv. et Jard. Bot. Genève* 7-8 : 313. 1904.

PARAGUAY: Loma Clavel, lat. S. 23° 20', Gran Chaco, November, 1903, E. Hassler 2592 (N-photo, V, Z-photo); Caballera, between Río Apa and Río Aquidaban, February 1909, K. Fiebrig 4773 (Cb-2, N, N-photo, Z-photo).

Lippia hieracifolia Cham., *Linnaea* 7 : 375 1832; Herter, *Revist. Sudam. Bot.* 4 : 185-186. 1937.

URUGUAY: Rivera, December, J. Arechavaleta 13 (Cb, N-photo, Z-photo); Galgo, Rivera, December 2-3, 1933, Herb. Herter 94.103 (N).

Lippia imbricata Kuntze, *Rev. Gen. Pl.* 3, 2 : 252. 1898.

BOLIVIA: Parotani, alt. 2400 m, March 20, 1892, O. Kuntze s. n. (N-type). ARGENTINA: Colonia Benítez, Chaco, December, 1934, A. G. Schulz 1499 (N). URUGUAY: Palleros, Río Negro, Dept. Cerro Largo, December, 1937, Gallinal, Aragone, Bergalli, Campal and Rosengurtt 1616 (N); Paysandú, November 12, 1937, Rosengurtt B. 2254 (N); Paysandú, November 6-8, 1937, Rosengurtt B. 2180 (N-2).

Lippia integrifolia (Griseb.) Hieron., *Bol. Acad. Nac. Córdoba* 4 : 406. 1881; Molino, *Trab. Inst. Bot. y Farm. Buenos Aires* 54 : 112. 1935; *Lilloa* 1 : 189. 1937.

Lippia turbinata var. *integrifolia* Griseb., *Abh. K. Ges. Wiss. Götting.* 19 : 195. 1874.

Vernacular names: pulco, polco.

ARGENTINA: Cerros, Belén, Catamarca, February 26, 1929, A. L. Cabrera 1123 (N); Alto Pencoso, San Luis, February,

1914, C. Bruch et E. Carette 55 (N); Cerros, Belén, Catamarca, February 24, 1929, A. L. Cabrera 1103 (N); Campo Quijano, Rosario de Lerma, alt. 1600 m, Salta, January, 1929, S. Venturi 8072 (N-2), flowers white; Catamarca, 1893, Hauthal s. n. (N); Valle de Cafayate, Salta, March 28, 1914, D. Rodríguez 1441 (N); Catamarca, March, 1916, P. Jörgensen s. n. [Herb. Facult. Farmac. 1734; Herb. Inst. Biol. S. Paulo 25.779] (N-photo, Sp, Z-photo); Cafayate, Salta, February 6, 1935, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 14.809] (N); Campo del Arenal, Catamarca, March 10, 1916, P. Jörgensen s. n. [Herb. Mus. Argent. Cienc. Nat. 23.855] (N); Cafayate, Salta, April 8, 1914, D. Rodríguez n. s. [Herb. Mus. Argent. Cienc. Nat. 23.894] (N).

Lippia lasiocalyxina Cham., *Linnaea* 7 : 231. 1832.

PARAGUAY: E. Hassler 10.630 (Cb-2).

Lippia Morongii Kuntze, *Rev. Gen. Pl.* 3, 2 : 263. 1898 : Briq., *Ann. Conserve. et Jard. Bot. Genève*, 7-8 : 314-315. 1904; Herter, *Revist. Sudam. Bot.* 4 : 185-186. 1937.

Lippia angustifolia Morong ex Kuntze, *Rev. Gen. Pl.* 3 : 2, 253, in syn. 1898 [not *L. angustifolia* Cham., *Linnaea* 7 : 377. 1832].

URUGUAY: Bella Unión, Dept. Artigas, November, 1927, W. G. Herter 989 [Herb. Herter 82.594] (N-2), originally distributed as *L. turnerifolia* Cham. ARGENTINA: Colonia Benítez, Chaco, May, 1933, A. G. Schulz 1498 (N). PARAGUAY: northern Paraguay, September, 1892, O. Kuntze s. n. (N); Pilcomayo River, January 9, 1890, T. Morong 860 (C-type and isotype), originally distributed as *L. angustifolia* Cham.; Luque, December, 1889, T. Morong 575 (C), originally distributed as *L. turneraefolia* Cham.

Lippia Pickelii Moldenke, sp. nov.

Herba perennis; caulinis ramisque albido-hispida; foliis oppositis; petiolis gracilibus albido-hispida; laminis ellipticis vel ovatis acutis vel obtusis regulariter serratis, ad basim acutis

vel acuminatis, supra strigosis vel hispidulis (pilis bulbosis), sub-tus strigosis (pilis non-bulbosis); inflorescentiis axillariibus par-vis; pedunculis brevibus.

Perennial herb, woody at base; stems and branches very slender, rather densely hispidulous with whitish erect hairs on younger parts, more sparsely so in age; leaves decussate-opposite; petioles slender, hispidulous with erect white hairs 1-2 mm long; blades chartaceous, elliptic or ovate, 2-5-6.5 cm long, 1-3 cm wide, acute or obtuse (in outline) at apex, acute or acuminate at base, regularly serrate from near the base to the apex with very small blunt antrorse teeth, strigose or hispidulous on the lamina (not on the venation) above with whitish bulbous-based hairs, strigose on the venation beneath with non-bulbous hairs; inflorescence axillary, much shorter than the subtending leaves, ascending, solitary, opposite, 8-13 mm long; peduncles very slender, 3-5 mm long, hispidulous.

The species is named in honor of Don Bento Pickel, who has contributed considerably to our knowledge of Pernambuco and other parts of Brazil.

PARAGUAY: limestone region along the upper course of the Río Apa, March, 1903, E. Hassler 11.040 (Cb-type K-isotype, N-fragment of type and photos of type and isotype, V-isotype, Z-photos of type and isotype).

Lippia primulina S. Moore, *Trans. Linn. Soc. Lond.*, ser. 2, 4 : 435. 1895.

ARGENTINA: San Ignacio, Misiones, August 28, 1913, Quiroga s. n. [Herb. Mus. Argent. Cienc. Nat. 23.825] (N).

Lippia Recoleta Morong, *Ann. N. Y. Acad. Sci.* 7 : 196. 1893 ; Briq., *Arkiv Bot.* 2, no. 10 : 19. 1904 ; *Ann. Conserv. et Jard. Bot. Genève*. 7-8 : 315-316. 1904.

PARAGUAY: Villa Rica, P. Jörgensen s. n. [Herb. Mus. Argent. Cienc. Nat. 28/2068] (N); Cerro Luis, E. Hassler 944 (N); Asunción, November 6, 1888, T. Morong 62 (C-type); Ibitimi, October, 1892, Hauthal 29 (N); Villa Rica, P. Jörgensen 3776 (N), petals pale-yellow; South Paraguay, September, 1892, O. Kuntze s. n. (N), flowers yellow. ARGENTINA: Santa Ana, Mi-

siones, December 25, 1912, D. Rodríguez s. n. [Herb. Mus. Argent. Cienc. Nat. 23.837] (N).

Lippia Rodriguezii Moldenke, sp. nov.

Frutex; ramis gracilibus obtuse tetragonis dense adpresso-strigosis; nodis annulatis; sarmentis dense glanduloso-pubescentibus, pilis patentibus; foliis oppositis; petiolis brevibus ampliatis marginatis vel obsoletis; laminis subcoriaceis griseo-viridibus oblongis vel anguste ellipticis acutes regulariter serrulatis, ad basim acutis et in petiolum angustatis, supra scabris dense adpresso-strigillose, subitus densiore strigoso-pubescentibus; venatio supra impresso; pedunculis filiformibus dense glanduloso-pubescentibus, pilis patentibus; bracteolis linearibus dense strigoso-pubescentibus brunneis.

Shrub; branches slender, erect, obtusely tetragonal, densely appressed-strigose with short, rather harsh, white hairs; nodes conspicuously annulate; twigs short, very slender, densely spreading-pubescent, the pubescence brown and more or less glandular; leaves decusate-opposite, short-petiolate or subsessile; petioles obsolete or to 5 mm long (on large leaves) and flattened-ampliate or margined, appressed-strigillose; blades subcoriaceous and uniformly gray-green on both surfaces when mature (thinner and brunnescence in drying when immature), oblong or narrowly elliptic, 3-5,5 cm long, 5-10 mm wide, acute at apex, regularly serrulate from the middle to the apex with small, acute, appressed, antrorse teeth acute and attenuate into the petiole at base, scabrous and densely appressed-strigillose with harsh antrorse white hairs, more densely strigose-pubescent beneath, the pubescence albidous; midrib, secondaries, and veinlet reticulation deeply impressed above, prominent or prominulous beneath; inflorescence axillary, about equalling the immature subtending leaves or surpassing them, 1,5-3 cm long; peduncles filiform, 1-2,5 cm long, densely glandular-pubescent with brown spreading hairs; heads compact, not elongating; bractlets linear, densely strigose-pubescent, brownish.

ARGENTINA: Santa Ana, Misiones, September 21, 1912, D. Rodríguez 609 [Herb. Mus. Argent. Cienc. Nat. 23.850] (N-type).

Lippia salsa Griseb., *Abh. K. Ges. Wiss. Götting.* 19 : 242. 1874.

ARGENTINA: Salina Grande, Córdoba, January, 1916, Hau-man s. n. [Herb. Mús. Argent. Cienc. Nat. 23.985] (N); El Pue-sito, alt. 700 m, Dept. Burruryacu, Tucumán, December, 1928, S. Venturi 7696 (N), flowers bluish; Totoralejos, Córdoba, No-vember, 1892, O. Kuntze s. n. (N); Prov. Santiago, October, 1892, O. Kuntze s. n. (N-2); Gramilla, Dept. Giménez, alt. 300 m, Santiago del Estero, March 16, 1930, S. Venturi 10.300 (N), flowers lilac; Gran Salina, Recreo, Córdoba, January, 1890, F. Kurtz 6760 (N); at crossroads of highways to Catamarcá and Tucumán, Salina, November 10, 1872, P. G. Lorentz et G. Hieronymus s. n. (N), originally labelled «494», but this num-ber later stricken out.

Lippia salviaefolia Cham., *Linnaea* 7 : 227. 1832.

PARAGUAY: K. Friebig 4234 (Cb-2, V). BOLIVIA: East Ve-lasco, alt. 200 m, July, 1892, O. Kuntze s. n. (N). ARGENTINA: Santa Ana, Misiones, September 18, 1912, D. Rodríguez 625 [Herb. Mus. Argent. Cienc. Nat. 23.838] (N).

Lippia Sandwithiana Moldenke, sp. nov.

Herba perennis; caulis erectis dense hirsuto-hispidulis; fo-liis oppositis sessilibus; laminis firmis oblongis vel ellipticis acu-tis, ad basim rotundatis vel cordatis, regulariter serrulatis utrin-que hirsuto-hispidulis, supra bullatis; pedunculis gracillimis brevibus hirsuto-hispidulis.

Perennial herb, woody at base; stems erect, slender, few or numerous, densely hirsute-hispidulous with white hairs to 2 mm long, not much branched; leaves decussate-opposite, num-erous, sessile; blades firmly chartaceous and stiff, oblong and elliptic, 0,8-4 cm long, 0,6-2,4 cm wide, acute at apex, rounded or cordate at base, uniformly and regularly serrulate from base to apex with very numerous and small blunt teeth, hirsute-his-pidulous on both surfaces, more densely so beneath, conspi-cuously bullate above; inflorescence axillary, shorter than the subtending leaves, sparse, solitary in the upper axils, opposite;

peduncles very slender, hirsute-hispidulous like the adjacent branches, 5-8 mm long.

The species is named in honor of my good friend and colleague, N. Y. Sandwith of the Royal Botanic Gardens, Kew, who has for so many years been contributing so much to our knowledge of the flora of tropical America, who has made an expedition into British Guiana, and who we hope will continue his important work for many years to come.

PARAGUAY: in calcareous region along the upper course of the Rio Apa, March, 1913, E. Hassler 11.031 (Cb-type, K-isotype, N-fragment and photo of type, Z-photo of type).

Lippia sclerophylla Briq., *Bull. Herb. Boiss.*, sér. 2, 4: 1162. 1904.

PARAGUAY: in flower, March, P. Jörgensen 4580 (La). ARGENTINA: Loreto, Misiones, March 8, 1930, G. Grüner 69 (N); Santa Ana, Misiones, March 11, 1910, D. Rodríguez 178 [Herb. Mus. Argent. Cienc. Nat. 23.836] (N).

Lippia sclerophylla var. *loretensis* Moldenke, var. nov.

Haec varietas a forma typica speciei recedit caulis sparsissime pilosis vel subglabratibus; foliis tenuiter chartaceis, subtus glabris vel subglabratibus et dense resinoso-punctatis, marginibus ciliatis et ultra medium argute paucidentatis.

This variety differs from the typical form of the species in its stems being very sparsely pilose or subglabrate; its leaves being thin-chartaceous, glabrous or subglabrate and resinous-punctate beneath, ciliate along the margins and sparsely sharp-toothed only above the middle.

ARGENTINA: Loreto, Misiones, March 14, 1931, G. Grüner 703 (N-type).

Lippia suffruticosa (Griseb.) Kuntze, *Rev. Gen. Pl.* 3, 2: 253. 1898.

ARGENTINA: Metán, Dept. Metán, Salta, April 7, 1933, A. L. Cabrera 3117 (N); Río Tacanas, Dept. Trancas, alt. 1400 m,

Tucumán, April 17, 1926, S. Venturi 4294 (N), flowers rose; Cadillal, Dept. Tafí, Tucumán, April 13, 1922, S. Venturi s. n. [Herb. Mus. Argent. Cienc. Nat. 23.870] (N); San José, Salta, February, 1873, P. G. Lorentz et G. Hieronymus s. n. (N); Salta, alt. 70 m, November, D. Rodríguez 1134 (La), flowers white; Cerro del Campo, alt. 1500 m, Burruyacu, April 1, 1930, S. Venturi 10.323 (N), flowers blue.

Lippia tegulifera Briq., *Ann. Conserv. et Jard. Bot. Genève*. 7 : 309-310. 1904.

PARAGUAY: E. Hassler 8994 (V); P. Jörgensen 3780 (N), 0,5 m tall, petals yellow; in vicinity of Caaguazú, March, 1905, E. Hassler 9142 (Cb, N-photo, V, Z-photo).

Lippia tegulifera var. **ovata** Briq., *Ann. Conserv. et Jard. Bot. Genève*. 7-8 : 310. 1904.

PARAGUAY: P. Jörgensen s. n. [Herb. Mus. Argent. Cienc. Nat. 28/2072] (N); on high plateau and declevities of Sierra de Amambay, December, 1907, T. Rojas s. n. [E. Hassler 9906] (N-photo, V, Z-photo); southern Paraguay, September, 1892, O. Kuntze s. n. (N), originally distributed as *L. pumila* Cham.; Caaguazú, November 7, 1874, Balansa 1031 (N-fragment of isotype); Ibitimi, October, 1892, Hauthal 23 (N).

Lippia tristis Briq., *Bull. Herb. Boiss.*, sér. 2, 4 : 1159. 1904.

PARAGUAY: burned campo, Estancia Primera, February, 1932, P. Jörgensen 4583 (Cp, N-2, N-photo, Z-photo), 0,5 m tall, petals yellow.

Lippia turbinata Griseb., *Abh. K. Ges. Wiss. Götting.* 19 : 243. 1874; Parodi, *Rev. Argent. Agron.* 1 : 201. 1934; Molino, *Trab. Inst. Bot. y Farm. Buenos Aires* 54 : 112. 1935; *Darwiniana* 3 : 52. 1937; Latzina, *Lilloa* 1 : 189. 1937.

Lippia globiflora var. *microphylla* f. *gabriuscula* Kuntze, *Rev. Gen. Pl.* 3, 2 : 252. 1898.

Vernacular name: poleo.

C. Houard in *Zoocéd. Pl. Amer. Sud* 350 (1933) says that this

species is often infested by two unidentified species of cecido-mydes in Argentina.

ARGENTINA: Colalao del Valle, alt. 1600 m, Dept. Tafí, Tucumán, April, 1926, S. Venturi 4292 (N-2), shrub 1.8 m tall, flowers violet; Trancas, alt. 700 m, Tucumán, December 13, 1913, D. Rodríguez 1183 (N), shrub 2 m tall, flowers white; Río Tacanas, Dept. Trancas, alt. 1450 m April 17, 1926, S. Venturi 4288 (N), on riverbank, 1 m tall, flowers rose; Paso de los Gutiérrez, Río Salí, Tucumán, January 2, 1934, S. Venturi 2361 (N), flowers white; Rosario de Lerma, Campo Quijano, alt. 1300 m, S. Venturi 8120 (N), shrub 1.5 m tall, flowers white; Tucumán, S. Venturi 1034 (N); El Cajón, alt. 700 m, Burruyacu, March 17, 1929, S. Venturi 8518 (N); Cosquín, alt. 730 m, Córdoba, January-February, 1936, A. R. Rodrigo 278 (N), flowers white; alrededores, La Falda, Córdoba, January, 1936, M. M. Job 554 (N-2); La Florida, along Río del Tala, Catamarca, February 3, 1873, P. G. Lorentz et G. Hieronymus 373 (N), type of *L. globiflora* var. *microphylla* f. *glabriuscula* Kuntze; San José, Salta, February 10, 1873, P. G. Lorentz et G. Hieronymus 236 (N), originally distributed as *L. globiflora* var. *geminata* f. *glabriuscula* Kuntze; Las Breñas, Chaco, December, 1932, A. G. Schulz 1488 (N), 1.2 m tall, flowers white; Capital, alt. 1200 m, Salta, February, 1936, A. G. Schulz 1449 (N), aromatic shrub, 1 m tall, along roadside, flowers lilac; riverbank, Tancacho, Córdoba, December, 1924, A. C. Scala 2001 (N); Alto Penceoso, San Luis, February, 1914, C. Bruch et E. Carette s. n. (N-2); Córdoba, 1872, Herb. A. Gray s. n. (C), originally distributed as *L. asperifolia*; riverbank, Bajo de Velis, Sierra de San Luis, February 1, 1895, F. Kurtz 8523 (N), shrub, 2 m tall; Tanti, Dept. Punilla, Córdoba, February, 1939, A. P. Rodrigo 2184 (N-2), flowers white; San Javier, Córdoba, January 12, 1939, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 31.197] (N); Andalgalá, Catamarca, November 22, 1929, A. L. Cabrera 1034 (N); Tapia, Tucumán, December 21, 1912, D. Rodríguez 212 [Herb. Mus. Argent. Cienc. Nat. 23.810] (N); Córdoba, December, 1891, O. Kuntze s. n. (N); Córdoba, January 2, 1880, P. G. Lorentz s. n. (N); Cafayate, Salta, February 6, 1935, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 14.814] (N); Agua Caliente, Dept. Candelaria, Salta,

April 2, 1925, S. Venturi s. n. [Herb. Mus. Argent. Cienc. Nat. 25/1674] (N); El Puesto, Dept. Tinogasta, Catamarca, January 23, 1930, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 30/604] (N); Sáenz Peña, Chaco, Ragonese 8 [Herb. Mus. Argent. Cienc. Nat. 13.345] (N); Andalgalá, Catamarca, March, 1916, Hauman s. n. [Herb. Mus. Argent. Cienc. Nat. 23.860] (N); Maipú, Mendoza, January, 1919, A. Ruiz s. n. [Herb. Mus. Argent. Cienc. Nat. 23.928] (N); between Merlo and Rincón, San Luis, March, 1929, Yepes s. n. [Herb. Mus. Argent. Cienc. Nat. 29/90] (N); General Roca, San Francisco, La Rioja, April 14, 1928, Gómez s. n. [Herb. Mus. Argent. Cienc. Nat. 28.775] (N); Chañar Pozo, Dept. Leales, Tucumán, November, 1919, S. Venturi s. n. [Herb. Mus. Argent. Cienc. Nat. 23.813] (N); no locality, P. Jörgensen s. n. [Herb. Facult. Cienc. Med. Buenos Aires 1024; Herb. Inst. Biol. S. Paulo 25.782] (Sp); Metán, November, 1939, T. Meyer 3048 (N); San Pedro de Colalao, Tucumán, January 10, 1940, T. Meyer 3093 (N), plant medicinal. CHILE: Pabellón, alt. about 600 m, Tierra Amarilla, Dept. Copiapó, Atacama, November, 1924, E. Werdermann 484 (N), originally distributed as *L. asperifolia* Rich.

Lippia turbinata* f. *angustifolia Osten, f. nov.

Haec forma a forma typica speciei recedit foliis angustissimis, 1-3 cm longis, 1-4 mm latis.

This form differs the typical form of the species in its very narrow leaves, which, including the petiole, are 1-3 cm long and only 1-4 mm wide.

ARGENTINA: cultivated at Colonia Benítez, Chaco, October, 1933, A. G. Schulz 1489 (N-type), flowers white, medicinal, used for stomach troubles and to aid digestion; Villa Brochero, Córdoba, November 12, 1927, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 11.672] (N); Río Córdoba, November 12, 1877, G. Hieronymus s. n. [Herb. Instit. Biol. S. Paulo 25.786] (N-photo, Sp, Z-photo); Salsipuedes, Dept. Colón, Córdoba, January, 1938, G. Dawson 78 (N-2).

Lippia turnerifolia Cham., *Linnaea* 7: 217. 1832; Herter, *Revis. Sudam. Bot.* 4: 185-186. 1937; Gallinal, Bergalli, Cam.

pal, Aragone and Rosengurtt, *Stud. Nat. Mead. Urug.* 81. 1938; Herter, *Beih. Bot. Centralbl.* 59: 275. 1939.

BOLIVIA: Tunari, 3000 m, May, 1892, O. Kuntze s. n. (N). URUGUAY: Valle Edén, Tacuarembó, September, 1928, Herb. Herter 83.831 (N). ARGENTINA: La Cruz, Corrientes, November 8, 1936, L. R. Parodi 12,386 (N); Jujuy, October, 1892, O. Kuntze s. n. (N), flowers yellow; Cerro San Lorenzo, Salta, October 18, 1925, Schreiter s. n. [Herb. Mus. Argent. Cienc. Nat. 26/1342] (N); Rosario de Lerma, Quijano, Salta, January, 1937, M. M. Job 1543 (N), flowers yellow.

Lippia vernonioides Cham., *Linnaea* 7: 232. 1832.

Lippia attenuata Mart., *Flora* 21, 2: Beibl. 59. 1832.

Aloysia attenuata Walp., *Repert.* 4: 42. 1845.

BOLIVIA: Buena Vista, alt. 700 m, Santa Cruz, June, 1937, M. Cárdenas 2028 (N), in open grassy soil; on sunny pampa, Ixiramos, alt. 800 ft., December 16, 1921, M. Cárdenas 1935 (N); campo de Buenavista, Prov. Sara, alt. 450 m, Santa Cruz, April 4, 1925, J. Steinbach 7027 (N); Yapacani, alt. 400 m, June, 1892, O. Kuntze s. n. (N), originally distributed as *L. hirsuta* f. *vernonioides* Kuntze; Prov. Velasco, alt. 200 m, July, 1892, O. Kuntze s. n. (N-2), originally distributed as *L. hirsuta* f. *vernonioides* Kuntze; Reis, alt. 1500 ft., June, 1886, H. H. Rusby 927 (C); Guanai, alt. 2000 ft., May, 1886, H. H. Rusby 926 (C); Buena Vista, alt. 400 m, Prov. Sara, April 15, 1921, J. Steinbach 5581 (N).

LAMIACEAE

by Carl Epling

Hedeoma multiflora Benth. — ARGENTINA: Bajo Hondo, Buenos Aires, 1916, N. Alboff et E. Carette s. n. (N).

Hyptis floribunda Briq. — ARGENTINA: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, Salta, January 20, 1929, S. Venturi 8129 (N); flowers rose, plants 2 m tall, along railroad tracks.

Hyptis lappacea Benth. — ARGENTINA: bank of the Río Paraná, 6 km north of Capital, Corrientes, November, 1936, A. P. Rodrigo 913 (N), flowers bluish-white; Potrero Grande, alt. 750 m, Dept. Orán, Salta, November 15, 1927, S. Venturi 5544 (N), in hard dry cleared land.

Hyptis mutabilis (Rich.) Briq. — ARGENTINA: Arroyo Las Garzas, Mercedes, Corrientes, November, 1936, A. P. Rodrigo 829 (N), flowers lilac; along highway at San Luis del Palmar, Capital, Corrientes, November, 1936, A. P. Rodrigo 897 (N), flowers blue; along highway «El Cuadrado», Dept. Colón, Córdoba, March, 1928, G. Dawson 246 (N); Punta Lara, Buenos Aires, November, 21, 1939, G. Dawson 376 (N); Vespucio, Dept. Orán, Salta, July 14, 1937, A. L. Cabrera 4171 (N-2), shrub.

Lepechinia floribunda (Benth.) Epling. — ARGENTINA: Andalgalá, near the Cerro Duraznos, Catamarca, January, 1937, M. M. Job 1354 (N), flowers white.

Mentha ? piperita L. — ARGENTINA: edge of Río Limay, Terr. Neuquén, March 4, 1939, A. Chicchi 183 (N), in water on left bank of the river.

Ocimum Selloi Benth. — URUGUAY: in wet sandy soil, Arroyo Negro, Dept. Río Negro, November 30, 1934, A. L. Cabrera 3261 (N), so determined also by the collector.

Prunella vulgaris L. — ARGENTINA: Puerto Blest, Terr. Río Negro, January 13, 1935, A. L. Cabrera et M. M. Job 258 (N).

Salvia guaranitica Benth. — ARGENTINA: alrededores, Norte de Monte, Mercedes, Corrientes, November, 1936, A. P. Rodrigo 805 (N), flowers blue, determined by the collector as *S. coerulea* Benth., which is a synonym.

Salvia gilliesii Benth. — ARGENTINA: Quebrada de Cafayate, Buenos Aires, April 7, 1914, D. Rodríguez 1419 [Herb. Mus. Argent. Cienc. Nat. 824] (N).

Salvia pallida Benth. — ARGENTINA: along highway from Santa Fe to Laguna Stubal o Guadalupe, Santa Fe, Ja-

nuary-February, 1936, M. M. Job 685 (N), flowers lilac, so determined also by the collector; Posadas, Misiones, January 9, 1930, D. Rodríguez 13 [Herb. Mus. Argent. Cienc. Nat. 30/2073] (N).

Salvia uliginosa Benth. — ARGENTINA: Concordia, Arroyo Arrebata Capa, Entre Ríos, January 28, 1931, A. Caste-llanos s. n. [Herb. Mus. Argent. Cienc. Nat. 31/1295] (N).

Satureja boliviana var. **tarijensis** (Griseb.) Epling. — ARGENTINA: western slope of Sierra de San Javier, alt. 1200 m, Dept. Tafí, Tucumán, July, 1938, A. P. Rodrigo 2037 (N-3), flowers white, tree 1.8 m tall; Quebrada de San Lorenzo, alt. 1463 m, Salta, July 18, 1938, A. P. Rodrigo 2049 (N), tree, flowers white; Villa Nougués, Dept. Tafí, Tucumán, October 2, 1919, Schreiter 35 (N), originally distributed as *S. boliviana* (Benth.) Briq.

Stachys annua L. — ARGENTINA: sandy soil, Isla Santiago, Buenos Aires, October 13, 1935, A. L. Cabrera 3364 (N-2), corolla rosy.

Stachys Micheliana Briq. — ARGENTINA: forest of Punta Lara, Buenos Aires, November 12, 1939, G. Dawson 858 (N); forests, Sierra de San Javier, alt. 800 m, Dept. Tafí, Tucumán, July 10, 1938, A. P. Rodrigo 2016 (N), flowers rosy.

Teucrium Grisebachii Hieron. — ARGENTINA: El Volcán, San Luis, January, 1933, M. A. Vignati 365 (N).

Teucrium laevigatum Vahl — ARGENTINA: forests of Pay-ubre Grande, Mercedes, Corrientes, November, 1936, A. P. Rodrigo 734 (N), flowers white; Estancia Bell, Buenos Aires, October 24, 1939, G. Dawson 785 (N); Salsipuedes, Dept. Colón, Córdoba, March, 1938, G. Dawson 147 (N).

Teucrium vesicarium Mill. — ARGENTINA: old canal from Santa Fe, to Colastiné, rio Paaná, Santa Fé, January-February, 1936, M. M. Job 740 (N).

SOLANACEAE

Lycium by C. L. Hitchcock; remainder by J. Monachino

Leptoglossis Benth. — Tree species have been proposed in the genus *Leptoglossis* Benth. (generic description according to Bentham in Benth. et Hook. f., *Gen. Pl.* 2, 2 : 908-909. 1876), while Miers in Hook., *Lond. Journ. Bot.* 5 : 174 (1846) recognized, but does not formally name, two varieties in *Nierembergia (Leptoglossis) linifolia*. These three proposed species are not sufficiently distinct to merit specific rank and are here proposed for reduction to varietal status.

Leptoglossis Schwenkioides var. **typica** Monachino, var. nov.

Leptoglossis Schwenkioides Benth., *Bot. Voy. Sulph.* 143. 1844.

Salpiglossis Schwenkioides Wettst. in Engl. u. Prantl, *Nat. Pflanzenfam.* 4,3b : 36. 1891.

Leptoglossis Schwenkioides var. **linifolia** (Miers) Monachino stat. nov.

Nierembergia linifolia Miers in Hook., *Lond. Journ. Bot.* 5 : 174. 1846.

Leptoglossis linifolia Benth. in Benth. et Hook. *Gen. Pl.* 2,2 : 909. 1876¹.

Salpiglossis linifolia Wettst. in Engl. u. Prantl, *Nat. Pflanzenfam.* 4,3b : 36. 1891.

Leptoglossis Schwenkioides var. **tenuis** (R. A. Phil.)

Monachino, stat. nov.

Cyclotigma tenue R. A. Phil., *Anal. Univers. Chile* 197-198. 1870.

Schwenkia tenuis Griseb., *Pl. Lorentz.* 166. 1874².

Leptoglossis tenuis Benth. in Benth. et Hook. f., *Gen. Pl.* 2,2 : 909. 1876.³

Salpiglossis tenuis Wettst. in Engl. u. Prantl, *Nat. Pflanzenfam.* 4,3b : 36. 1891.

¹ These two binomials are cited to Bentham and Hooker in the *Index Kewensis* and elsewhere, but were not actually validly published there under the present *International Rules of Nomenclature*. Furthermore, according to Bentham's *On the joint and separate work of the authors of Bentham and Hooker's 'Genera Plantarum'* in *Journ. Linn. Soc. Lond.* 20 : 305 (1884) the text of the *Solanaceae* in that work was written entirely by Bentham.

² *Schwenkia tenuis* Griseb. is obviously conspecific with and only a new name for *Cyclotigma tenue* see Griseb., *Symb. Fl. Argent.* 241, n° 1846. 1879.

Leptoglossis Schwenkoides var. **xerophytica** Monachino, var. nov.

Haec varietas a forma typica speciei recedit habitu xerophytico, ad basim multibrachiato valde lignoso; antheris fertilibus 2; staminodiis 3; foliis parvis brevibus adscendentibus; floribus parvioris, disco non vel obscure stipitato; capsula calycen excedente.

Leptoglossis Schwenkoides var. *xerophytica* is closely related to the three varieties listed above, differing (like var. *tenuis*¹) from the first two varieties² in having only two fertile anthers and three staminodes, the middle staminode being much smaller than the two lateral ones. From all three varieties it differs in having a xerophytic aspect (rather than a *Linum* habit³); being intricately many-branched from the base and more woody; having its leaves few in number, short (varying from about 6 mm long to reduced bract-like scales), and ascending; and its flowers smaller, the calyx 2,5-4 mm long, calyx-teeth 1-1,5 mm long, corolla-tube 9-10 mm long, narrow (1,5 mm wide at the throat), disk not stipitate or very obscurely so, and capsule exceeding the calyx, about 4 mm long.

ARGENTINA: Alto Pencoso, Prov. de San Luis, November, 1914, C. Bruch et E. Carette s. n. (N-type), in flower and fruit, originally distributed as *Wahlenbergia* sp.

Lycium cestroides Schlecht. — ARGENTINA: Las Juntas, Catamarca, December, 1896, C. Bruch s. n. (N), determined as this species also by A. P. Rodrigo; Vespucio, Dept. Orán, Salta, July 13, 1937, A. L. Cabrera 4155 (N), shrub; Las Juntas, Catamarca, 1893, Collector undesignated s. n. (N), determined also as this species by A. P. Rodrigo.

¹ R. A. Philippi, in his original description of the genus *Cyclostigma*, says « *desert a Leptoglossi Benth... staminibus duobus, nec quatuor* ». Wettsstein, however, in Engl. u. Prantl, *Nat. Pflanzenfam.* 4,3b : 36, fig. 16 f (1891), includes the species in his Section 3 « *Sib. 4, nur 2 fruchtbar* ».

² Bentham in *Bot. Voy. Sulph.* 143 (1844) says « *Stamina didynama... staminum posticum dimidio minores* ». See also Miers, *Illustr. S. Am. Pl.* 2 : pl. 53. 1857.

³ Miers in Hook., *Lond. Journ. Bot.* 5 : 174 (1846), says « *appearance of a Linum in habit* ».

Lycium chilense Miers ex Bertero. — ARGENTINA : Rincón del Palo, Río Negro, January, 1916, A. C. Scala s. n. (N-3); Sierra de la Ventana, Partido de Tornquist, November 6, 1938, A. L. Cabrera 4669 (N); Córdoba, July 21, 1939, R. Maldonado B 82 (N), probably some form of this species; Monte Hermoso, Buenos Aires, 1916, E. Carette s. n. (N-2); Dufaur, Estancia La Lola, Sierra de Curumalal, Partido de Saavedra, November 3, 1939, A. L. Cabrera 5434 (N), shrub; Alto Pencoso, San Luis, February, 1914, C. Bruch et E. Carette s. n. (N), possible some form of this species, but no flowers seen (the flower in the packet does not belong to this plant, but to *L. cestroides*), originally distributed as *Lycium elongatum* Ms. ? C. Tweedianum Gris. ? by A. P. Rodrigo.

Lycium Gilliesianum Miers. — ARGENTINA : Mendoza, 1916, E. Carette s. n. (N); Carmen de Patagones, Buenos Aires, July 30, 1938, A. L. Cabrera 4535 (N).

Lycium Gilliesianum var. **longitubum** (Dammer) C. L. Hitch. — CHILE : Cerro Paredones, Cord. Río Figuerosa, Dept. Copiapó, Atacama, alt. 3200 m, January, 1926, E. Werdermann 980 (N), this is not the same plant as that cited in *An. Mo. Bot. Gard.* 19 : 263. 1932.

Lycium infaustum Miers. — ARGENTINA : Quebrada de Los Bateones, Sierra del Cajón, alt. 2200 m, Tafí, Tucumán, April 29, 1926, S. Venturi 4227 (N-3), flowers white; Alto Pencoso, San Luis, February, 1914, C. Bruch et E. Carette s. n. (N), uncertain, possibly this species.

Lycium nodosum Miers. — ARGENTINA : Chañar Pozo, alt. 300 m, Dept. Leales, Tucumán, December, 1919, S. Venturi 708 (N), shrub, 1.5-2 m tall, flowers white.

Lycium ovalilobum C. L. Hitch. — ARGENTINA : Gramilla, alt. 300 m, Dept. Giménez, Santiago del Estero, March 13, 1930, S. Venturi 10.280 (N), shrub 80 cm tall, flowers white.

Lycium pubescens Miers. — ARGENTINA : Quehué, mountains of Calden, La Pampa, March 28, 1939, A. Chicchi 291 (N); Quehué, mountains of Calden, La Pampa, March 28, 1939, A. Chicchi 284 (N); Alto Pencoso, San Luis, February, 1914, C. Bruch et E. Carette s. n. (N).

Lycium vimineum Miers. — ARGENTINA : old canal from Santa Fe to Colastiné, Río Paraná, Santa Fe, January-February, 1936, M. M. Job 718 (N).

Nierembergia hippomanica Miers. — ARGENTINA : river banks. Tancacho, Córdoba, December, 1924, A. C. Scala s. n. (N).

GESNERIACEAE

by C. V. Morton

Achimenes gymnostoma (Griseb.) Lillo. — ARGENTINA : Cerro del Campo, alt. 1500 m, Dept. Burruyacu, Tucumán, May 9, 1930, S. Venturi 10.324 (N), in moist ravine flowers rosy.

VALERIANACEAE

by J. Monachino

Valerianopsis salicariaefolia (Vahl.) C. A. Muell. — ARGENTINA : Canal Guazú, November, 1925, A. C. Scala s. n. (N).

CAMPANULACEAE

by Rogers McVaugh

Specularia biflora (R. et P.) F. et M. — ARGENTINA : Hudson, Buenos Aires, December 5, 1938, G. Dawson 397 (N), originally distributed as *S. perfoliata* (L.) A. DC.; in front of Recreo Tiburón, Río Carabelas, Delta, November, 1925, A. C. Scala s. n. (N), originally distributed as *S. perfoliata* (L.) A. DC.

LOBELIACEAE

by Rogers McVaugh

Lobelia nana H. B. K. — ARGENTINA : Valle de Tafí, Tucumán, 1908, C. Bruch s. n. (N-2), previously determined as *L. Cymbalaria* Griseb. by A. P. Rodrigo.

Lobelia xalapensis H. B. K. — ARGENTINA : Vespucio, Sierra de Aguaragua Dept. Orán, July 14, 1937, A. L. Cabrera 4188 (N).

Siphocampylus foliosus Griseb. — ARGENTINA : El Cuadrado highway, Colón, January, 1938, G. Dawson 228 (N); Unquillo, Córdoba, 1926, C. Bruch s. n. (N-2); Cerro Azul, Colón, Córdoba, February 3, 1939, L. A. Dawson 4 (N).

Siphocampylus nemoralis Griseb. — ARGENTINA : Quebrada del Río Carapari, Dept. Orán, Salta, July 15, 1937, A. L. Cabrera 4223 (N-2).

CALYCERACEAE

by J. Monachino

Acicarpha tribuloides Juss. — ARGENTINA : forest of Punta Lara, Buenos Aires, November 12, 1939, G. Dawson 876 (N).

CARDUACEAE

Vernonia by H. A. Gleason; remainder by J. Monachino

Ophryosporus Charua (Griseb.) Hieron. — ARGENTINA : western slope of the Sierra de San Javier, alt. about 1200 m, Tafí, Tucumán, July 12, 1938, A. P. Rodrigo 2035 (N-2), shrub 70 cm tall, flowers immature, originally distributed as *Salvia* sp.

Vernonia Chamaedrys Less. — ARGENTINA : Las Breñas, alt. 250 m, Chaco, November, 1929, S. Venturi 9791 (N), flowers lilac.

Vernonia incana Less. — ARGENTINA : island opposite the port of Esquina, Corrientes, December, 1936, A. P. Rodrigo 938 (N), flowers lilac.

Vernonia remotiflora L. C. Rich. — ARGENTINA : Cerro del Campo, alt. 1200 m, Dept. Burruyacu, Tueumán, November, 1928, S. Venturi 7579 (N), flowers blue.

Vernonia tarijensis Hieron. — ARGENTINA : Vespucio, Dept. Orán, Salta, July 12, 1937, A. L. Cabrera 4154 (N).

Vernonia Tweedyana Baker. — PARAGUAY : Villa Rica, March, 1931, P. Jörgensen 4442 (N).