

CONTRIBUTIONS TO THE FLORA OF EXTRA-TROPICAL SOUTH AMERICA

V

BY HAROLD N. MOLDENKE
(U. S. A.)

ALISMACEAE

(determination by J. H. Pierce)

Sagittaria montevidensis Cham. — ARGENTINA : Chaco : Enrique Urien, Campo Bonazzola, Dept. Tapenaga, November, 1940, A. P. Rodrigo 2480 (N), so determined also by the collector.

POACEAE

(determinations by Mrs. Agnes Chase)

Andropogon altus Hitchc. — ARGENTINA : Buenos Aires : sandy steppe, Salliqueló, Partido de Pellegrini, March 14, 1941, A. L. Cabrera 7108 (N).

Andropogon condensatus H. B. K. — ARGENTINA : Salta : Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, February 3, 1941, T. Meyer 3479 [Herb. Inst. Miguel Lillo 35608] (N), called « cola de zorro », determined as *A. paniculatus* Kunth by the collector.

Andropogon consanguineus Kunth — ARGENTINA : Buenos Aires : sandy steppe, Salliqueló, Partido de Pellegrini, March 14, 1941, A. L. Cabrera 7104 (N).

Andropogon saccharoides Sw. var. **imperatoides** Hack. — ARGENTINA: Buenos Aires: sandy steppe, Salliqueló, Partido de Pellegrini, March 14, 1941, A. L. Cabrera 6992 (N).

Aristida adscensionis L. — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 20, 1941, T. Meyer 3467 [Herb. Inst. Miguel Lillo 35596] (N).

Aristida pallens Cav. — ARGENTINA: Buenos Aires: primitive steppe, Pellegrini, Partido de Pellegrini, November 28, 1940, A. L. Cabrera 6912 (N). San Luis: in tough grass steppe, Saladillo, November 9, 1940, G. Covas 1022 (N).

Axonopus sp. — ARGENTINA: Tucumán: Cochuna, Dept. Chilicasta, March 4, 1941, C. A. O'Donell 92 [Herb. Inst. Miguel Lillo 36215] (N).

Bouteloua curtipendula (Mx.) Torr. — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 20, 1941, T. Meyer 3466 [Herb. Inst. Miguel Lillo 35595] (N).

Briza brizoides (Lam.) Kuntze — ARGENTINA: Buenos Aires: Tandil, Partido de Tandil, November 22, 1940, A. L. Cabrera 6870 (N).

Briza triloba Nees — ARGENTINA: Buenos Aires: Tandil, Partido de Tandil, November 22, 1940, A. L. Cabrera 6869 (N).

Calamagrostis viridiflavescens Stead. — URUGUAY: grassy slopes, Palleros, Río Negro, Dept. Cerro Largo, December, 1935, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 1136 (N), so determined also by the collectors.

Cenchrus pauciflorus Benth. — ARGENTINA: Buenos Aires: sandy steppe, Salliqueló, Partido de Pellegrini, March 14, 1941, A. L. Cabrera 6980 (N), so determined also by the collector.

Chloris bahiensis Steud. — URUGUAY: grassy slopes, Sta. Adelaida, Arroyo Grande, Dept. Flores, November, 1937,

Gallinal, Aragone, Bergalli, Campal y Rosengurtt 960 (N), so determined also by the collectors.

Chloris Beyrichiana Kunth — ARGENTINA : Salta : Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 18, 1941, T. Meyer 3464 [Herb. Inst. Miguel Lillo 35593] (N), « much material from Argentina and Bolivia, but species uncertain at present ». A. Chase.

Chloris Gayana Kunth — ARGENTINA : Salta : Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 18, 1941, T. Meyer 3477 [Herb. Inst. Miguel Lillo 35603] (N). Tucumán : Parque 9 de Julio, alt. 450 m, Dept. Capital, December 15, 1940, T. Meyer 3435 [Herb. Inst. Miguel Lillo 35422] (N).

Chloris uliginosa Hack. — URUGUAY : in meadows and grassy places, Rio Tí ~~á~~nd Arroyo Mariucho, Dept. Flores, November 21, 1936, Rosengurtt B. 573 (N), so determined also by Parodi.

Chusquea Lorentziana Griseb. — ARGENTINA : Tucumán : Cochuna, Dept. Chicligasta, March 4, 1941, C. A. O'Donell 100 [Herb. Inst. Miguel Lillo 36223] (N).

Cynodon Dactylon (L.) Pers. — ARGENTINA : Tucumán : Quinta Lillo, alt. 480 m, Dept. Capital, October 26, 1940, H. R. Descole s. n. [Herb. Inst. Miguel Lillo 35941] (N).

Dactyloctenium aegyptium (L.) Richt. — ARGENTINA : Salta : Río Arenales, alt. 1000 m, Dept. Capital, January 10, 1941, T. Meyer 3462 [Herb. Inst. Miguel Lillo 35591] (N).

Danthonia montevidensis Hack. et Arech. — ARGENTINA : Buenos Aires : Tandil, Partido de Tandil, November 22, 1940, A. L. Cabrera 6876 (N). URUGUAY : in sandy fields and dunes, Carrasco, Montevideo, November 6, 1936, Rosengurtt B. 424 (N), se determined also by the collector.

Echinochloa polystachya (H. B. K.) Hitchc. — ARGENTINA : Buenos Aires : in beds, San Nicolás, Partido de San Nicolás, March 6, 1941, A. L. Cabrera 7146 (N).

Elyonurus rostratus Nees — ARGENTINA: San Luis: Villa Mercedes, November 13, 1940, G. Covas 1047 (N).

Eragrostis cilianensis (All.) Link — ARGENTINA: Buenos Aires: La Lucila, Dept. San Isidro, February 16, 1941, P. Torrent 31 [Herb. Inst. Miguel Lillo 17491] (N). Tucumán: Parque 9 de Julio, Dept. Capital, December 15, 1940, T. Meyer 3434 [Herb. Inst. Miguel Lillo 35421] (N).

Eragrostis flaccida Lindm. — ARGENTINA: Buenos Aires: sandy steppe, Salliqueló, Partido de Pellegrini, March 14, 1941, A. L. Cabrera 6991 (N).

Eragrostis flaccida Lindm. ? — ARGENTINA: Buenos Aires: very common on dunes, Puerto Belgrano, Las Baterías, Partido de Bahía Blanca, February, 1941, M. M. Job 1583 (N).

Eragrostis Neesii Trin. — URUGUAY: grassy slopes, Palleros, Río Negro, Dept. Cerro Largo, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt 1998 (N), cfr. *Estud. s. Prad. Nat. Urug.* 1: 77. 1938.

Eragrostis sp. (aff. *lugens*, *trichocalea*, etc.) — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 18, 1941, T. Meyer 3470 [Herb. Inst. Miguel Lillo 35599] (N), «very immature». A. Chase.

Festuca megalura Nutt. — ARGENTINA: Buenos Aires: Choique, limestone ridges, Partido de Tornquist, November 7, 1940, A. L. Cabrera 6726 (N), determined as «*Vulpia*» by the collector.

Glyceria multiflora Steud. — ARGENTINA: Buenos Aires: in ditch along roadside, Ensenada, November 1, 1940, A. L. Cabrera 6584 (N).

Hordeum pusillum Nutt. — ARGENTINA: La Pampa: Hucal, November 7, 1940, A. L. Cabrera 6745 (N).

Ichnanthus minarum Doell. — ARGENTINA: Salta: Mojotoro, alt. 1060 m, Dept. Caldera, January 11, 1941, T. Meyer 3579 [Herb. Inst. Miguel Lillo 35719] (N).

Imperata brasiliensis Trin. — URUGUAY: Arenales de Olmos, F. C. Loza Díaz, Canelones, March 7, 1937, Rosengurtt B. 1228 (N), so determined also by Parodi.

Leersia hexandra Sw. — URUGUAY: grassy slopes, San Pedro, Cerro Colorado, Dept. Florida, December 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 724 (N).

Manisuris altissima (Poir.) Hitchc. — ARGENTINA: Salta: Río Arenales, alt. 1000 m, Dept. Capital, January 10, 1941 T. Meyer 3463 [Herb. Inst. Miguel Lillo 35592] (N), determined as *Rotboellia* sp. by the collector.

Manisuris Selloana (Hack.) Kuntze — URUGUAY: common in fields, Barra del Río Ti, above Río Negro, Dept. Flores, November 25, 1936, Rosengurtt B. 438 (N), determined as *Rotboellia Selloana* Hackel by Parodi.

Melica filiculmis Desv. ? — ARGENTINA: Buenos Aires: San Román, Partido de Coronel Dorrego, November 8, 1940, A. L. Cabrera 6776 (N).

Melica macra Nees — ARGENTINA: Córdoba: Alta Gracia, alt. 607 m, rather frequent, cespitose, along the margins of Arroyo Alta Gracia, January 16, 1940, A. T. Hunziker 664 (N).

Melica sp. sect. **Blepharolepis**. — ARGENTINA: Buenos Aires: Grumbein, Partido de Bahía Blanca, November 5, 1940, A. L. Cabrera 6612 (N), «1-flowered». A. Chase.

Nassella trichotoma (Nees) Hack. — ARGENTINA: Buenos Aires: San Román, Partido de Coronel Dorrego, November 8, 1940, A. L. Cabrera 6778 (N), determined as *Stipa* sp. by the collector; meadows, Partido de Villarino, November 6, 1940, A. L. Cabrera 6685 (N), determined as *Stipa trichotoma* by the collector.

Oplismenus hirtellus (L.) Beauv. — ARGENTINA: Tucumán: Tafí Viejo, Dept. Tafí, alt. 500 m, February 20, 1941, T. Meyer 3913 [Herb. Inst. Miguel Lillo 17392] (N); Cochu-

na, Dept. Chieligasta, March 4, 1941, C. A. O'Donell 44, in part [Herb. Inst. Miguel Lillo 36162, in part] (N), mixed with *Pseudochinolaena polystachya* (H. B. K.) Stapf.

Panicum Bergii Arech. — ARGENTINA: Buenos Aires: sandy steppe, Salliqueló, Partido de Pellegrini, March 14, 1941, A. L. Cabrera 6998 (N).

Panicum elephantipes Nees — ARGENTINA: Buenos Aires: in bads, San Nicolás, Partido de San Nicolás, March 6, 1941, A. L. Cabrera 7143 (N).

Panicum Lilloi Hack. — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 23, 1941, T. Meyer 3476 [Herb. Inst. Miguel Lillo 35605] (N), in woods, 1,5 m, tall, so determined also by the collector.

Panicum missionum Ekm. — URUGUAY: very rare in shady woods, in a spot not pastured, gregarious and soloniferous, Aiguá, Cerro de la Salamanca, Maldonado, March 26, 1939, Rosengurtt B. 2896 (N).

Panicum Urvilleanum Kunth — ARGENTINA: Buenos Aires: primitive steppe, Pellegrini, Partido de Pellegrini, November 28, 1940, A. L. Cabrera 6919 (N), so determined also by the collector; in dunes, Monte Hermoso, Partido de Coronel Dorrego, November 8, 1940, A. L. Cabrera 6751 (N), so determined also by the collector.

Pappophorum pappiferum (Lam.) Kuntze — ARGENTINA: Salta: Cerrillos, alt. 1260 m, Dept. Cerrillos, February 2, 1941, T. Meyer 3578 [Herb. Inst. Miguel Lillo 35718] (N).

Paspalum commune Lillo — ARGENTINA: Salta: Cerrillos, alt. 1260 m, Dept. Cerrillos, March 1, 1941, T. Meyer 3582 [Herb. Inst. Miguel Lillo 35722] (N).

Paspalum cromyorhizon Trin. — URUGUAY: in fertile fields, Paso Pache, Río Sta. Lucía, February 25, 1940, Rosengurtt B. 3111 (N), so determined also by the collector.

Paspalum dilatatum Poir. — ARGENTINA: Salta: Río Arenales, alt. 1000 m, Dept. Capital, January 10, 1941, T. Meyer 3460 [Herb. Inst. Miguel Lillo 35590] (N). URUGUAY: in grassy slopes, Sta. Clara, Timote, Dept. Florida, December 1, 1936, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 824 (N), so determined also by Parodi; same locality and date, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 832 (N), cfr. Parodi, *Notas Mus. La Plata* 1: 240. 1937.

Paspalum distichum L. — URUGUAY: in swampy meadows, Sta. Clara, Timote, Dept. Florida, December, 1936, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 846 (N), so determined also by Parodi.

Paspalum exaltatum Presl. — URUGUAY: in swamps, Agronomía, Paysandú, November 10, 1937, Rosengurtt B. 2240 (N); in grassy slopes, Palleros, Río Negro, Dept. Cerro Largo, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt 1714 (N), so determined also by the collectors, cfr. *Estudios sobre Praderas Nat. del Uruguay*, p. 76. 1938.

Paspalum Humboldtianum Fl. — ARGENTINA: Córdoba: La Falda, «Molino de Oro», alt. 900 m, February, 1941, A. P. Rodrigo 2760 (N). Salta: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 20, 1941, T. Meyer 3468 [Herb. Inst. Miguel Lillo 35599] (N).

Paspalum indecorum Mez — URUGUAY: in fields, Arroyo Sopas and Arerungua, Salto, January 30, 1937, Rosengurtt B. 1034 (N), so determined also by Parodi in *Rev. Mus. La Plata* 1: 238. 1937.

Paspalum notatum Fl. — URUGUAY: in grassy slopes, Rio Ti and Arroyo Mariucho, Dept. Flores, April 13, 1937, Rosengurtt B. 1501 (N), so determined also by Parodi.

Paspalum proliferum Arech. — URUGUAY: in cespitose patches in sandy fields near riverside thickets, Río Uruguay and

Arroyo San Antonio Grande, Salto, Rosengurtt B. 951 (N), so determined also by Parodi.

Paspalum quadrifarium Lam. — URUGUAY: in grassy slopes, Palleros, Río Negro, Dept. Cerro Largo, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt 1722 (N), so determined also by the collectors, cfr. *Estudios sobre Praderas Nat. del Uruguay*, p. 76. 1938.

Paspalum remotum Remy — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 20, 1941, T. Meyer 3469 [Herb. Inst. Miguel Lillo 35598] (N).

Paspalum repens Berg. — ARGENTINA: Buenos Aires: floating, San Nicolás, Partido de San Nicolás, March 6, 1941, A. L. Cabrera 7145 (N), so determined also by the collector.

Paspalum unispicatum (S. et M.) Nash — ARGENTINA: Salta: Coronel Moldes, alt. 1100 m, Dept. La Viña, January 31, 1941, T. Meyer 3754 [Herb. Inst. Miguel Lillo 35698] (N), erect, 50 cm tall; Mojotoro, alt. 1060 m, Dept. Caldera, January 11, 1941, T. Meyer 3481 [Herb. Inst. Miguel Lillo 35588] (N).

Paspalum virgatum L. — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 18, 1941, T. Meyer 3472 [Herb. Inst. Miguel Lillo 35602] (N), matted, 1,5 m, tall, inflorescence red.

Paspalum sp., *Virgata* group — ARGENTINA: Chaco: Campo Bonazzola, Enrique Urien, Dept. Tapenaga, November, 1940, A. P. Rodrigo 2379 (N), 2 m tall, in mats and very abundant.

Phalaris angusta Nees — ARGENTINA: Buenos Aires: Delta Paraná, rare, January 11, 1941, A. T. Hunziker 963 (N).

Pholiurus incurvus (L.) Schinz et Thell. — ARGENTINA: Buenos Aires: Monte Hermoso, Partido de Coronel Dorrego, November 8, 1940, A. L. Cabrera 6770 (N).

Piptochaetium panicoides (Lam.) Desv. — URUGUAY : in grassy slopes, Monzón-Heber, Juan Jackson, Dept. Soriano, November, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt PE. 749 (N).

Piptochaetium Ruprechtianum Desv. — ARGENTINA : Buenos Aires : Tandil, Partido de Tandil, November 22, 1940, A. L. Cabrera 6871 (N), determined as *Stipa sp.*, by the collector.

Poa lanigera Nees — URUGUAY : in riverside thickets, San Pedro, Cerro Colorado, Dept. Florida, December, 1936, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 706 (N), so determined also by Parodi; common in grassy slopes, Paso Cuello, Canelón Clueo, Dept. Canelones, October 29, 1936, Rosengurtt B. 386 (N), so determined also by Parodi.

Poa sp. — ARGENTINA : Buenos Aires : in dunes, Monte Hermoso, Partido de Coronel Dorrego, November 8, 1940, A. L. Cabrera 6752 (N); La Granja, Partido de La Plata, November 10, 1940, A. P. Rodrigo 2351 (N). La Pampa : Huical, November 7, 1940, A. L. Cabrera 6738 (N).

Pseudechinolaena polystachya (H. B. K.) Stapf — ARGENTINA : Tucumán : Cochuna, Dept. Chicligasta, March 4, 1941, C. A. O'Donell 44, in part [Herb. Inst. Miguel Lillo 36152, in part] (N), mixed with *Oplismenus hirtellus* (L.) Beauv.

Puccinellia sp. — ARGENTINA : Buenos Aires : Grumbein, Partido de Bahía Blanca, November 5, 1940, A. L. Cabrera 6647 (N), «not *P. argentinensis*». A. Chase.

Setaria argentina Herrm. — ARGENTINA : Salta : Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 23, 1941, T. Meyer 3577 [Herb. Inst. Miguel Lillo 35717] (N). Tucumán : Capital, alt. 400 m, Dep. Capital, December 8, 1940, T. Meyer 3415 [Herb. Inst. Miguel Lillo 35399] (N).

Setaria Fiebrigii Herrm. — URUGUAY : in grassy slopes, Sta. Clara, Timote, Dept. Florida, Gallinal, Aragone, Bergalli,

Campal y Rosengurtt B. 826 (N); in grassy slopes, Palleiros, Río Negro, Dept. Cerro Largo, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt PE. 1796 (N); cespitose mats in fields, perennial, Escuela de Paysandú, Dept. Paysandú, January 21, 1937, Rosengurtt B. 890 (N).

Setaria geniculata (Lam.) Beauv. — ARGENTINA: Buenos Aires: sandy steppe, Salliqueló, Partido de Pellegrini, March 14, 1941, A. L. Cabrera 6978 (N). Salta: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 18, 1941, T. Meyer 3473 [Herb. Inst. Miguel Lillo 35601] (N), so determined also by the collector; Río Arenales, alt. 1000 m, Dept. Capital, January 10, 1941, T. Meyer 3893 [Herb. Inst. Miguel Lillo 17387] (N), so determined also by the collector; Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 20, 1941, T. Meyer 3465 [Herb. Inst. Miguel Lillo 35594] (N). Tucumán: Capital, alt. 400 m, Dept. Capital, December 8, 1940, T. Meyer 3414 [Herb. Inst. Miguel Lillo 35398] (N).

Setaria globulifera Griseb. — URUGUAY: in grassy slopes, Sta. Clara, Timote, Dept. Florida, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt PE. 3112 (N).

Setaria magna Griseb. ? — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 23, 1941, T. Meyer 3480 [Herb. Inst. Miguel Lillo 35609] (N), in pasture, 1,5 m, tall.

Setaria Onurus (Willd.) Griseb. — URUGUAY: in grassy slopes, Sta. Elena, Juan Jackson, Dept. Soriano, March, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 1247 (N).

Setaria scabrifolia (Nees) Kunth — ARGENTINA: Chaco: Colonia Benítez, alt. 55 m, January 18, 1941, T. Meyer 3892 [Herb. Inst. Miguel Lillo 17386] (N). Salta: Cerrillos, alt. 1200 m, Dep. Cerrillos, February 2, 1941, T. Meyer 3583 [Herb. Inst. Miguel Lillo 35723] (N). Tucumán: Las En-

crucijadas, alt. 300 m, Dept. Leales, February 24, 1941, Ousset 56 [Herb. Inst. Miguel Lillo 35964] (N).

Setaria verticillata (L.) Beauv. — ARGENTINA: Salta: Río Arenales, alt. 1000 m, Dept. Capital, January 10, 1941, T. Meyer 3459 [Herb. Inst. Miguel Lillo 35589] (N).

Sorghastrum pellitum (Hack.) Parodi — URUGUAY: in grassy slopes, San Pedro, Cerro Colorado, Dept. Florida, January, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 773, so determined also by the collectors.

Sorghastrum stipoides (H. B. K.) Nash. — ARGENTINA: Buenos Aires: Pellegrini, in primitive steppe, Partido de Pellegrini, November 29, 1940, A. L. Cabrera 6968 (N), identified with a question by Mrs. Chase. Chaco: Campo Bonazzola, Enrique Urien, Dept. Tapenaga, November, 1940, A. P. Rodrigo 2419 (N).

Sporobolus Poiretii (R. et S.) Hitchc. — ARGENTINA: Salta: Río Arenales, alt. 1000 m, Dept. Capital, January 10, 1941, T. Meyer 3580 [Herb. Inst. Miguel Lillo 35720] (N).

Stipa ambigua Speg. — ARGENTINA: La Pampa: Hucal, November 7, 1941, A. L. Cabrera 6744 (N, W). San Luis: Saladillo, November 9, 1940, G. Covas 1015 (N).

Stipa filifolia Nees — ARGENTINA: Buenos Aires: Sierra de las Animas, Partido de Tandil, November 21, 1940, A. L. Cabrera 6831 (N).

Stipa Hackelii Arech. — ARGENTINA: Buenos Aires: Médanos, Partido de Villarino, November 6, 1940, A. L. Cabrera 6684 (N).

Stipa Ichu (Ruiz et Pav.) Kunth — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, Dept. Rosario de Lerma, January 20, 1941, T. Meyer 3475 [Herb. Inst. Miguel Lillo 35604] (N).

Stipa leucogluma Steud. ? — ARGENTINA: Buenos Aires: in primitive steppe, Pellegrini, Partido de Pellegrini, Novem-

ber 28, 1940, A. L. Cabrera 6914 (N); road to Nueva Roma, Partido de Bahía Blanca, November 9, 1940, A. L. Cabrera 6792 (N).

Stipa papillosa (Hack.) Hitchc. — ARGENTINA: Buenos Aires: Grumbein, Partido de Bahía Blanca, November 5, 1940, A. L. Cabrera 6615 (N).

Stipa tenuissima Trin. — ARGENTINA: Buenos Aires: road to Nueva Roma, Partido de Bahía Blanca, November 9, 1940, A. L. Cabrera 6794 (N), « very immature ». A. Chase. San Luis: at foot of mountain, La Calera, November 6, 1940, G. Covas 1030 (N).

Stipa sp. — ARGENTINA: La Pampa: Hucal, November 7, 1940, A. L. Cabrera 6737 (N), « florets very immature and so embedded in glue their characters not visible ». A. Chase.

Tragus Berteronianus Schult. — ARGENTINA: Salta: Coronel Moldes, alt. 1100 m, Dept. La Viña, January 31, 1941, T. Meyer 3478 [Herb. Inst. Miguel Lillo 35607] (N).

Trichachne insularis (L.) Nees — ARGENTINA: Tucumán: La Cocha, alt. 450 m, Dept. Graneros, February 23, 1941, T. Meyer 3898 [Herb. Inst. Miguel Lillo 35773] (N), determined as *Valota* sp. by the collector.

Trichloris pluriflora Fourn. — ARGENTINA: Salta: Coronel Moldes, alt. 1100 m, Dept. La Viña, January 31, 1941, T. Meyer 3477 [Herb. Inst. Miguel Lillo 35606] (N).

Tridens brasiliensis Nees — URUGUAY: in grassy slopes, Sta. Clara, Timote, Dept. Florida, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt PE. 3095 (N), so determined also by the collectors.

BROMELIACEAE

(determinations by L. B. Smith)

Tillandsia argentina C. H. Wright — ARGENTINA: Catamarca: Quebrada del Tala, Dept. Capital, September 6, 1910, Castillon s. n. [Herb. Inst. Miguel Lillo 36869] (N), determined as *T. unca* Griseb. by the collector; same locality, September 5, 1909, Castillon 1801 [Herb. Inst. Miguel Lillo 36875] (N), determined as *T. unca* by the collector. Tucumán: Tapia to Cadillal, alt. 680 m, Dept. Trancas, August-September, 1918, Schreiter 797 [Herb. Inst. Miguel Lillo 36886] (N), determined as *T. unca* by Castellanos in 1931.

Tillandsia bandensis Bak. — ARGENTINA: Catamarca; Loma de Choya, Dept. Capital, December, 1910, Castillon 14110 [Herb. Inst. Miguel Lillo 36928] (N). Formosa: January, 1918, P. Jörgensen 2010 [Herb. Inst. Miguel Lillo 36931] (N). Tucumán: Vipos, alt. 786 m, Dept. Trancas, January 6, 1922, Schreiter 1265 [Herb. Inst. Miguel Lillo 37178] (N), so determined also by Castellanos; Chañar Pozo, alt. 300 m, Dept. Leales, December, 1919, S. Venturi 735 [Herb. Inst. Miguel Lillo 36930] (N), flowers violet; Vipos, alt. 800 m, Dept. Trancas, December 22, 1907, M. Lillo 7311 [Herb. Inst. Miguel Lillo 36932] (N); Vipos, alt. 780 m, Dept. Trancas, December 24, 1923, Schreiter 6588 [Herb. Inst. Miguel Lillo 37177] (N).

Tillandsia bryoides Griseb. emend. L. B. Sm. — ARGENTINA: Salta: Cobos, Dept. Campo Santo, November 21, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 36790] (N). Tucumán: Vipos, alt. 780 m, Dept. Trancas, November 29, 1925, Schreiter 2029 [Herb. Inst. Miguel Lillo 37181] (N), determined as *T. coarctata* Gill. by the collector.

Tillandsia capillaris R. et P. — ARGENTINA: Tucumán: Naranjal (Yerba Buena), alt. 500 m, Dept. Tafí, October 14, 1923; Schreiter 3289 [Herb. Inst. Miguel Lillo 36830] (N),

Tapia, alt. 680 m, Dept. Trancas, September 25, 1923,
Schreiter 3292 [Herb. Inst. Miguel Lillo 36829] (N).

Tillandsia capillaris R. et P. forma **cordobensis** (Hieron.) L. B. Sm. — ARGENTINA : Jujuy : Est. Volcán, alt. 3000 m, January 15, 1927, Castillon 182 [Herb. Inst. Miguel Lillo 36821] (N). Tucumán : El Molle, Quebrada de Amaicha, alt. 3100 m, Dept. Tafí, November, 1932, Schreiter 8837 [Herb. Inst. Miguel Lillo 36768] (N), flowers whitish ; Tafí Viejo, April 27, 1890, M. Lillo 1690, in part [Herb. Inst. Miguel Lillo 36905, in part] (N) ; Villa Nouguès, alt. 1000 m, Dept. Famaillá, August 29, 1922, S. Venturi 1900 [Herb. Inst. Miguel Lillo 36933] (N) ; Bajo de Anfama, June 8, 1906, M. Lillo 5060 [Herb. Inst. Miguel Lillo 36924] (N).

Tillandsia capillaris R. et P. forma **Hieronymi** (Mez) L. B. Sm. — ARGENTINA : Tucumán : Naranjal (Yerba Buena), alt. 500 m, Dept. Tafí, October 8, 1923, Schreiter 4163 [Herb. Inst. Miguel Lillo 36825] (N).

Tillandsia capillaris R. et P. forma **incana** (Gill.) L. B. Sm. — ARGENTINA : Tucumán : Quebrada de la Hoyada, alt. 1300 m, Dept. Tafí, December, 1931, Schreiter 7177 [Herb. Inst. Miguel Lillo 36817] (N) ; Vipos, alt. 786 m, Dept. Trancas, October 28, 1923, Schreiter 1725 [Herb. Inst. Miguel Lillo 36815] (N) ; La Hoyada, alt. 1400 m, Dept. Tafí, November, 1932, Schreiter 8836 [Herb. Inst. Miguel Lillo 36769] (N), growing on rocks.

Tillandsia Duratii Vis. — ARGENTINA : Tucumán : Vipos, alt. 786 m, Dept. Trancas, September 6, 1925, Schreiter 6581 [Herb. Inst. Miguel Lillo 37172] (N), so determined also by the collector ; Tapia, alt. 600 m, Dept. Trancas, July, 1919, Schreiter 807 [Herb. Inst. Miguel Lillo 37174] (N), flowers violet ; Tapia, alt. 900 m, Dept. Trancas, August 22, 1920, S. Venturi 1048 [Herb. Inst. Miguel Lillo 36956] (N), flowers blue.

Tillandsia Gilliesii Bak. — ARGENTINA : Catamarca : Los Nacimientos de Hualfin, alt. 1600 m, Dept. Belén, December 29, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 36796] (N).

Tillandsia ixoides Griseb. — ARGENTINA : Salta : La Candelaria, Dep. La Candelaria, August 14, 1932, Schreiter 8793 [Herb. Inst. Miguel Lillo 36809] (N), so determined also by the collector. Tucumán : La Calera, alt. 500 m, Dept. Río Chico, November 30, 1913, Monetti 1583 [Herb. Inst. Miguel Lillo 34919] (N), in woods; Tapia, alt. 600 m, February 3, 1917, Schreiter s. n. [Herb. Inst. Miguel Lillo 34917] (N).

Tillandsia Lorentziana Griseb. — ARGENTINA : Salta : Quebrada Las Conchas de Alemania to Cafayate, Dept. Guachipas, November 27, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 36797] (N). Tucumán : Vipos, alt. 786 m, December 10, 1922, Schreiter 6577 [Herb. Inst. Miguel Lillo 37152] (N), plants epiphytic, flowers white, so determined also by Castellanos in 1931.

Tillandsia maxima Lillo et Haum. — ARGENTINA : Tucumán : Quebrada La Hoyada, December 22, 1900, M. Lillo 2663 [Herb. Inst. Miguel Lillo 37147] (N).

Tillandsia myosura Griseb. — ARGENTINA : Catamarca : Cerro del Arenal, Dept. Andalgalá, March 20, 1916, P. Jørgensen 1772 [Herb. Inst. Miguel Lillo 36812] (N), determined as *T. retorta* Griseb. by Osten. Tucumán : Tapia, alt. 750 m, Dept. Trancas, November 22, 1920, S. Venturi 1178 [Herb. Inst. Miguel Lillo 36813] (N); Quebrada de Amajcha, alt. 2000 m, Dept. Tafí, Schreiter 7663 [Herb. Inst. Miguel Lillo 36814] (N).

Tillandsia parviflora R. et P. — BOLIVIA : Santa Cruz: Cumbres del Cerro Hosana, alt. 1400 to 1900 m, September 4, 1917, J. Steinbach 3457 [Herb. Inst. Miguel Lillo 37036] (N), determined as « *Tillandsia* aff. *Weberbaueri* Mez » by the collector.

Tillandsia Peiranoi Castellanos — ARGENTINA : Salta : Quebrada Las Conchas on the road from Alemania to Cafayate,

November 27, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 36770] (N).

Tillandsia pulchella Hook. — ARGENTINA: Tucumán: Naranjal (Yerba Buena), alt. 500 m, August or September, 1923, Schreiter 8 [Herb. Inst. Miguel Lillo 37087] (N), so determined also by Castellanos in 1931.

Tillandsia recurvata L. — ARGENTINA: Tucumán: Taff Viejo, April 27, 1890, M. Lillo 1690, in part [Herb. Inst. Miguel Lillo 36905, in part] (N); El Timbó, alt. 500 m, Dept. Capital, January, 1932, R. Díaz s. n. [Herb. Inst. Miguel Lillo 36818] (N); Naranjal (Yerba Buena), alt. 500 m, January, 1919, Schreiter 749 [Herb. Inst. Miguel Lillo 36912] (N), epiphytic, so determined also by A. Castellanos in 1931; Río Lules, alt. 450 m, January 13, 1924, Schreiter 4167 [Herb. Inst. Miguel Lillo 36916] (N), flowers white, so determined also by A. Castellanos in 1931.

Tillandsia Reichenbachii Bak. — ARGENTINA: Jujuy: Santa Clara (S. Pedro de Jujuy), alt. 600 m, November 5, 1925, Schreiter 5153 [Herb. Inst. Miguel Lillo 36963] (N), determined as *T. tucumanensis* Griseb. by the collector. Salta: Quebrada de Talapampa, December, 1915, Schreiter s. n. [Herb. Inst. Miguel Lillo 36958] (N); Tartagal, alt. 500 m, Dept. Orán, October 25, 1924, Schreiter 3480 [Herb. Inst. Miguel Lillo 36962] (N), determined as *T. tucumanensis* by the collector; Quebrada Las Conchas on the road from Alemania to Cafayate, alt. 1200 m, Dept. Guachipas, November 28, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 36793] (N), determined as *T. tucumanensis* by the collector; Río Juramento, F.C. C. N. A., November 20, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 36795] (N), determined as *T. tucumanensis* by the collector; Quebrada Las Conchas on the road from Alemania to Cafayate, alt. 1200 m, November 27, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 36791] (N), determined as *T. tucumanensis* by the collector; Cobos, alt. 1100 m, Dept. Campo Santo, November 21, 1933, Herb. Inst. Miguel Lillo 36799 (N), determined previously

as *T. tucumanensis*. Tucumán: Quebrada de San Rafael, alt. 500 m, October to December, 1918, Schreiter 802 [Herb. Inst. Miguel Lillo 36948] (N), epiphytic; San Pablo, December, 1925, Castillon s. n. [Herb. Inst. Miguel Lillo 36950] (N), determined as *T. tucumanensis* Mey. by A. Castellanos in 1932; El Cadillal, November 17, 1904, M. Lillo 3827 [Herb. Inst. Miguel Lillo 36951] (N), corolla blue.

Tillandsia retorta Griseb. — ARGENTINA: Salta: La Candelaria, alt. 1000 m, Dept. La Candelaria, August 14, 1932, Schreiter 8779 [Herb. Inst. Miguel Lillo 36778] (N). Tucumán: Tapia, December, 1917, Herb. Inst. Miguel Lillo 36939 (N); national highway from Cadillal to Tapia, alt. 600 m, Dept. Trancas, July 20, 1924, Schreiter 4165 [Herb. Inst. Miguel Lillo 36940] (N), so determined also by A. Castellanos in 1931.

Tillandsia tricholepis Bak. — ARGENTINA: Formosa: January, 1918, P. Jörgensen s. n. [Herb. Inst. Miguel Lillo 37097] (N). Salta: Cobos, Dept. Campo Santo, November 21, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 36792] (N); Tartagal, alt. 500 m, Dept. Orán, December 20, 1924, Herb. Inst. Miguel Lillo 36898 (N), so determined also by A. Castellanos in 1931. Tucumán: alt. 500 m, November, 1918, Schreiter 800 [Herb. Inst. Miguel Lillo 36897] (N), so determined also by A. Castellanos in 1931.

Tillandsia usneoides L. — ARGENTINA: Tucumán: La Ciénaga, alt. 2500 m, Dept. Tafí, October 2, 1924, Herb. Inst. Miguel Lillo 36857 (N), so determined also by A. Castellanos in 1931; El Potrerillo, alt. 600 m, Dept. Río Chico, November 21, 1913, Monetti s. n. [Herb. Inst. Miguel Lillo 36860] (N); Quebrada de Lules, Dept. Tafí, alt. 900 m, February, 1920, S. Venturi 858 [Herb. Inst. Miguel Lillo 36859] (N).

Tillandsia xiphioïdes Ker. — ARGENTINA: Catamarca: Punta Balastro, Dept. Santa María, December 28, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 36798] (N), so determined

also by the collector. Salta : Capital, Dept. Capital, December, 1913, D. Rodriguez s. n. [Herb. Inst. Miguel Lillo 36854] (N), so determined also by A. Castellanos in 1931. Tucumán : Campo de Las Arcas, alt. 1700 m, Dept. Tranca, February 3, 1917, Schreiter 5523 [Herb. Inst. Miguel Lillo 36850] (N), so determined also by A. Castellanos in 1931; La Hoyada, alt. 1000 to 1500 m, September 25, 1920, Schreiter 1377 [Herb. Inst. Miguel Lillo 36844] (N), so determined also by A. Castellanos in 1931.

Tillandsia sp. Castellanos, ined. [*T. Friesii* sensu Castellanos, non Mez] — ARGENTINA: Tucumán: Managua, Colalao del Valle, alt. 2000 m, Dept. Tafí, December, 1931, Schreiter 7176 [Herb. Inst. Miguel Lillo 34731] (N), determined as «*T. Friesii* Cast.» by A. Castellanos, flowers violet.

PIPERACEAE

(determinations and notes by William Trelease)

Peperomia san-pedritoi Trelease, n. sp.

Herba parviuscula stolonifera assurgens villosa; caulis gracilis; foliis oppositis ellipticis acutis, in siccitate opaquis perspicue 1-nervatis; spicis terminalibus axillaribusque.

A moderately small stoloniferous assurgent villous herb; stem slender; leaves opposite, elliptic, acute at both ends, $1 \times 1,5$ to $1,5 \times 2,5$ cm, dryng opaque and conspicuously 1-nerved; petiole 10 mm long; spikes terminal and axillary, 1×60 mm; peduncle 10 mm long.

Type locality : Tartagal to San Pedrito, alt. 500 m, dept. Orán, Salta, Argentina, Schreiter 11183 [Herb. Inst. Miguel Lillo 33303] (N-type).

Distribution : Argentina.

Piper argentinum (C. DC.) Trelease, comb. nov. [*P. Gaudichaudianum* var. *argentinum* C. DC., *Candollea* 21: 135. 1921]. — ARGENTINA : Tucumán : Cochuna, dept. Chivilcoy, March 4, 1941, C. A. O'Donell 81 [Herb. Inst. Miguel Lillo 17424] (N).

Piper tucumanum C. DC. — ARGENTINA: Tucumán: shrub 4-5 m tall, Parque Aconquija, alt. 500 m, dept. Tafí, December 1, 1940, T. Meyer 3418 [Herb. Inst. Miguel Lillo 35402] (N), so determined also by the collector.

Piper Venturii Trelease, n. sp.

Frutex; sarmentis subtomentellis; foliis elliptico-oblongis acuminatis, ad basin inaequilateralibus, pinnato-nervatis, supra granuloso-scabridis, subtus criso-puberulentis, venis hirsutis; petiolis perabbreviatis subsericeis; spicis valde curvatis; pedunculis criso-hispidis.

A shrub, 3-4 m tall, of the *Aduncum* series; twigs at least for a time subtomentulose; leaves elliptic-oblong, acuminate, obtuse at base, with one side nearly equaling the petiole, 7-9 × 20-25 cm, pinnately nerved from below the upper third, the nerves 6 × 7, granular-scabrid above, crisp-puberulent beneath with hirsute veins; petiole scarcely 5 mm long, subsericeous; spikes as yet 3 × 60 mm, strongly curved; peduncle 10-15 or 25 mm long, crisp-hispid.

Type locality: alt. 750 m, dept. Tafí, Tucumán, Argentina, S. Venturi 866 (Ur-type).

Distribution: Argentina.

Piper Venturii var. *yesoanum* Trelease, n. var.

Haec varietas a forma typica speciei differt laminis foliorum subtus glabratis et nervis sparsiore pubescentibus.

A form with the leaf-surface glabrate beneath and the nerves more finely pubescent.

Type locality: Quebrada del Yeso, alt. 730 m, Sierra de La Ramada, dep. Burruyacu, Tucumán, A. Peirano s. n. [Herb. Inst. Miguel Lillo 35383] (N-type).

SALICACEAE

(determinations by Carleton R. Ball)

Salix Humboldtiana Kunth — ARGENTINA: Salta: Río Arenales, alt. 1200 m, dept. Capital, January 10, 1941, T. Meyer

3630 [Herb. Inst. Miguel Lillo 17287] (N), called «sauce colorado», determined as «*Salix Humboldtiana* Willd.» by the collector. URUGUAY: in riverside thickets, Arroyo Canelón Chico, Tuanico, Canelones, October 24, 1935, B. Rosengurtt B. 2088 (N), determined as «*Salix Humboldtiana* Willd.» by the collector.

ULMACEAE

(determinations by E. P. Killip)

Celtis brasiliensis (Gardn.) Planch. — ARGENTINA: Tucumán: Tafí Viejo, alt. 500 m, dept. Tafí, February 20, 1941, T. Meyer 3915 [Herb. Inst. Miguel Lillo 17394] (N), called «tala».

Celtis Selloviana Miq. — ARGENTINA: Salta: Alemania, alt. 1170 m, dept. Cuachipas, January 14, 1941, T. Meyer 3608 [Herb. Inst. Miguel Lillo 17370] (N), tree 8 m tall; Coronel Moldes, alt. 1100 m, dept. La Viña, January 31, 1941, T. Meyer 3609 [Herb. Inst. Miguel Lillo 17371] (N), tree 6.7 m tall.

Celtis Tala Gill. — ARGENTINA: Tucumán: Capital, alt. 480 m, dept. Capital, November 15, 1940, called «tala», T. Meyer 3914 [Herb. Inst. Miguel Lillo 17393] (N), tree 4-5 m tall, determined as *C. pubescens* (H.B.K.) Spreng. by the collector.

Celtis Tala var. **Chichape** (Wedd.) Planch. — ARGENTINA: Salta: Coronel Moldes, alt. 1100 m, dept. La Viña, January 31, 1941, T. Meyer 3696 [Herb. Inst. Miguel Lillo 35639] (N), spiny shrub to 3 m tall, fruit pale-yellow.

URTICACEAE

(determinations by E. P. Killip)

Boehmeria caudata Sw. — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 18, 1941, T. Meyer 3600 [Herb. Inst. Miguel Lillo 17362] (N), shrub 3 m

tall. Tucumán : Cochuna, dept. Chielgasta, March 4, 1941, C. A. O'Donell 66 [Herb. Inst. Miguel Lillo 36204] (N); same locality and date, C. A. O'Donell 86 [Herb. Inst. Miguel Lillo 17419] (N); Parque Aconquija, alt. 500 m, dept. Tafí, December 1, 1940, T. Meyer 3431 [Herb. Inst. Miguel Lillo 35413] (N), shrub 4 m, tall, so determined also by the collector.

Phenax hirtus (Sw.) Wedd. — ARGENTINA : Salta : Coronel Moldes, alt. 1100 m, dept. La Viña, January 31, 1941, T. Meyer 3866 [Herb. Inst. Miguel Lillo 35669] (N), pistillate; Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 28, 1941, T. Meyer 3601 [Herb. Inst. Miguel Lillo 17363] (N), 2 m tall, staminate.

Urera baccifera (L.) Gaud. — ARGENTINA : Tucumán : Cochuna, dept. Chielgasta, March 4, 1941, C. A. O'Donell 22 [Herb. Inst. Miguel Lillo 36185] (N).

BRASSICACEAE

(determinations by Reed C. Rollins)

Brassica campestris L. — ARGENTINA : Jujuy : Humahuaca, alt. 2931 m, dept. Humahuaca, February 7, 1941, A. T. Hunziker 1301 (N), frequent in barren soil near railroad tracks. Salta : Coronel Moldes, alt. about 1200 m, dept. La Viña, February 2, 1941, A. T. Hunziker 1162 (N), rare in pampa along banks of Río Chaña.

Capsella bursa-pastoris (L.) Medic. — ARGENTINA : Buenos Aires : Hurlingham, dept. 6 de Septiembre, July 1, 1940, A. T. Hunziker 806 (N), frequent. Jujuy : La Quiaca to Villa-zón, alt. 3442 m, dept. Yavi, January 25, 1940, Schreiter 10967 [Herb. Inst. Miguel Lillo 33893] (N), flowers white.

Coronopus didymus (L.) Smith — ARGENTINA : Salta : Saucelito, alt. 400 m, August 21, 1941, S. Zabala 202 [Herb. Inst. Miguel Lillo 57302] (N), called « calachin ».

Descurainia appendiculata (Griseb.) Schulz — ARGENTINA: Jujuy: Humahuaca, alt. 2931 m, dept. Humahuaca, February 4, 1941, A. T. Hunziker 1326 (N), frequent.

Descurainia argentina O. E. Schultz — ARGENTINA: Salta: roadway to Coronel Moldes, alt. 1200 m, August, 1941, S. Zabala 196 [Herb. Inst. Miguel Lillo 57301] (N).

Rorippa Nasturtium-aquaticum (L.) Hayek — ARGENTINA: Buenos Aires: Cerro de la Cascada, Partido de Tandil, November 22, 1940, A. L. Cabrera 6895 (N), in arroyo, determined as « *Roripa Nasturtium-aquaticum* » by the collector.

Sisymbrium Arnottianum Gillies? — ARGENTINA: Tucumán: Las Lenguas (Quebrada Río Cochuna), alt. 1300 m, dept. Chicligasta, November 24, 1938, Descole, Schreiter y O'Donnell s. n. [Herb. Inst. Miguel Lillo 35168] (N), plants 60 cm tall, flowers white.

Sisymbrium Irio L. — ARGENTINA: Buenos Aires: Puerto White, Partido de Bahía Blanca, November 6, 1940, A. L. Cabrera 6653 (N), so determined also by the collector.

AMYGDALACEAE

(determinations by Joseph Monachino)

Prunus subcordiacea (Chod. et Hassl.) Koehne — ARGENTINA: Misiones: shrub to 3 m tall, cultivated in Hort. Bot. Fac. Agr. B. Aires, but originally from Loreto, November, 1940, L. R. Parodi (N).

EUPHORBIACEAE

(determinations and notes by Leon Croizat)

Acalypha cordifolia Griseb. — ARGENTINA: Salta: Coronel Moldes, alt. about 1200 m, dept. La Viña, January 30, 1941, A. T. Hunziker 1034 (N), rather frequent.

Acalypha flabellifera Rusby (*A. cordifolia* Griseb., non Hook.) — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, dept.

Rosario de Lerma, January 23, 1941, T. Meyer 3635 [Herb. Inst. Miguel Lillo 17337] (N), tree to 2,5 m tall, « ad Fiebrig 2129 cited by Pax and Hoffman in *Pflanzenr.* 85 [IV. 147. XVI] : 122. 1924 »; same locality, January 18, 1941, T. Meyer 3784 [Herb. Inst. Miguel Lillo 17331] (N).

Acalypha lycioides Pax et Hoffm. — ARGENTINA: Salta: Cerro San Bernardo, alt. 1200 m, dept. Capital, January 9, 1941, T. Meyer 3637 [Herb. Inst. Miguel Lillo 17339] (N), tree 1,5 m tall.

Acalypha trachelifolia Pax et Hoffm. — ARGENTINA: Salta: Mojotoro, alt. 1060 m, dept. Caldera, January 11, 1941, T. Meyer 3650 [Herb. Inst. Miguel Lillo 17352] (N), plant 1 m tall, growing in the middle of a wood; Coronel Moldes, alt. about 1200 m, dept. La Viña, February 2, 1941, A. T. Hunziker 1176 (N), rather frequent.

Bernardia pulchella Müll. Arg. — ARGENTINA: Misiones: Santa Ana, October 27, 1913, M. Lillo 12547 [Herb. Inst. Miguel Lillo 3549] (N), determined as *B. Lorentzii* Griseb. by the collector; Bonpland, May 7, 1910, D. Rodríguez 336 [Herb. Inst. Miguel Lillo 4744] (N); Santa Ana, December 22, 1912, D. Rodríguez 680 [Herb. Inst. Miguel Lillo 4732] (N).

Caperonia palustris (L.) St. Hil. — Tucumán: Chañar Pozo, dept. Leales, December, 1919, S. Venturi 746 [Herb. Inst. Miguel Lillo 4850] (N); Parque 9 de Julio, Capital, alt. 450 m, dep. Capital, January 31, 1921, Schreiter 2124 [Herb. Inst. Miguel Lillo 6376] (N).

Chamaesyce cf. brasiliensis (Lam.) Small — ARGENTINA: Salta: Coronel Moldes, alt. 1100 m, dept. La Viña, January 31, 1941, T. Meyer 3648 [Herb. Inst. Miguel Lillo 17350] (N), plants erect.

Chamaesyce hirta (L.) Millps. subsp. **procumbens** (DC.) Croiz. — ARGENTINA: Tucumán: Capital, alt. 400 m, dept. Capital, December 8, 1940, T. Meyer 3412 [Herb. Inst. Miguel

Lillo 25396] (N), creeping — « I have cultivated this plant for several years. It is absolutely constant, and in the character of its seeds differs from the other forms, *sensu lato*, of *C. hirta*. It is not a variety in the sense that it can be separated from the holotypic form in details of pubescence, serration and the like. It actually is one of the main subentities into which *C. hirta* can be broken up, with a range that is rather South American than otherwise. For these reasons I recognize this entity as *Chamaesyce hirta* (L.) Millsp. subsp. *procumbens* (DC.) Croiz., subsp. nov. [*Euphorbia hirta* L. var. *procumbens* (DC.) N. E. Brown].

« *Chamaesyce* is to be upheld as a valid generic name not on the basis of phylogeny and morphology alone. If the group which this name stands for is denied generic rank it becomes necessary to merge within *Phyllanthus* such universally recognized genera as *Andrachne*, *Glochidion*, *Securinega*, *Agyneia*, *Sauropolis* and *Breynia*. None of these genera, and others here not mentioned but just as important for the classification of the *Euphorbiaceae*, can be separated from *Phyllanthus* on the basis of characters that are more significant than those whereby *Euphorbia* is distinguished from *Chamaesyce* ».

Chamaesyce cf. Lorentzii (Müll. Arg.) Croizat, mss. — ARGENTINA : Salta : Coronel Moldes, alt. about 1200 m, dept. La Viña, January 30, 1941, A. T. Hunziker 1012 (N), frequent.

Chamaesyce serpens (H.B.K.) Small — ARGENTINA : Buenos Aires : Otamendi, part. de Campana, February 15, 1940, A. T. Hunziker 385 (N), frequent, forming dark-green carpets over rocks and stones. Tucumán : Tres Pozos, F. C. C. A., alt. 420 m, dept. Leales, December 5, 1938, Descole y Schreiter 10767 [Herb. Inst. Miguel Lillo 35076] (N), plants creeping, flowers greenish, determined as *Euphorbia serpens* H.B.K. by the collectors.

Chiropetalum triandrum Griseb. — ARGENTINA : Catamarca : El Rodeo, January 15, 1911, Castillon 2015 [Herb. Inst. Miguel Lillo 4771] (N), so determined also by the collector;

Catamarca, January, 1910, Castillon 1893 [Herb. Inst. Miguel Lillo 4772] (N). Jujuy: Ledesma, October 25, 1996, Dinelli 5161 [Herb. Inst. Miguel Lillo 4766] (N), so determined also by the collector. Salta: Cedral, dept. Orán, October, 1913, D. Rodríguez 1061 [Herb. Inst. Miguel Lillo 4774] (N), so determined also by the collector. Tucumán: Río Loro, alt. 500 m, dept. Burruyacu, April 24, 1932, Schreiter 7858 [Herb. Inst. Miguel Lillo 37394] (N), so determined also by the collector; Quebrada de Garabatal, alt. 1800 m, March 22, 1922, Schreiter 3063 [Herb. Inst. Miguel Lillo 6379] (N), so determined also by the collector; Yerba Buena, alt. 900 m, dept. Tafí, April 20, 1920, S. Venturi 843 [Herb. Inst. Miguel Lillo 4779] (N), so determined also by the collector.

« It is difficult to find valid characters to separate such a specimen as Mandon 1081, isotype of *Chiropetalum boliviense* (Muell. Arg.) Pax et Hoffm. [in herb. Arnold Arboretum] from Rodríguez 1061, collected in Salta, at El Cedral, Orán. It seems probable that *Chiropetalum trianthrum* Griseb. is a weak variety, if not a downright synonym, of *C. boliviense*, material of which was not seen by Pax and Hoffmann when preparing their monograph of the genus (see cited authors in *Pflanzenr.* 57 [IV. 147. vi]: 95. 1912). Larger sets of Bolivian material may prove that the species of Grisebach is not to be extricated, even trinomially, from that of Mueller Argoviensis. Evidence is not lacking that the region botanized by Mandon in Bolivia is rich in species that occur in the north of Argentina. »

Chiropetalum tricoccum Chod. et Hassl.—PARAGUAY: on sides of Mt. San Bernardo, June, 1915, T. Rojas 1201 [Herb. Inst. Miguel Lillo 4800] (N), so determined a so by the collector.

Chiropetalum tricuspidatum Juss. var. ***angustifolium*** Griseb.—ARGENTINA: Catamarca: Capital, dept. Capital, Schunck s. n. [Herb. Inst. Miguel Lillo 4783] (N), so determined also by the collector — « In the Cavanilles specimen from Taleahuano, Perú, cited by Mueller Argoviensis [in DC.,

Prod. 15 (2): 745. 1866] under *Argyrothamnia tricuspidata* \times *lanceolata* the lobes of the ♀ calyx are larger than in the Schunck specimen from Catamarca, but the other characters agree as between the Argentine and the Peruvian plants. Pax and Hoffman treat *Chiropetalum tricuspidatum* var. *angustifolium* Griseb. as a synonym of *C. tricuspidatum* var. *genuinum*. The fact that no geographic segregation is possible, the type variety (*genuinum*) being recorded in Peru as well as in Argentina, and the var. *lanceolatum* occurring both in Peru and Chile, seems to indicate that the trinomials segregated by Mueller Argoviensis on the strength of leaf-characteres are scarcely better than vegetative states of the same entity. Variations in the size of the lobes of the ♀ calyx are to be expected in *Chiropetalum*, *Caperonia* and allied genera ».

Croton Bonplandianus Baill. — ARGENTINA: Chaco: Barranqueras, alt. 55 m, dept. Resistencia, February 11, 1941, T. Meyer 3763 [Herb. Inst. Miguel Lillo 17306] (N). Salta: Alemania, alt. 1170 m, dept. Guachipas, January 14, 1941, T. Meyer 3646 [Herb. Inst. Miguel Lillo 17348] (N).

Croton densiflorus Pax — ARGENTINA: Salta: San Pedrito (Vespucio), dept. Orán, alt. 1100 m, November, 1940, Schreiter 11498 [Herb. Inst. Miguel Lillo 37184] (N), small tree 6 m, tall.

Croton Hieronymi Griseb. — ARGENTINA: Salta: Coronel Moldes, in fields in the vicinity of the Experiment Station, alt. about 1200 m, dept. La Viña, January 30, 1941, A. T. Hunziker 1063 (N), frequent.

Croton saltensis Griseb. var. **discolor** Griseb. — ARGENTINA: Salta: Cerro San Bernardo, alt. 1200 m, dept. Capital, January 8, 1940, T. Meyer 3638 [Herb. Inst. Miguel Lillo 17340] (N), shrub 1,5 m tall. — « Meyer 3638 agrees very well with Lillo 7912, which is determined in our herbarium as *Croton saltensis* Griseb. var. *microthrica* Lillo. I am barely able to separate the two cited specimens from the

holotype of *Croton saltensis* Griseb. var. *discolor* Griseb., loaned by the herbarium of the Botanical Garden of Goettingen. Meyer 3638, in fact, is intermediate between Lillo 7912 and the holotype of *C. saltensis* var. *discolor* and on all its intangibles is to be treated as *Croton saltensis* Griseb. var. *discolor* Griseb. Even with large collections and with the holotypes at hand it is not possible to interpret satisfactorily the Argentine *Croton* in the vicinity of *C. sarcopetalus*, *C. tucumanensis* and *C. saltensis*. It is not clear from dried material whether minor differences in the color of the pubescence and in its amount merely indicate vegetative states of a variable entity, which it is possible to sort up in herbaria to form tolerably homogeneous sets, or actually correspond to varietal and specific differences which deserve taxonomic recognition. A careful field study must be undertaken preliminary to a classification of the group. There is some evidence that *C. sarcopetalus* might be restricted to the Province of Córdoba, but there is no proof that it is actually distinct from *C. tucumanensis* Griseb. In a work now in press I have reduced the latter to the former, a disposition which will bear revision on the basis of field data ».

***Croton sarcopetalus* Müll. Arg.** — ARGENTINA: Salta: Mojotoro, alt. 1060 m, dept. Caldera, January 9, 1941, T. Meyer 3643 [Herb. Inst. Miguel Lillo 17345] (N), shrub 1,5 m tall. — «As stated in the notes under *Croton saltensis* var. *discolor*, I have treated *C. sarcopetalus* and *C. tucumanensis* as the same species in a work now in press. Meyer 3643, which I accordingly determine as *C. sarcopetalus*, closely matches Lorentz 721, the holotype of *C. tucumanensis*, and differs from Lorentz 293, the holotype of *C. sarcopetalus*, in its grayish, not orangish pubescence. If field study should prove the advisability of maintaining *C. tucumanensis* and *C. sarcopetalus* as distinct entities, Meyer 3643 will undoubtedly fall within the limits of the former binomial». Salta: Coronel Moldes, alt. 1100 m, dept. La Viña, February 31, 1941, T. Meyer 3762 [Herb. Inst. Miguel

Lillo 17307] (N) — « On the basis of its vegetative characters Meyer 3762 undoubtedly falls within the limits of *C. tucumanensis*, which I treat as a synonym of *C. sarcopetalus*. As to the ♀ flowers, it seems to me be inextricable from Lorentz 293, the holotype of *C. sarcopetalus* Muell. Arg. The difference between the indument of the ovary of *C. tucumanensis* and *C. sarcopetalus* is one of degree of thickness and color, but numerous intermediates are present in herbaria which connect Meyer 3762 and Lorentz 293. Only field study may decide whether *C. tucumanensis* Griseb. is a vegetative state (more or less weak lateral shoots) of *C. sarcopetalus*, or actually a separable entity close to this species, but specifically or varietally different from it ». Tucumán : La Cocha, alt. 450 m, dept. Graneros, February 23, 1941, T. Meyer 3905 (Herb. Inst. Miguel Lillo 35780] (N) — « Meyer 3905 is a classic instance of a specimen that can not be extricated either from *C. sarcopetalus* Muell. Arg. or from *C. tucumanensis* Griseb., its characters being apparently exactly intermediate between those of the two cited binomials ».

Croton tucumanensis Griseb., quoad spec. typicum (cfr. Croizat, *Darwiniana* 5: 421-428. 1941) — ARGENTINA: Salta: rare along edge of highway, Coronel Moldes, alt. about 1200 m, dept. La Viña, February 2, 1941, A. T. Hunziker 1154 (N).

Euphorbia acerensis Boiss. — ARGENTINA: Salta: at the mouth of Río Chañapampa, Coronel Moldes, alt. about 1200 m, dept. La Viña, February 2, 1941, A. T. Hunziker 1171 (N).

Euphorbia chilensis Gay, *Fl. Chil.* 5: 336. 1849 — « *Euphorbia portulacoides* L. is represented in the Linnean herbarium, as reported by Boissier (in DC. *Prodr.* 15, 2: 102. 1862), by a mixed sheet which includes a North American perennial, *E. Ipecacuanha* L., and an Eurasian weed, *E. helioscopia* L. Although, strictly speaking, the coexistence of different specimens on the same sheet creates a *nomen confusum* (cf. *Inter. Rules Nomencl.* 1935, Art. 64), in the present case it is certain that *E. helioscopia*, was added to

E. Ipecacuanha in the Linnean herbarium by somebody other than Linnaeus, who perfectly knew that common weed. The publication of *E. portulacoides* (*Sp. Pl.* 1: 456. 1753) refers to one direct synonym, 'Tithymalus perennis, portulacae folio. *Few Peruv.* 707', to which is added the range, 'Habitat in Philadelphia. *Kalm*'. It seems altogether probable that the binomial is prevailingly, if not exclusively meant for the North American species separately recognized by Linnaeus as *E. Ipecacuanha*. This is the plant represented in the Linnean herbarium on the classic sheet of *E. portulacoides*, and to it applies the note 'perennis, portulacae folio' of Feuillée's *Tithymalus*. It is impossible to know exactly what Feuillée saw 'in Peru-via' and meant to refer to, so that the synonym taken by Linnaeus from Feuillée's work is meaningless. On the strength of this evidence, accepting Boissier's interpretation of the material in the Linnean herbarium, I formally propose the new synonymy: *Euphorbia Ipecacuanha* L. *Sp. Pl.* 1: 455. 1753 (syn.: *E. portulacoides* L., *op. cit.* 456, excl. syn. Feuillée. Non alior). This synonymy merely extends the one already proposed by Boissier (in *DC. Prodr.* 15, 2: 101. 1862), who has published *E. Ipecacuanha* β *portulacoides*, reducing to trinomial status *E. portulacoides* L., *Am. Acad.* 3: 117. 1756, with the exclusion of Feuillée's synonym.

«Once *E. portulacoides* is ruled out as a valid binomial for the plant which has been known so far as such to South American botanists, two names come in view, (1) *Euphorbia caespitosa* Lam. in *Encycl. Meth. Bot.* 2: 421. 1788, and (2) *Euphorbia chilensis* Gay, *Fl. Chil.* 5: 336. 1849. I believe at present that the latter name will have to be taken up for the great majority of the Chilean and Argentine forms so far identified as *E. portulacoides*, but my belief is liable to change when more material is available. I have at hand authentic material of *E. chilensis* and *E. caespitosa*, either as fragments or as verified collections, and I am not able to extricate all the Argentine plants from the Uruguayan form which typifies *E. caespitosa*.

It may yet prove that Lamarck's binomial covers the majority of the plants of Argentina, leaving the plants of Chile and certain regions of Argentina under trinomial names still to be taken from Boissier's original monograph.

« It is manifest that under the present circumstances it is unadvisable and useless to work out a 'classification' of the '*Portulacoides* group'. Before this can be attempted much more must be known, and it must be learned particularly which are the primary forms in the incredibly large and proteiform group so far indiscriminately determined as *E. portulacoides*. Once this is established, the tagging of the various entities with fitting and proper names can be effected within the limits of informed and tolerable opinion.

« The outline of the investigation which suggests itself to my mind as preliminary to a reliable treatment of *E. chilensis* and the forms in its vicinity is the following: *Euphorbia chilensis*, *sensu lato*, is apparently allied with the group of *E. claytonioides* Pax, which is endemic to Angola, West Africa. The South American plant (and probably the African one) was and is essentially a psammophilous element, thriving on the shore of the sea or of bodies of fresh water. As it is well known, the uplifting of the Andes is a recent geological event, and the Argentine plains have undergone considerable variations as to their shorelines from the Pleistocene onwards. Since *E. chilensis* was in the Argentine and Chilean range earlier than the Pleistocene it appears altogether probable that its more recent life history includes wanderings along the shifting shorelines and an adaptation to changed ecological conditions, both in answer to the Andean uplifting and to the drying-up of ancient bodies of salt, brackish and fresh water. In brief: the evolution of the modern *E. chilensis* complex most closely parallels that of the Eurasian *E. Esula*, although for different geological and climatic reasons. Both are 'young' species rich in segregates that are very variable and have a very ill-defined status.

« The material in the herbarium does not afford the slightest opportunity as yet to appraise the environmental factors of the available collections. There is some evidence that *E. chilensis* has been moved about by the white man as a weed, but

this evidence is not conclusive. Experimental cultivation is badly needed to determine the coefficient of variability of the most important forms and their presumed segregates. It is fair, consequently, to conclude that a taxonomist has not yet sufficient reason to work out the group of *E. chilensis* by using only dried material. The work must be undertaken in South America first, with the purpose of clearing up the biology and the morphology of the aggregates. Once this is done, it will be a matter of little moment to standardize the names on the basis of classic specimens.

« For the present, the name *E. chilensis* is maintained here for such specimens as Cabrera 6969 and Covas 1091. It may be added that the hypothesis here suggested to account for the presence of countless segregates under *E. chilensis* is supported by the recent discovery that *Aonikenka patagonica* Speg., so far known only from the sandy shores of lakes in Patagonia, also occurs in the Province of San Luis as a weed of cultivation (Burkart 10881) and in the Province of Córdoba (Giacchino 9542). There is evidence that both *E. chilensis* and *A. patagonica*, originally at home on the shores of bodies of water, have migrated throughout Argentina for the same causes. »

ARGENTINA: Buenos Aires: Pellegrini, Partido de Pellegrini, November 29, 1940, A. L. Cabrera 6969 (N). Salta: Capital, alt. 1000 m, dept. Capital, January 10, 1941, T. Meyer 3644 [Herb. Inst. Miguel Lillo 17346] (N), flowers reddish. San Luis: vicinity of San Luis, November 5, 1940, G. Covas 1091 (N), determined as *E. portulacoides* by the collector.

Euphorbia pentadactyla Griseb. — ARGENTINA: Córdoba: Dique, December, 1891, O. Kuntze s. n. (N), determined as « *E. heterophylla* L. var. *angustifolia* O. Ktze., foliis omnibus auguste lanceolatis » by the collector, cfr. *Symb. Fl. Arg.* 63. 1879.

Euphorbia cf. pentadactyla Griseb. — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 28, 1941, T. Meyer 3647 [Herb. Inst. Miguel Lillo 17349] (N).

Euphorbia Peplus L.— ARGENTINA : Buenos Aires : La Granja, partido La Plata, November 10, 1940, A. P. Rodrigo 2356 (N).

Jatropha cf. grossidentata Pax et Hoffm.— ARGENTINA : Salta : km. 60 from Vespucio to Hickman, dept. Orán, October, 1940, Schreiter 11423 [Herb. Inst. Miguel Lillo 37185] (N), Plants 60 to 80 cm tall, flowers blood-red.

Julocroton serratus Müll. Arg.— ARGENTINA : Salta : Cerro San Bernardo, alt. 1200 m, dept. Capital, January 7, 1941, T. Meyer 3765 [Herb. Inst. Miguel Lillo 17310] (N), plants 50 to 70 cm, tall, flowers greenish-white.

Sapium longifolium (Müll. Arg.) Huber in *Bull. Herb. Boiss.*, 2^e sér., 6: 444, fig. 39. 1906. (*Sapium biglandulosum* var. *longifolium* Müll. Arg. in *Linnaea* 32: 118. 1863). — ARGENTINA : Salta : Coronel Moldes, alt. 1100 m, dept. La Viña, January 31, 1941, T. Meyer 3766 [Herb. Inst. Miguel Lillo 17311] (N); Capital, dept. Capital, January 10, 1941, T. Meyer 3642 [Herb. Inst. Miguel Lillo 17344] (N), tree 8 m tall; Río Arenales, alt. 1000 m, dept. Capital, January 10, 1941, T. Meyer 3639 [Herb. Inst. Miguel Lillo 17341] (N), small tree.

« The determination is effected after comparison with three classic collections, Hassler 3479, Hassler 4833, and Fiebrig 542. Notwithstanding this, I am not certain that it will prove to be lasting, on grounds both of taxonomy and of nomenclature.

« Earlier, perhaps overbroad specific concepts in the classification of *Sapium*, have been split up by Huber (in *Bull. Herb. Boiss.*, 2^e sér., 6: 345-364, 433-452. 1906) and by Hemsley (in Hook., *Icon.* 29: pls. 2878-2900. 1909) in what seems to be an exceedingly fine manner. I find very little difference in the material which I have at hand to separate *S. montevidense* Huber from *S. longifolium* Huber, *S. Gilbertii* Hemsl. and *S. Muelleri* Hemsl. Extreme forms in this group of binomials may seem to be distinct, but uni- or bisexuality, vigor of the shoot, size and serration of the blade, number, position and size of the hydathodes on the leaf, length of the inflorescence, and possibly

size of the fruit are all too often dependent upon individual and vegetative factors, and little reliance can be placed upon them for specific segregation. It seems doubtful that the material collected in Salta is actually distinct from that of Uruguay to an extent that requires the use of separate binomials.

« A factor that looms large as a potential disturber of the current nomenclature of *Sapium* is the illegitimate use that has been made of manuscript binomials of Klotzsch. *Sapium montevidense* may be briefly dealt with here as a convenient illustration of the erroneous application of these names. Huber, Hemsley and Pax and Hoffmann [in *Pflanzenr.* 52 (IV 147. v.): 215. 1912] alike credit *Sapium montevidense* to Klotzsch ex Baillon in *Adansonia* 5: 320. 1865. At the page cited Baillon lists *Stillingia biglandulosa* (L.) Baill., based upon *Hippomane biglandulosa* L., with synonyms: ‘*S. [Sapium] serratum, prunifolium, Sellowianum, montevidense* Kl. in herb. berol., et Erichs. Arch. VII, loc. cit.’ The *locus citatus* is page 187 of the ‘Erichsen Archiv.’ *fide* Baillon, in which appears a paper, listed in full title by Baillon *Etud. Gén. Euphorb.* 674. 1858) as ‘Neue und weniger gekannte [sic] südamerikanische Euphorbiaceen-Gattungen’, with the reference once again repeated: ‘*Erich. Arch.* p. 175, pl. 7-9’. This very same paper is credited to the ‘Wiegmann Archiv’ by the *Catalogue of Scientific Papers of the Royal Society of London*, 3: 679. 1869. *Sapium* is entered in Klotzsch’s work, p. 187, merely as a genus without indication of species, with reference to Jacquin, *Select. Stirp. Amer. Hist.* 249, pl. 158. 1763; Kunth in *H. B. K. Nov. Gen.* 2: 64 [error for 51]. 1817, and D. de Jussieu, *Euphorb. Tent.* 49, pl. 15, fig. 51. No mention whatever is made in these works of the binomials which Baillon and later authors credit to Klotzsch. It is to be believed, therefore, that *Sapium serratum*, *S. prunifolium*, *S. Sellowianum* and *S. montevidense* of Klotzsch from Baillon are manuscript names of Klotzsch, which Baillon mentioned but actually never published in a manner that can be accepted (see Arts. 37 and 40, *Intern. Rules Nomencl.*, 1935), despite the opinion generally held to the contrary. The fact Klotzsch’s and Baillon’s works are seldom available to taxonomists prompts me to add that other binomials of Klotzsch, now in current use, are proba-

bly illegitimate for the very same reason that invalidates *Sapium montevidense*. Binomials which are cited with reference to Klotzsch in 'Wiegm.' or 'Ericks'. Archiv, especially if pages with page-numbers lower than 250, should be carefully scrutinized, because they are likely to prove either *nomina nuda* or *nomina mss. in sched.*, oftentimes introduced in the literature by Baillon as mere synonyms. The genera of Klotzsch, on the other hand, were described in detail. Validly published [see Art. 44 (3)] are also certain species, for which good illustrations were given. Since these species are few, and occur in a wide range of euphorbiaceous genera, it is convenient to list them here in full, as follows: (1) *Peridium ovale* Kl. (*op. cit.*, 180, 203, pl. VII C); (2) *Dactylostemon glabrescens* Klotzsch (*op. cit.*, 181, 203, pl. VIII A); (3) *Adenogyne pachystachys* Kl. (*op. cit.*, 184 [as *pachystachya*], 203, pl. VIII C); (4) *Actinostemon grandifolius* Kl. (*op. cit.*, 204, pl. VIII D); (5) *Traganthus sidoides* Kl. (*op. cit.*, 188, 204, pl. IX A); (6) *Botryanthus discolor* Kl. (*op. cit.*, 191, 204, pl. IX B); (7) *Discocarpus essequiboensis* Kl. (*op. cit.*, 201, 204, pl. IX C). Although the genera of Klotzsch are seldom held by modern authors to be valid, the specific epithets must be used (see Art. 54), and it is desirable to determine here their status in nomenclature.

« Huber is the first author in my present knowledge who has used the binomial *Sapium montevidense* in such a manner as to constitute valid publication, and the adoption of the epithet *montevidense* under his authorship is certainly legitimate (see Art. 69, last paragraph). Hence Huber, not Klotzsch nor Baillon, must be cited as the author of the binomial, as I have done. Since Huber also published in the same work, *S. submarginatum*, which Pax and Hoffmann treat (in *Pflanzenr.* 52 [IV. 147. v.] 215. 1912) as a synonym under *S. montevidense*, it may be said that *S. montevidense* has lectotypic status (see Art. 56). The 'type' of the species is the material collected by Sello and Anderson in southern Brazil and near Montevideo cited by Huber in his description of *S. montevidense*. These are the specimens which answer the definition of 'type' (understood as a specimen) in the Rules of Nomenclature (see *Rec.* VII), because it is using this material that Huber, the author of the legitimate

binomial, actually wrote up the publication. The specimens used by Klotzsch have lost their status as 'types', because no valid publication took place which can be said to have based upon them.

« The disturbances that may arise in existing nomenclature on account of the conditions just described are not to be dismissed lightly. Nothing, unfortunately, can be done at present because it is impossible to secure the loan of the type-specimens needed for a general revision. I am forced to maintain existing standards and names, because nomenclature can not be legitimately altered (see Art. 17, *Rec.* III) unless for just cause.

« As a last comment upon *Sapium* in general I state my belief that a clear understanding of the classification of this genus requires a better knowledge of the range of its species than is available at the present time. The characters of *Sapium*, like those of *Croton*, *Acalypha* and *Phyllanthus*, are seldom sharply marked, and, if we may so speak, each species begins only where all its allies end. Thus, before a satisfactory classification can be worked out, the entire genus must be surveyed and fairly well known. This shows the futility of 'splitting' or ' lumping' species on the basis of herbarium material, using as criteria minor variations in the flowers, differences in foliage, venation, pubescence, and the like ».

Sebastiana anisandra (Griseb.) Lillo — ARGENTINA: Salta: Mojotoro, alt. 1060 m, dept. Caldera, January 9, 1941, T. Meyer 3641 [Herb. Inst. Miguel Lillo 17343] (N); km. 10, road from Vespucio to Hickman, dept. Orán, October, 1940, Schreiter 11422 [Herb. Inst. Miguel Lillo 37182] so determined also by the collector; Tartagal, alt. 500 m, dept. Orán, October, 1940, Schreiter 11421 [Herb. Inst. Miguel Lillo 37183] (N), called « leche-leche ».

Tragia geraniifolia Baill. — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 28, 1941, T. Meyer 3651 [Herb. Inst. Miguel Lillo 17353] (N), Tueumán: Acheral, alt. 450 m, dept. Monteros, November 11, 1923, Schreiter 4169 [Herb. Inst. Miguel Lillo 5104] (N), so determined also by the collector; Chañar Pozo,

alt. 300 m, dept. Leales, October, 1919, S. Venturi 505 [Herb. Inst. Miguel Lillo 4881] (N), so determined also by the collector; Yacuchire, alt. 300 m, Chicligasta, October 25, 1913, Monetti 1370 [Herb. Inst. Miguel Lillo 3136] (N), so determined also by the collector.

Tragia volubilis L. — ARGENTINA: Tucumán: Cerro del Duraznillo, 800 m, dept. Burruyacu, March 5, 1914, Monetti 2089 [Herb. Inst. Miguel Lillo 5170] (N), so determined also by the collector; Arroyo Las Piedras, January 8, 1899, M. Lillo 2209 [Herb. Inst. Miguel Lillo 5165] (N), so determined also by the collector; Cadillal, alt. 600 m, November 11, 1917, Schreiter 1298 [Herb. Inst. Miguel Lillo 6489] (N), so determined also by the collector; Cerros de la Ramada, alt. 500 m, dept. Burruyacu, December, 1916, Monetti 3073 [Herb. Inst. Miguel Lillo 5173] (N), so determined also by the collector.

HIPPOCRATEACEAE

(determinations by Albert C. Smith)

Hippocratea volubilis L. — ARGENTINA: Misiones: Salto Iguazú, playas, August 25, 1910, D. Rodríguez 375 [Herb. Inst. Miguel Lillo 37100] (N), so determined also by the collector. BOLIVIA: Santa Cruz: Cerro del Amboró, alt. 1000 m, prov. del Sara, October 19, 1916, J. Steinbach 3072 [Herb. Inst. Miguel Lillo 36045] (N); same locality and date, J. Steinbach s. n. [Herb. Inst. Miguel Lillo 36044] (N), flowers greenish-yellow; Montecitos del Río Cuchi, prov. del Sara, alt. 150 m, October 31, 1916, J. Steinbach 3118 [Herb. Inst. Miguel Lillo 36046] (N), sepals and petals greenish-yellow; prov. del Sara, alt. 400 m, November 6, 1916, J. Steinbach 3133 [Herb. Inst. Miguel Lillo 36047] (N), petals greenish-yellow.

Pristimera andina Miers — ARGENTINA: Jujuy: Ledesma, November 1, 1911, Budin s. n. [Herb. Inst. Miguel Lillo 37101] (N), so determined also at Tucumán, flowers green. Misio-

nes : Santa Ana, September 19, 1912, D. Rodríguez 631 [Herb. Inst. Miguel Lillo 37105] (N), so determined also at Tucumán. Salta : Tartagal, dept. Orán, October 25, 1924, Schreiter 3391 [Herb. Inst. Miguel Lillo 37104] (N), so determined also at Tucumán ; dept. Orán, October, 1913, D. Rodríguez 1012 [Herb. Inst. Miguel Lillo 37099] (N), so determined also at Tucumán ; Yacuiba, October, 1915, J. Steinbach 1648 [Herb. Inst. Miguel Lillo 37102] (N), so determined also at Tucumán ; El Cedral, dept. Orán, October 12, 1913, D. Rodríguez 1012 (N), a vine.

MALVACEAE

(determinations by Ira L. Wiggins)

Abutilon pauciflorum St. Hilaire — URUGUAY : in cultivated ground in the suburbs of San José, June 26, 1937, Rosengurtt B. 1985 (N), plants 2,5 m tall, so determined also by A. P. Rodrigo.

Abutilon pedunculare H. B. K. — ARGENTINA : Chaco : Campo Bonazzola, Enrique Urien, dept. Tapenaga, November, 1940, A. P. Rodrigo 2665 (N), flowers salmon-colored abundant ; same locality and date, A. P. Rodrigo 2484 (N), in mountains, flowers salmon. Jujuy : Yala, alt. 1450 m, dept. Capital, January 27, 1940, Schreiter 11105 [Herb. Inst. Miguel Lillo 33505] (N), flowers brick-red.

Abutilon terminale St. Hil. — URUGUAY : Florida, December 18, 1936, Rosengurtt B. 746 (N), creeping, leaning against shrubs, flowers rosy, so determined also by A. P. Rodrigo ; Cerro Largo, Cerro de las Cuentas, February 23, 1938, Rosengurtt B. 2561 (N), so determined also by A. P. Rodrigo.

Anoda cristata (L.) Schlecht. — BOLIVIA : Santa Cruz : Samapata, alt. 1200 m, prov. Villagrande, March, 13, 1920, J. Steinbach 3730 [Herb. Inst. Miguel Lillo 16506] (N), so determined also by the collector ; alt. 1500 m, prov. Villagrande, March 23, 1920, J. Steinbach 3808 [Herb. Inst. Miguel Lillo 16521] (N), so determined also by the collector.

Gaya grandiflora Baker f. — BOLIVIA : Santa Cruz : alt. 450 m, prov. del Cercado, April 15, 1916, J. Steinbach 1963 [Herb. Inst. Miguel Lillo 16512] (N), so determined by the collector, « probably O. K., though I don't know this species ». I. L. Wiggins.

Gayoides crispum (L.) Small — ARGENTINA : Tucumán : La Cocha, alt. 450 m, dept. Graneros, February 23, 1941, T. Meyer 3904 [Herb. Inst. Miguel Lillo 35779] (N).

Hibiscus cisplatinus St. Hil. — ARGENTINA : Buenos Aires : Otamendi, partido de Campana, January 3, 1940, A. T. Hunziker 358 (N), plants 1,5 m tall, called « rosa del río », so determined also by the collector.

Hibiscus furcellatus Desr. — BOLIVIA : Santa Cruz : alt. 450 m, prov. del Sara, March 5, 1917, J. Steinbach 1807 [Herb. Inst. Miguel Lillo 16522] (N), « one of its numerous forms »... I. L. Wiggins.

Malva parviflora L. — ARGENTINA : Río Negro : Allen, Chagras, February 23, 1939, A. T. Hunziker 87 (N).

Malvastrum capitatum (Cav.) Griseb. — ARGENTINA : Catamarca : Las Faldas, alt. 2000 m, Sierra de Belén, dept. Belén, March, 1939, Schreiter s. n. [Herb. Inst. Miguel Lillo 35196] (N). BOLIVIA : Cochabamba : Cochabamba, alt. 2600 m, April 14, 1920, J. Steinbach 3981 [Herb. Inst. Miguel Lillo 16504] (N), so determined also by the collector.

Malvastrum spicatum (L.) A. Gray — ARGENTINA : Salta : Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 20, 1941, T. Meyer 3675 [Herb. Inst. Miguel Lillo 35619] (N), plants 1,5 m tall, flowers pale-yellow.

Modiolastrum geranioides (Gill.) Bak. — URUGUAY : Río Tí and Alto Matanzas, Flores, November 25, 1936, Rosen-gurtt B. 524 (N), on grassy slopes, so determined also by A. P. Rodrigo.

Pavonia consobrina N. E. Brown — URUGUAY : in swampy meadow, Bañado de Medina, Cerro Largo, February 19,

1938, Rosengurtt B. 2503 (N), shrub 0,5-0,6 m tall, flowers red, so determined also by A. P. Rodrigo.

Pavonia glechomoides Juss. — URUGUAY: Florida, Alto Mansavillagra, December 16, 1936, Rosengurtt B. 711 (N), rare in wet meadows, flowers red and white, so determined also by A. P. Rodrigo and H. Monteiro.

Pavonia sepium St. Hil. — ARGENTINA: Salta: Quebrada de Capiasuti, alt. 600 m, dept. Orán, February 8, 1940, Schreiter 11106 [Herb. Inst. Miguel Lillo 33506] (N), flowers pale-yellow.

Pavonia sidifolia H. B. K. — BOLIVIA: Santa Cruz: alt. 450 m, prov. Cercado, August 24, 1916, J. Steinbach 2718 [Herb. Inst. Miguel Lillo 16520] (N), so determined also by the collector.

Pavonia spinifex Cav. — BOLIVIA: Santa Cruz: alt. 450 m, prov. del Sara, August 10, 1916, J. Steinbach 1855 [Herb. Inst. Miguel Lillo 16518] (N), so determined also by the collector.

Pavonia Urbaniana Gürke — URUGUAY: wet meadows, Palleros, Río Negro, dept. Cerro Largo, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 2352 (N), so determined also by A. P. Rodrigo.

Pseudabutilon Stuckertii R. E. Fries — ARGENTINA: Chaco: Campo Bonazzola, Enrique Urien, November, 1940, A. P. Rodrigo 2676 (N), so determined also by the collector.

Sida leprosa (Ortega) K. Schum. — URUGUAY: gregarious in wet meadow, Bañados de Carrasco, Canelones, February 6, 1940, Rosengurtt B. 3073 (N), creeping, so determined also by the collector.

Sida leprosa (Ortega) K. Schum. var. **parvifolia** (Hemsl.) Hochr. — ARGENTINA: Río Negro: Allen, Chagras, February 23, 1939, A. T. Hunziker 85 (N).

Sida rhombifolia L. — ARGENTINA: Salta: Campo Quijano, dept. de Rosario de Lerma, February 4, 1941, A. T. Hunziker s. n. (N). Tucumán: Cochuna, dept. Chivilcoy, March 4, 1941, C. A. O'Donnell 63 [Herb. Inst. Miguel Lillo 36201] (N), « form ».

Sida urticifolia St. Hil. — ARGENTINA: Chaco: Campo Bonazzola, Enrique Urien, November, 1940, A. P. Rodrigo 2498 (N), flowers salmon-colored, so determined also by the collector.

Sphaeralcea miniata (Cav.) Spach — ARGENTINA: Buenos Aires: Otamendi, along railroad tracks, Partido de Campana, January 3, 1940, A. T. Hunziker 357d (N).

Wissadula excelsior (Cav.) Presl — BOLIVIA: Santa Cruz: alt. 450 m, prov. Buena Vista, August, 1915, J. Steinbach 1543 [Herb. Inst. Miguel Lillo 16513] (N), so determined also by the collector.

Wissadula glechomatifolia (St. Hil.) R. E. Fries — URUGUAY: common in open meadows between bushes, Flores, Río Tí and Alto Matanzas, November 25, 1936, Rosengurtt B. 579 (N), flowers yellow-cream, so determined also by A. P. Rodrigo and H. Monteiro.

FRANKENIACEAE

(determination by Joseph Monachino)

Frankenia pulverulenta L. — ARGENTINA: Buenos Aires: Bahía Blanca, Salitral de la Vidriera, November 6, 1940, L. R. Parodi 13793 (N), determined as *F. pampeana* Speg. by the collector.

PASSIFLORACEAE

(determinations by E. P. Killip)

Passiflora Mooreana Hook. f. — ARGENTINA: Chaco: Enrique Urien, Campo Bonazzola, dept. Tapenaga, November, 1940, A. P. Rodrigo 2414 (N).

Passiflora naviculata Griseb. — ARGENTINA: Salta: Chorrillos, alt. 1260 m, dept. Chorrillos, January 17, 1941, T. Meyer 3718 [Herb. Inst. Miguel Lillo 35661] (N), vine.

Passiflora suberosa L. — ARGENTINA: Salta: Coronel Moldes, alt. 1100 m, dept. La Viña, January 31, 1941, T. Meyer 3727 [Herb. Inst. Miguel Lillo 35664] (N), so determined also by the collector.

MELASTOMACEAE

(determinations by H. A. Gleason)

Tibouchina gracilis (Bonpl.) Cogn. — URUGUAY: grassy slopes, Palleros, Río Negro, dept. Cerro Largo, January, 1941, Gallinal, Aragone, Bergalli, Campal y Rosengurtt PE. 4638 (N), so determined also by the collector.

Tibouchina paratropica (Griseb.) Cogn. — ARGENTINA: Córdoba: highway from Tanti to Los Gigantes, dept. Punilla, March 24, 1941, G. Dawson 1108 (N). Salta: Quebrada San Lorenzo, alt. 1200 m, January 31, 1940, L. R. Parodi 13616 (N), growing in the forest.

OENOTHERACEAE

(determinations by P. A. Munz)

Jussiaea uruguayensis Camb. — ARGENTINA: Punta Lara, La Plata, December 11, 1895, N. Alboff 127 (N).

Oenothera (Raimannia) longiflora L. — ARGENTINA: Buenos Aires: Pellegrini, Partido de Pellegrini, November 28, 1940, A. L. Cabrera 6954 (N), in meadows.

Oenothera (Raimannia) mollissima L. — ARGENTINA: Buenos Aires: Puerto Belgrano, Las Baterías, Partido de Bahía Blanca, February, 1941, M. M. Job 1599 (N), on dunes, flowers orange. URUGUAY: Punta del Este, Dept. Maldonado, January 3, 1941, H. Descole 74 [Herb. Inst. Miguel Lillo 36079] (N).

Oenothera (Raimannia) Parodiana Munz — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 28, 1941, T. Meyer 3586 [Herb. Inst. Miguel Lillo 35726] (N).

AMMIACEAE

(*Limosella* by J. H. Pierce; remainder of determinations by Mildred Mathias and L. Constance)

Ammi majus L. — ARGENTINA: Salta: Alemania, alt. 1170 m, dept. Guachipas, January 14, 1941, T. Meyer 3618 [Herb. Inst. Miguel Lillo 17380] (N), plants 1 m, tall, flowers white.

Ammi Visnaga (L.) Lam. — ARGENTINA: Buenos Aires: Otamendi, Partido de Campana, January, 3, 1940, A. T. Hunziker 345 (N), 1,5 m, tall, common.

Apium australe Pet. Thouars — ARGENTINA: Buenos Aires: Delta Paraná, secc. Arroyo Gálvez, January, 1939, A. T. Hunziker 933 (N.)

Apium leptophyllum (Pers.) F. von Muel. — ARGENTINA: Buenos Aires: Delta Paraná. secc. Arroyo Gálvez, February, 1938, A. T. Hunziker 868 (N).

Bowlesia incana R. et P. — ARGENTINA: Tucumán: Raco, dept. Tafí, alt. 800 m, August 30, 1939, T. Meyer 3429 [Herb. Inst. Miguel Lillo 35411] (N).

Conium maculatum L. — ARGENTINA: Salta: Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, February, 1941, T. Meyer 3875 [Herb. Inst. Miguel Lillo 35678] (N), flowers white.

Daucus Carota L. — ARGENTINA: Buenos Aires: Pellegrini, Partido de Pellegrini, November 28, 1940, A. L. Cabrera 6939 (N).

Eryngium aff. **pandanifolium** C. et S. — ARGENTINA: Buenos Aires: Otamendi, Partido de Campana, frequent along

sides of railroad tracks, February 15, 1940, A. T. Hunziker 389 (N), scapes to 2 m, tall.

Eryngium paniculatum Cav. et Dombey — ARGENTINA: Buenos Aires; Sierra de las Animas, Partido de Tandil, November 21, 1940, A. L. Cabrera 6808 (N).

Foeniculum vulgare Miller — ARGENTINA: Buenos Aires: Martínez, dept. San Isidro, March 9, 1941, P. Torrent 42 [Herb. Inst. Miguel Lillo 17470] (N), plants 2 m, tall, flowers yellow. Salta: Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 28, 1941, T. Meyer 3617 [Herb. Inst. Miguel Lillo 17379] (N), plants 1 m tall, flowers yellow.

Lilaeopsis andina A. W. Hill — ARGENTINA: Jujuy: Quebrada de Salitre, alt. 3600 m, dept. Yavi, February 21, 1940, T. Meyer s. n. [Herb. Inst. Miguel Lillo 34340] (N).

Limosella aquatica L. — ARGENTINA: Jujuy: Tumbaya, alt. 2500 m, Volcán, February, 1928, S. Venturi 10265 (N), flowers green; Cochinoeca, alt. 3400 m, Abra Pampa, February, 1929, S. Venturi 9383 (N), flowers yellow.

Mulinum spinosum Pers. — ARGENTINA: Buenos Aires: Choique, Partido de Tornquist, November 7, 1940, A. L. Cabrera 6720 (N), in calcareous soil.

LOGANIACEAE

(determinations by L. B. Smith)

Buddleja grandiflora Cham. et Schlecht. — ARGENTINA: Chacho: Enrique Urien, Campo Bonazzola, dept. Tapenaga, November, 1940, A. P. Rodrigo 2540 (N), distributed as «Acanthaceae».

Buddleja paludicola Kränzl. — URUGUAY: common in swamp, Cerro Largo, Cerro de las Cuentas, February 23, 1938, Rosengurtt B. 2535 (N).

Buddleja thyrsoïdes Lam. — URUGUAY : Maldonado, Cerro Pan de Azúcar, October 8, 1939, Rosengurtt B. 3028 (N), shrub to 2 m, tall, flowers white.

APOCYNACEAE

(determinations by R. E. Woodson, Jr.)

Macrosiphonia petraea (St. Hil.) K. Sch. — ARGENTINA : Buenos Aires : Pellegrini, in meadows, Partido de Pellegrini, November 28, 1940, A. L. Cabrera 6956 (N). URUGUAY : growing in a dry barranca, Atlantida, Canelones, February 5, 1939, Rosengurtt B. 2829 (N), determined as *M. verticillata* by the collector.

Mandevilla Bridgesii (Muell.-Arg.) Woods. — ARGENTINA : Tucumán : Tafí Viejo, alt. 500 m, dept. Tafí, February 20, 1941, T. Meyer 3916 [Herb. Inst. Miguel Lillo 17395] (N), climbing, flowers white.

Mandevilla Pentlandiana (A. DC.) Woods. — ARGENTINA : Salta : Capital, alt. 1000 m, dept. Capital, January 10, 1941, T. Meyer 3711 [Herb. Inst. Miguel Lillo 35654] (N), milky, climbing, flowers white, determined as « *Lasequea* » by the collector; Coronel Moldes, alt. 1100 m, dept. La Viña, January 31, 1941, T. Meyer 3708 [Herb. Inst. Miguel Lillo 35651] (N), determined as « *Lasequea* » by the collector.

Vallesia glabra Cav. — ARGENTINA : Tucumán : La Cochá, alt. 450 m, dept. Graneros, February 23, 1941, T. Meyer 3901 [Herb. Inst. Miguel Lillo 35776] (N), called « ancoche », so determined also by the collector, shrubs 3 to 4 m, tall.

CUSCUTACEAE

(determinations by T. G. Yuncker)

Cuscuta cristata Engelm. — ARGENTINA : Buenos Aires : Islotes del Paraná, San Nicolás, Partido de San Nicolás, March 6, 1941, A. L. Cabrera 7144 (N), so determined also by the collector.

Cuscuta globiflora Engelm. — ARGENTINA : Salta : in a valley about 20 km from Coronel Moldes, alt. about 1200 m, dept. La Viña, February 7, 1941, A. T. Hunziker 1976 (N), frequent, called « barba de monte ».

Cuscuta indecora Choisy var. **longisepala** Yuncker (probably) — ARGENTINA : Chaco : Campo Bonazzola, Enrique Urien, November, 1940, A. P. Rodrigo 2640 (N).

Cuscuta membranacea Yuncker — ARGENTINA : Salta : in woods on a small hill about 400 m, from the Experiment Station, Coronel Moldes, alt. about 1200 m, dept. La Viña, February 2, 1941, A. T. Hunziker 1149 (N), frequent.

HYDROPHYLACEAE

(determinations by L. Constance)

Nama jamaicense (L.) Kuntze. — Argentina : Salta : Cedral, dept. Orán, October 28, 1913, D. Rodríguez 1066 [Herb. Inst. Miguel Lillo 45202] (N), creeping, flowers white, determined as « *Nama jamaicense* L. » by the collector. Tucumán : dept. Monteros, October 8, 1899, M. Lillo 2337 [Herb. Inst. Miguel Lillo 45211] (N), so determined also by the collector. BOLIVIA : alt. 700 m, October 11, 1915, J. Steinbach 1660 [Herb. Inst. Miguel Lillo 45206] (N).

Nama undulatum H. B. K. — ARGENTINA : Catamarca : alrededores, dept. Capital, September 20, 1910, Castillon s. n. [Herb. Inst. Miguel Lillo 45223] (N), so determined also by the collector; same locality, September 1, 1910, Castillon s. n. [Herb. Inst. Miguel Lillo 48959] (N). Tucumán : Alurralde, December, 1889, M. Lillo s. n. [Herb. Inst. Miguel Lillo 48746] (N); Río Churqui, dept. Tafí, alt. 2020 m, February 3, 1908, M. Lillo 7527 [Herb. Inst. Miguel Lillo 45226] (N), flowers blue; Los Herreras, dept. Leales, alt. 400 m, October 10, 1913, Monetti 1230 [Herb. Inst. Miguel Lillo 45228] (N), called « viola »; Río Salí, alt. 250 m, dept. Leales. November, 1919, S. Venturi 512 [Herb. Inst. Miguel Lillo 45229] (N), flowers violet.

Phacelia artemisioides Griseb. — ARGENTINA: Buenos Aires: Pellegrini, Partido de Pellegrini, November 29, 1940, A. L. Cabrera 6966 (N).

Phacelia boliviana Brand. — ARGENTINA: Salta: Sierra del Cajón, alt. 4250 m, February 11, 1914, D. Rodríguez 1368 (N), flowers blue.

Phacelia magellanica (Lam.) Cov. f. **robusta** Brand. — ARGENTINA: Tucumán: Lara, alt. 3200 m, January 26, 1912, D. Rodríguez 279 [Herb. Inst. Miguel Lillo 49094] (N), determined as *P. magellanica* by the collector; same locality, February 15, 1912, D. Rodríguez 332 [Herb. Inst. Miguel Lillo 49123] (N), determined as *P. magellanica* by the collector.

BORAGINACEAE

(determinations by I. M. Johnston)

Amsinckia hispida (R. et P.) Johnston — ARGENTINA: Buenos Aires: stubble in meadows, Partido de Junín, October 17, 1940, A. L. Cabrera 6522 (N), flowers yellow. Río Negro: Bariloche, region of Lago Nahuel Huapi, February 3, 1940, A. L. Cabrera 5815 (N), flowers yellow.

Cordia alliodora (R. et P.) Cham. — BOLIVIA: Santa Cruz: Buena Vista, alt. 450 m, June, 1915, J. Steinbach 1429 [Herb. Inst. Miguel Lillo 34755] (N), called «picana negra», so determined also at Berlin; common in Canton Buena Vista, prov. del Sara, alt. 450 m, July 7, 1916, J. Steinbach 2445 [Herb. Inst. Miguel Lillo 34759] (N), so determined also at Berlin.

Cordia bifurcata R. et S. — ARGENTINA: Buenos Aires: forest of Punta Lara, November 12, 1939, G. Dawson 859 (N), shrub 2 m tall. Entre Ríos: Paraná Guazú, Delta, November, 1925, A. C. Scala s. n. (N).

Cordia buddleoides Rusby — BOLIVIA: Santa Cruz: Buena Vista, alt. 450 m, May, 1915, J. Steinbach 1343 [Herb.

Inst. Miguel Lillo 34578] (N), flowers greenish-white, so determined also at Berlin.

Cordia chacoensis Chodat — ARGENTINA : Salta : Cerro San Bernardo, dept. Capital, alt. 1200 m, January 7, 1941, T. Meyer 3742 [Herb. Inst. Miguel Lillo 35689] (N), tree 1,5 m tall, flowers white. BOLIVIA : Santa Cruz : alt. 450 m, prov. del Sara, August 20, 1916, J. Steinbach 2519 [Herb. Inst. Miguel Lillo 34779] (N), shrub 80-150 cm tall, flowers white; Buena Vista, alt. 459 m, June, 1915, J. Steinbach 1376 [Herb. Inst. Miguel Lillo 34756] (N), flowers white, determined as « *Cordia cylindrostachya* aff. » at Berlin.

Cordia cylindrostachya Roem. et Schult., aff. — BOLIVIA : Santa Cruz : Buena Vista, alt. 450 m, June, 1915, J. Steinbach 1376 [Herb. Inst. Miguel Lillo 34756] (N), so determined also at Berlin.

Cordia ecalyculata Vell. — ARGENTINA : Misiones : Loreto, in mountains, July 26, 1931, G. Grüner 279 (N), shrub or tree 9 m tall.

Cordia glabrata var. *orbicularis* Chod. — BOLIVIA : Santa Cruz : Buena Vista, region of Río Cuchi, September 4, 1915, J. Steinbach 1599 [Herb. Inst. Miguel Lillo 34754] (N), shrub 7 m tall, flowers white, so determined also at Berlin.

Cordia nodosa Lam. — BOLIVIA : Santa Cruz : Buena Vista, alt. 450 m, June, 1915, J. Steinbach 1401 [Herb. Inst. Miguel Lillo 34750] (N), flowers white, called « *huevo de gato* », so determined also at Berlin.

Cordia trichotoma (Vell.) Arrab. — ARGENTINA : Jujuy : La Quinta, around Laguna de la Brea, dept. Santa Bárbara, July 10, 1937, A. L. Cabrera 4132 (N), tree called « *spata* », so determined also by the collector.

Cryptantha albida (H. B. K.) Johnston — ARGENTINA : Catamarca : Andalgalá, Cerro Duraznos, alt. 1600 m, January, 1937, M. M. Job 1360 (N), flowers white.

Echium plantagineum L. — ARGENTINA: Buenos Aires: La Granja, Arroyo 3°, October 22, 1939, G. Dawson 775 (N); mountains, Sierra de la Ventana, Partido de Tornquist, April 25, 1939, A. L. Cabrera 5216 (N), so determined also by the collector; vicinity of Cap. Federal, Cementerio de Flores, October 12, 1919, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 4062] (N); Otamendi, Partido de Campana, January 3, 1940, A. T. Hunziker 356 (N), frequent along railroad tracks.

Hackelia revoluta (R. et P.) Johnst. — ARGENTINA: Salta: La Ollada, about 20 km from Coronel Moldes, alt. about 1200 m, dept. La Viña, February 2, 1941, A. T. Hunziker 1204 (N).

Heliotropium amplexicaule Vahl — ARGENTINA: Buenos Aires: in the vicinity of Dolores, April 4, 1939, B. H. Dawson 21 (N), so determined also by the collector; Sierra de la Ventana, February, 1914, A. C. Scala s.n. (N); Sierra de la Ventana, Partido de Tornquist, January 18, 1940, A. L. Cabrera 5790 (N), so determined also by the collector; Sierra de Cura-malal, Arroyo Alfalfa Grande, east side, November 16, 1928, A. C. Scala s.n. (N); Monte Veloz, Juan Gerónimo, shore of the Río de la Plata, November 10, 1931, A. L. Cabrera 1845 (N), on dunes; Bajo Hondo, 1916, N. Alboff y E. Carette s. n. (N). Chaco: Enrique Urien, Campo Bonazzola, dept. Tapenaga, November, 1940, A. P. Rodrigo 2546 (N), flowers lilac. Córdoba: Salsipuedes, dept. de Colón, March, 1938, G. Dawson 138 (N), so determined also by the collector; Cosquín, alt. 730 m, January or February, 1936, A. P. Rodrigo 283 (N), flowers white. Salta: Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 21, 1941, T. Meyer 3605 [Herb. Inst. Miguel Lillo 17367] (N); Coronel Moldes, alt. 1100 m, dept. La Viña, January 31, 1941, T. Meyer 3744 [Herb. Inst. Miguel Lillo 35691] (N). San Luis: Chischaca, December 13, 1925, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 25/2920] (N). Tucumán: Valle de Tafí, 1908, C. Bruch s. n. (N), determined as *H. curassavicum* L. by A. P. Rodrigo. BOLIVIA: Cochabamba: alt. 2700 m, April 16, 1920, J. Stein-

bach 4005 [Herb. Inst. Miguel Lillo 34776] (N), flowers blue-violet, determined as *H. bolivianum* Rusby at Berlin.

Heliotropium chrysanthum Phil. — ARGENTINA: Catamarca: Andean region, collector undesignated s. n. (N), so determined also by A. P. Rodrigo. Tucumán: Tafí, Sierra del Cajón, Río Managua, alt. 2100 m, April 29, 1926, S. Venturi 4223 (N), in sand, flowers yellow.

Heliotropium curassavicum var. **argentinum** Johnston — ARGENTINA: Mendoza: Lavalle, March 15, 1940, G. Dawson 955 (N), so determined also by the collector. Salta: La Salada, dept. Rosario de la Frontera, June 18, 1933, A. L. Cabrera 3149 (N), frequent at the saltpeter works, flowers white. San Juan: Partido de Monte, on shores of Laguna El Seco, February 17, 1938, A. L. Cabrera s.n. (N), so determined also by the collector; Laguna La Adela, April 6, 1939, G. Dawson 664 (N), sandy soil, so determined also by the collector; Monte Hermoso, 1916, E. Carette s. n. (N). San Luis: Alto Pencoso, February, 1914, C. Bruch y E. Carette s. n. (N), determined as *H. curassaricum* L. by A. P. Rodrigo. Santa Fe: vicinity of Santo Tomé, February 1, 1936, M. M. Job 1064 (N), determined as *H. curassaricum* L. by the collector. Tucumán: El Bañado, alt. 1650 m, Tafí, May 2, 1926, S. Venturi 4353 (N), in a saltpeter works, flowers white.

Heliotropium curassavicum var. **typicum** Johnston — ARGENTINA: Buenos Aires: Playa de Miramar, February, 1929, A. C. Seala 9 (N), determined as var. *argentinum* by the collector.

Heliotropium elongatum Hoffm. — ARGENTINA: Corrientes: banks of the Paraná, 6 km north of Capital, November, 1936, A. P. Rodrigo 929 (N), 80 cm tall, flowers lilac.

Heliotropium filiforme Lehm. — BOLIVIA: Santa Cruz: Prov. del Sara, Cantón Buena Vista, alt. 450 m, January 25, 1916, J. Steinbach 3181 [Herb. Inst. Miguel Lillo 34772] (N), petals white, interior of calyx yellow, sepals green.

Heliotropium indicum L. — ARGENTINA : Corrientes : banks of the Río Corrientes, Esquina, December, 1936, A. P. Rodrigo 1003 (N), flowers white.

Heliotropium lagoense (Warm.) Gürke — BOLIVIA : Santa Cruz : Cantón Buena Vista, Prov. del Sara, alt. 450 m, November 25, 1916, J. Steinbach 3184 [Herb. Inst. Miguel Lillo 34775] (N), semi-creeping, sepals green, petals white at base, yellow within and at apex, determined as *Schleidenia parciflora* (Mart.) DC. at Berlin.

Heliotropium mendocinum Phil. — ARGENTINA : Catamarca : Belén, February 24, 1929, A. L. Cabrera 1100 (N), so determined also by the collector. San Juan : Valle Fértil, February 17, 1927, Gnecco 25 (N). Tucumán : Tafí, alt. 1900 m, Río Managua, April 29, 1926, S. Venturi 4446 (N), banks of the river, flowers white.

Heliotropium nicotianaefolium Poir. — ARGENTINA : Buenos Aires : Olivos, February 25, 1939, G. Dawson 420 (N); Martínez, dept. San Isidro, March 9, 1941, P. Torrent 46 [Herb. Inst. Miguel Lillo 17535] (N).

Heliotropium procumbens Mill. — ARGENTINA : Jujuy : Vinalito, Yuto, dept. Santa Bárbara, July 7, 1937, A. L. Cabrera 4050 (N), ruderal. Salta : Coronel Moldes, alt. about 1200 m, dept. La Viña, January 31, 1941, A. T. Hunziker 1092 (N), frequent weed in alfalfa ; same locality, February 2, 1941, A. T. Hunziker 1196 (N), along banks of river about 10 km from Coronel Moldes ; Río Arenales, alt. 1000 m, dept. Capital, January 10, 1941, T. Meyer 3602 [Herb. Inst. Miguel Lillo 17364] (N), flowers white ; Coronel Moldes, alt. 1100 m, dept. La Viña, January 31, 1941, T. Meyer 3603 [Herb. Inst. Miguel Lillo 17365] (N), flowers white ; Moto-toro, alt. 1060 m, dept. Caldera, January 9, 1941, T. Meyer 3606 [Herb. Inst. Miguel Lillo 17368] (N), 30 to 60 cm tall, flowers white. Tucumán : Río Salí, alt. 400 m, dept. Capital, December 8, 1940, T. Meyer 3411 [Herb. Inst. Miguel Lillo 35395] (N), flowers white ; La Cocha, alt. 450 m, dept. Graneros, February 23, 1941, T. Meyer 3910 [Herb. Inst.

Miguel Lillo 17389] (N), flowers white; Parque 9 de Julio, dept. Capital, December 5, 1940, T. Meyer 3437 [Herb. Inst. Miguel Lillo 35424] (N), erect, 40 to 50 cm tall, flowers white. BOLIVIA: Cochabamba: Totora, alt. 1800 m, December 18, 1921, J. Steinbach 6004 [Herb. Inst. Miguel Lillo 34751] (N), flowers clear yellow or white, determined as *H. inundatum* L. at Berlin. Santa Cruz: Cantón Buena Vista, Prov. del Sara, alt. 450 m, November 6, 1916, J. Steinbach 3140 [Herb. Inst. Miguel Lillo 34761] (N), determined as *H. inundatum* L. at Berlin; Buena Vista, alt. 450 m, April, 1915, J. Steinbach 1207 [Herb. Inst. Miguel Lillo 34765] (N).

Heliotropium salicoides Cham. — BOLIVIA: Santa Cruz: alt. 460 m, Prov. del Sara, April 24, 1916, J. Steinbach 1933 [Herb. Inst. Miguel Lillo 34760] (N), flowers yellow, determined as *H. hispidum* H. B. K. at Berlin.

Heliotropium tiaridioides Cham. — ARGENTINA: Chaco: Colonia Benítez, alt 55 m, February, 1941, T. Meyer 3745 [Herb. Inst. Miguel Lillo 35692] (N). Misiones: Loreto, July, 30, 1931, Pérez Moréau s. n. [Herb. Mus. Argent. Cienc. Nat. 31/2237] (N), flowers white; Puerto Aguirre, July, 1938, J. Frenguelli 56 (N); Puerto Aguirre, July 26, 1937, A. P. Rodrigo 1045 (N), flowers white, very abundant. BOLIVIA: Santa Cruz: Prov. Sara, alt. 450 m, April 28, 1916, J. Steinbach 2045 [Herb. Inst. Miguel Lillo 34770] (N), flowers white, determined as *H. monostachyum* Cham. at Berlin; Santa Cruz, alt. 450 m, April, 1915, J. Steinbach 1243 [Herb. Inst. Miguel Lillo 34769] (N), flowers white, determined as *H. monostachyum* Cham. at Berlin.

Heliotropium veronicifolium Griseb. — ARGENTINA: Catamarca: San Isidro, dept. Valle Viejo, January 14, 1941, Rojas Paz 1 [Herb. Inst. Miguel Lillo 37349] (N). Santiago del Estero: Río Hondo, alt. 250 m, dept. Río Hondo, February 25, 1941, Ousset 130 [Herb. Inst. Miguel Lillo 35815] (N), flowers white.

Myosotis laxa Lehm. — CHILE : Valdivia : Valdivia, alt. about 15 m, March, 1929, A. Hollermayer s. n. [E. Werdermann 1907] (N).

Tournefortia Lilloi Johnston — ARGENTINA : Salta : Río Pescado, dept. Orán, September 17, 1938, A. L. Cabrera 4579 (N); Orán, dept. Orán, September 15, 1938, A. L. Cabrera 4568 (N).

Tournefortia mapirensia Lingelsh. — BOLIVIA : Santa Cruz : Buena Vista, alt. 450 m, June, 1915, J. Steinbach 1395 [Herb. Inst. Miguel Lillo 34767] (N), flowers green, determined as *Heliotropium zeylanica* at Berlin.

Tournefortia paniculata Cham. — BOLIVIA : Santa Cruz : Las Barreras, alt. 450 m, prov. del Sara, J. Steinbach 3129 [Herb. Inst. Miguel Lillo 34762] (N), flowers bright green.

Tournefortia paniculata Cham. var. **austrina** Johnst. — ARGENTINA : Salta : Mojotoro, alt. 1060 m, dept. Caldera, January 9, 1941, T. Meyer 3604 [Herb. Inst. Miguel Lillo 17366] (N), woody creeper, 3-4 m long; Coronel Moldes, alt. 1100 m, dept. La Viña, January 31, 1941, T. Meyer 3741 [Herb. Inst. Miguel Lillo 35688] (N). Tucumán : Puente del Río Cochuna, alt. 1000 m, dept. Chivilcoy, November 24, 1938, Descole, Schereiter y O'Donell s. n. [Herb. Inst. Miguel Lillo 35176] (N), flowers green.

Tournefortia rubicunda Salzm. — ARGENTINA : Salta : Orán, November 18, 1913, D. Rodríguez 1131 (N), climbing, flowers dull-red. BOLIVIA : Santa Cruz : Vallegrande, Samaipata, alt. 1500 m, March 21, 1920, J. Steinbach 3802 [Herb. Inst. Miguel Lillo 34777] (N), determined as *T. andina* Britton at Berlin.

VERBENACEAE

Acantholippia deserticola (R. A. Phil.) Molkenke. — ARGENTINA : Catamarca : Cerro del Arenal, dept. Andalgalá, April 15, 1917, P. Jörgensen 1736 [Herb. Inst. Miguel Lillo 32373]

(N), determined as *A. salsolooides* Griseb. by the collector; Corral Blanco to Laguna Blanca, alt. 3300 m, dept. Belén, March, 27, 1934, Peirano s. n. [Herb. Inst. Miguel Lillo 32834] (N), determined as *Lippia* sp. by the collector.

Acantholippia hastulata Griseb. — ARGENTINA : Jujuy : Humahuaca, alt. 2931 m, dept. Humahuaca, February 7, 1941, common shrub very abundant on the banks of the Río Grande, used very extensively as a medicinal plant, an infusion being made for stomach-ache, A. T. Hunziker 1334 (N); Humahuaca, alt. 2800 m, dept. Humahuaca, February 28, 1929, S. Venturi s. n. [Herb. Inst. Miguel Lillo 37999] (N).

Acantholipia seriphiooides (A. Gray) Moldenke. — ARGENTINA : Buenos Aires : in dry barrancas, Grünbein, B. Blanes, November 5, 1940, L. R. Parodi 13846 (N); Grünbein, Partido de Bahía Blanca, November 5, 1940, A. L. Cabrera 6650 (N), determined as *Lippia* sp. by the collector. Mendoza : Payúm Matru, January 29, 1941, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 36867] (N).

Acantholippia trifida (C. Gay) Moldenke. — ARGENTINA : Mendoza : F. Kurtz 7049 [Herb. Río de Janeiro 1924] (Ja).

Aegiphila Hassleri Briq. — ARGENTINA : Misiones : Santa Ana, September 9, 1912, D. Rodríguez 566 [Herb. Inst. Miguel Lillo 32532] (N).

Aegiphila mediterranea Vell., *Fl. Flum.* 38 (1825), *Icon.* 1 : 94. 1827.

Aegiphila hirta Casar., *Nov. Stirp. Bras. Dec.* 47. 1842.

Aegiphila cestrifolia Gardn. in Hook., *Lond. Journ. Bot.* 1 : 184. 1842.

ARGENTINA : Misiones : shrub, 3 m tall, October 11, 1910, D. Rodríguez 457 [Herb. Inst. Miguel Lillo 57251] (N), determined as *Cordia Sellowiana* Cham. by the collector.

Aloysia Castellanosi var. **magna** Moldenke, *Geogr. Distrib.* 75. 1942. — ARGENTINA : Tucumán : Amaicha, alt. 2300 m,

February 4, 1917, Castillon 85 [Herb. Inst. Miguel Lillo 31353] (N-type).

Aloysia catamarcensis Moldenke, *Geogr. Distrib.* 75. 1942. — ARGENTINA: Catamarca: Quebrada del Tala, March 15, 1909, Castillon 956 [Herb. Inst. Miguel Lillo 32251] (N-type).

Aloysia chacoënsis Moldenke — ARGENTINA: Salta: Lorohuasi, alt. 1650 m, dept. Cafayate, December 1, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 32847] (N).

Aloysia ligustrina (Lag.) Small — ARGENTINA: Catamarca: Los Bazanes, dept. Capayán, April 24, 1935, Peirano s. n. [Herb. Inst. Miguel Lillo 32868] (N). La Rioja: Los Llanos, La Jarilla, February 12, 1940, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 33892] (N). Misiones: Santa Ana, December 3, 1912, D. Rodríguez 66 [Herb. Inst. Miguel Lillo 32302] (N), so determined also by the collector. Santiago del Estero: La Banda, March 29, 1907, M. Lillo s. n. [Herb. Inst. Miguel Lillo 32305] (N), so determined also by the collector. Tucumán: Cruz Alta, July 29, 1913, Monetti 1035 [Herb. Inst. Miguel Lillo 32293] (N), so determined also by the collector; El Saladillo, November 10, 1907, M. Lillo 7183 [Herb. Inst. Miguel Lillo 33207] (N), so determined also by the collector; Tapia, October 19, 1911, D. Rodríguez 6 [Herb. Inst. Miguel Lillo 32320] (N), so determined also by the collector.

Aloysia Looseri Moldenke — CHILE: Valparaíso: cultivated at Valparaíso, Harshberger 1044 (Up), determined as *Lippia lycioides* by the collector.

Aloysia triphylla (L'Hér.) Britton — ARGENTINA: Catamarca: Las Faldas, Sierra de Belén, alt. 2000 m, dept. Belén, April, 1930, R. Schreiter s. n. [Herb. Inst. Miguel Lillo 37998] (N), called «cedrón», determined as *Lippia sp.* by the collector; same locality, March, 1939, R. Schreiter s. n. [Herb. Inst. Miguel Lillo 37997] (N), determined as *Lippia citriodora* (Lam.) H. B. K. by the collector. Tucumán: Río

del Nío, alt. 700 m, dept. Burruyacu, February 6, 1914, Monetti 1925 [Herb. Inst. Miguel Lillo 32112] (N), so determined also by the collector.

Aloysia virgata (Ruiz et Pav.) A. L. Juss. — ARGENTINA: Misiones: Salto Iguazú, September 4, 1910, D. Rodríguez 478 [Herb. Inst. Miguel Lillo 32271] (N). Salta: Antillas, January 18, 1910, M. Lillo 9790 [Herb. Inst. Miguel Lillo 32268] (N), so determined also by the collector; Rosario de la Frontera, December 3, 1905, M. Lillo 4612 [Herb. Inst. Miguel Lillo 32252] (N), so determined also by the collector. Tucumán: between Benjamín Paz and Trancas, alt. 800 m, dept. Trancas, May 2, 1931, R. Schreiter 7420 [Herb. Inst. Miguel Lillo 32658] (N); El Morado, alt. 700 m, dept. Burruyacu, February, 1936, R. Díaz s. n. [Herb. Inst. Miguel Lillo 32931] (N), determined as *Lippia* sp. by the collector.

Bouchea boliviiana (Kuntze) Moldenke — ARGENTINA: Salta: Río Las Piedras, dept. Orán, December 3, 1911, D. Rodríguez 174 [Herb. Inst. Miguel Lillo 32439] (N), determined as *Stachytarpheta* sp. by the collector; Piquirenda to Quebrada Yacui, alt. 600 m, February 3, 1925, R. Schreiter 3516 [Herb. Inst. Miguel Lillo 32447] (N), determined as *Stachytarpheta cayennensis* Vahl by the collector.

Bouchea fluminensis (Vell.) Moldenke — ARGENTINA: Jujuy: Ledesma, October 30, 1906, Dinelli s. n. [Herb. Inst. Miguel Lillo 32440] (G), corolla blue, determined as *Stachytarpheta* sp. by the collector.

Castelia cuneato-ovata Cav. — ARGENTINA: La Rioja: Olta, February 26, 1940, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 33900] (N). Salta: Talapampa, April 16, 1908, M. Lillo s. n. [Herb. Inst. Miguel Lillo 32457] (N), so determined also by the collector; Coronel Moldes, alt. about 1200 m, dept. La Viña, February 2, 1941, A. T. Hunziker 1312 (N), in the garden of the Estación Experimental, Puerta de Díaz, frequent. Tucumán: Cadillal, November 11, 1917, R. Schreiter s. n. [Herb. Inst. Miguel

Lillo 32600] (N), determined as *Priva laevis* Juss. by the collector; La Florida, dept. Leales, April 24, 1913, Monetti s. n. [Herb. Inst. Miguel Lillo 32466] (N), so determined also by the collector.

Junellia longidentata Moldenke, *Geogr. Distrib.* 75. 1942. — ARGENTINA: Tucumán: Amaicha, alt. 2090 m, December 29, 1912, Castillon 2460 [Herb. Inst. Miguel Lillo 31753] (N-type).

Lantana aristata var. **Cabrerae** Moldenke — ARGENTINA: Salta: Río de las Piedras, dept. Orán, November 5, 1911, D. Rodríguez 42 [Herb. Inst. Miguel Lillo 32197] (N), determined as *Lippia sp.* by the collector.

Lantana aristata var. **pluripedunculata** (Kuntze) Moldenke — ARGENTINA: Jujuy: Perico, February 2, 1910, M. Lillo 9861 [Herb. Inst. Miguel Lillo 32221] (M), determined as *Lippia geminata* var. *lanceolata* Griseb. by the collector. Tucumán: Tapia, December 18, 1911. D. Rodríguez 196 [Herb. Inst. Miguel Lillo 32222] (N), determined as *Lippia geminata* var. *lanceolata* by the collector.

Lantana Balansae Briq. — ARGENTINA: Catamarca: El Candado, dept. Andalgalá, February 2, 1915, P. Jörgensen 1025 [Herb. Inst. Miguel Lillo 32398] (N), identified as *Lippia sp.* by the collector. Jujuy: Sierra de Zenta, alt. 3000 m, March, 1931, E. Budin 7428 [Herb. Inst. Miguel Lillo 32594] (N).

Lantana Cabrerae Moldenke — ARGENTINA: Salta: Coronel Moldes, alt. about 1200 m, dept. La Viña, January 30, 1941, A. T. Hunziker 1006 (N), not very frequent.

Lantana Camara var. **aculeata** (L.) Moldenke — ARGENTINA: Tucumán: cultivated at Villa Luján, alt. 460 m, dept. Capital, February, 1919, S. Venturi 192 [Herb. Inst. Miguel Lillo 31884] (N), determined as *L. Camara* L. by the collector.

Lantana Camara var. **mista** (L.) L. H. Bailey — ARGENTINA : Tucumán : Capital, dept. Capital, November 16, 1909, M. Lillo s. n. [Herb. Inst. Miguel Lillo 32160] (N).

Lantana Chamissonis (D. Dietr.) Benth. — ARGENTINA : Misiones : Bonpland, March 11, 1910, D. Rodríguez 179 [Herb. Inst. Miguel Lillo 31815] (N). Tucumán : Negro Potrero, alt. 500 m, dept. Monteros, February 16, 1907, M. Lillo 5834 [Herb. Inst. Miguel Lillo 31811] (N).

Lantana cordobensis Moldenke — ARGENTINA : Buenos Aires : Otamendi, Partido de Campana, frequent in woods on the sloping banks of the Río Paraná, January 3, 1940, A. T. Hunziker 363 (N), flowers violet. Santiago del Estero : La Banda, April 16, 1907, M. Lillo 6180 [Herb. Inst. Miguel Lillo 31914] (N).

Lantana Fiebrigii Hayek — ARGENTINA : Misiones : Santa Ana, February 28, 1913, D. Rodríguez s. n. [Herb. Inst. Miguel Lillo 31854] (N).

Lantana foetida Rusby — ARGENTINA : Buenos Aires : Partido Quilmes, December 26, 1912, S. Venturi 134 [Herb. Inst. Miguel Lillo 31886] (N). URUGUAY : rare shrub along river, Río Uruguay and Río Chapiuy, February 24, 1941, Rosengurtt B. 3391 (N).

Lantana fucata Lindl. — ARGENTINA : La Rioja : Sierra Brava, February 17, 1940, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 33897] (N); Ilcal, near Olta, February 4 1940, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 33886] (N); Represa de Olta, February 27, 1940, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 33901] (N). Salta : Rosario de la Frontera, January 7, 1905, M. Lillo 3843 [Herb. Inst. Miguel Lillo 31905] (N), determined as «*Lantana lilacina* var.» by the collector. Tucumán : Las Salinas, May 28, 1913, Monetti s. n. [Herb. Inst. Miguel Lillo 31920] (N). URUGUAY : in river woods, Paysandú, Río Uruguay and Río Chapiuy, February 21, 1941, Rosengurtt B. 3230 (N).

Lantana micrantha Briq. — ARGENTINA : Tucumán : December 6 to 22, 1872, Lorentz et Hieronymus s. n. (N), determined as *Camara lilacina* f. *grandifolia* Kuntze by the collector and erroneously cited by me in *Lilloa* 5: 407 (1940) as *Lantana Camara* L.

Lantana Rusbyana Moldenke — BOLIVIA : Cochabamba : J. Steinbach 8690 [Herb. Mus. Argent. Cienc. Nat. 29/686] (Ra), previously erroneously determined by me as *L. velutinoides* var. *Bruchii* Moldenke.

Lippia alba (Mill.) N. E. Br. — ARGENTINA : Misiones : Santa Ana, September 14, 1912, D. Rodríguez 6161 [Herb. Inst. Miguel Lillo 32241] (N).

Lippia Arechavaletae Moldenke — URUGUAY : rare in rocky pastures, Paysandú, Río Uruguay and Río Chapiuy, February 22, 1941, Rosengurtt B. 3252 (N).

Lippia asperrima Cham. — URUGUAY : rare in fields, Paysandú, Río Uruguay and Río Chapiuy, February 24, 1941, Rosengurtt B. 3383 (N); so determined also by the collector.

Lippia Grisebachiana Moldenke — ARGENTINA : Los Bazanes, dept. Capayán, April 24, 1935, Peirano s. n. [Herb. Inst. Miguel Lillo 32867] (N), called «palo amarillo»; Las Mansas, alt. 2300 m, dept. Belén, March, 1938, R. Schreiter 19550 [Herb. Inst. Miguel Lillo 32858] (N), determined as *Verbena* sp. by the collector; Pomancillo, January 11, 1940, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 33879] (N); Gracián, January 2, 1940, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 33876] (N); Londres, alt. 1350 m, dept. Belén, January 22, 1934, Peirano s. n. [Herb. Inst. Miguel Lillo 32845] (N); Cerro Duraznos, alt. 1600 m, Andalgalá, January, 1937, M. M. Job 1375 (N), flowers pink, erroneously cited by me in *Lilloa* 5: 405 (1940) as *Lantana Balansae* Briq. Tucumán: mouth of Río Salí (Dique), October 31, 1920, R. Schreiter 2356 [Herb. Inst. Miguel Lillo 32624] (N), determined as «*Lippia lantanifolia* Griseb. aff.» by the collector; Gualinchay, alt. 1500 m, dept. Trancas,

November, 1933, R. Schreiter 9732 [Herb. Inst. Miguel Lillo 32828] (N), determined as *Verbena sp.* by the collector; Quebrada del Paso, alt. 2000 m, dept. Trancas, December, 1917, R. Schreiter 372 [Herb. Inst. Miguel Lillo 32622] (N), determined as *L. lantanifolia* by the collector; Escaba, dept. Río Chico, December 5, 1913, Monetti 1625 [Herb. Inst. Miguel Lillo 32353] (N); Tafí, alt. 2000 m, dept. Tafí, January 29, 1908, M. Lillo 7445 [Herb. Inst. Miguel Lillo 32393] (N); Gualinchay, San Pedro de Colalao, January 30, 1927, R. Schreiter 4911 [Herb. Inst. Miguel Lillo 32340] (N); Río del Nío, alt. 700 m, dept. Burruyacu, February 7, 1914, Monetti 1935 [Herb. Inst. Miguel Lillo 32388] (N); Tafí, alt. 2000 m, dept. Tafí, March 5, 1905, M. Lillo 4304 [Herb. Inst. Miguel Lillo 32382] (N), determined as *L. lantanifolia* by the collector.

Lippia hieracifolia Cham. — ARGENTINA : Corrientes : north of Sauce, November 25, 1940, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 34483] (N). Misiones : Santa Ana, February 15, 1913, D. Rodríguez 773 [Herb. Inst. Miguel Lillo 31582] (N), flowers yellow, determined as *Verbena sp.* by the collector.

Lippia laxibracteata Herzog. — ARGENTINA : Salta : Unquillo, alt. 1200 m, dept. La Candelaria, November 7, 1931, R. Schreiter 6699 [Herb. Inst. Miguel Lillo 32707] (N).

Lippia suffruticosa (Griseb.) Kuntze — ARGENTINA : Salta : Rosario de la Frontera, January 7, 1905, M. Lillo 3842 [Herb. Inst. Miguel Lillo 32075] (N), determined as *L. geminata* by the collector. Tucumán : La Ramada, F. C. C. A., alt. 450 m, dept. Burruyacu, April 2, 1933, Peirano s. n. [Herb. Inst. Miguel Lillo 32895] (N).

Lippia tegulifera Briq. — ARGENTINA : Misiones : Santa Ana, January 6, 1913, D. Rodríguez 697 [Herb. Inst. Miguel Lillo 32236] (N), so determined also by the collector.

Lippia turbinata Griseb. — ARGENTINA : Catamarca : Andalgalá, dept. Andalgalá, February 20, 1915, P. Jörgensen

1024 [Herb. Inst. Miguel Lillo 32080] (N), so determined also by the collector. La Rioja: Olta, February 25, 1940, A. Castellanos, s. n. [Herb. Mus. Argent. Cienc. Nat. 33898] (N). Salta: Avenida Virrey Toledo, dept. Capital, January 30, 1941, J. B. Correa 5 [Herb. Inst. Miguel Lillo 37041] (N), called «poleo». Santiago del Estero: La Banda, April 2, 1907, M. Lillo 6182 [Herb. Inst. Miguel Lillo 32088] (N), so determined also by the collector. Tucumán: Capital, dept. Capital, D. Rodríguez 1183 [Herb. Inst. Miguel Lillo 32095] (N), so determined also by the collector; Río del Nío, alt. 700 m, dept. Burruyacu, February 8, 1914, Monetti 1949 [Herb. Inst. Miguel Lillo 32090] (N), so determined also by the collector; Las Lecinas, alt. 270 m, Leales May 28, 1913, Monetti s. n. [Herb. Inst. Miguel Lillo 32086] (N), so determined also by the collector; Colonia, dept. Leales, January 26, 1917, M. Lillo 18826 [Herb. Inst. Miguel Lillo 32077] (N), determined as *L. poleo* Lillo by the collector; El Nío, alt. 900 m, dept. Burruyacu, April 29, 1937, Peirano s. n. [Herb. Inst. Miguel Lillo 32831] (N) Tapia, December 21, 1911, D. Rodríguez 212 [Herb. Inst. Miguel Lillo 32094] (N), so determined also by the collector; Chañar Pozo, alt. 300 m, dept. Leales, November 1919, S. Venturi 655 [Herb. Inst. Miguel Lillo 32092] (N), so determined also by the collector.

Lippia turbinata f. angustifolia Osten — ARGENTINA: Tucumán: Campo Alegre, December 8, 1924, R. Schreiter 7962 [Herb. Inst. Miguel Lillo 32616] (N), so determined also by the collector.

Lippia turnerifolia Cham. — ARGENTINA: Tucumán: Muñecas, alt. 500 m, dept. Tafí, December 16, 1923, R. Schreiter s. n. [Herb. Inst. Miguel Lillo 37994] (N); Muñecas, alt. 500 m, dept. Capital, S. Venturi 1375 [Herb. Inst. Miguel Lillo 32167] (N), so determined also by the collector; Ranchillos, alt. 400 m, dept. Cruz Alta, September 25, 1913, Monetti 1138 [Herb. Inst. Miguel Lillo 32176] (N).

Neosparton aphyllum (Gill. et Hook.) Kuntze — ARGENTINA : Mendoza : Arroyo Colorado, Rio Malal-hue, January 12, 1941, A. Castellanos s. n. [Herb. Mus. Argent. Cienc. Nat. 36868] (N).

Neosparton ephedroides Griseb. — ARGENTINA : Catamarca : Quebrada de San Buenaventura, alt. 2400 m, dept. Tinogasta, February 9, 1930, R. Schreiter 6340 [Herb. Inst. Miguel Lillo 32417] (N); El Cajón, El Saladillo, January 13, 1914, Castillon 3346 [Herb. Inst. Miguel Lillo 38000] (N), so determined also by the collector. Tucumán : Managua, Gololao del Valle, alt. 2000 m, dept. Tafí, December, 1931, R. Schreiter 7112 [Herb. Inst. Miguel Lillo 32597] (N), so determined also by the collector.

Parodianthus ilicifolia (Moldenke) Troncoso, *Darwiniana* 5: 33, 36, 39. 1941. —

The material cited by me in a previous installment of these Contributions as *Timotocia ilicifolia* (Moldenke) Moldenke should be changed to *Parodianthus ilicifolia* (Moldenke) Troncoso. Miss Troncoso has given a very thorough and scholarly discussion of this plant in a recent number of *Darwiniana*, cited above.

Verbena Berterii (Meisn.) Schau. — CHILE : Coquimbo : Skottsberg et Skottsberg 843 (N), previously determined as *V. porrigenes* R. A. Phil. and « *Verbena Berterii* Schau. » Valparaíso : Skottsberg et Skottsberg 930 (N). State undetermined : Herb. Mus. Nac. Santiago 7 (N).

Verbena bonariensis L. — ARGENTINA : Buenos Aires : Delta Paraná, Secc. 1, Arroyo Gálvez, February, 1938, A. T. Hunziker 911 (N). URUGUAY : rare in swamp, Palleros, dept. Cerro Largo, January, 1941, Gallinal, Aragone, Bergalli, Campal y Rosengurtt PE. 4733e (N), so determined also by the collectors.

Verbena brasiliensis Vell. — ARGENTINA : Salta : Coronel Moldes, dep. La Viña, January 30, 1941, A. T. Hunziker 1035 (N), rare.

Verbena Cabrerae Moldenke — ARGENTINA: Formosa, Formosa, February, 1918, P. Jörgensen 2470 [Herb. Inst. Miguel Lillo 31725] (N), determined as *V. erinoides* Lam. by the collector.

Verbena calliantha Briq. — ARGENTINA: Misiones: Santa Ana, September 7, 1912, D. Rodríguez 548 [Herb. Inst. Miguel Lillo 31367] (N), flowers rose, determined as *V. chamaedrifolia* Juss. by the collector; Tucumán: Los Herreras, May 30, 1913, Monetti s. n. [Herb. Inst. Miguel Lillo 31696] (N), determined as *V. erinoides* Lam. by the collector; Cerro del Campo, alt. 1100 m, dept. Burruyacu, March, 1918, Bailetti 231 [Herb. Inst. Miguel Lillo 31690] (N), flowers violet, determined as *V. erinoides* Lam. by the collector; Cuesta de Anfama, alt. 2500 m, February 12, 1905, M. Lillo 3989 [Herb. Inst. Miguel Lillo 31691] (N), flowers blue, determined as *V. erinoides* by the collector; Tapia, alt. 600 m, September 19, 1920, R. Schreiter 2358 [Herb. Inst. Miguel Lillo 32760] (N), determined as *V. erinoides* by the collector.

Verbena carollata Briq. — URUGUAY: Palleros, Río Negro, dept. Cerro Largo, January, 1941, Gallinal, Aragone, Bergalli, Campal y Rosengurtt PE. 4605, in part (N), mixed with *V. intermedia*.

Verbena corymbosa Ruiz et Pav.—CHILE: Valdivia: in virgin forest, Cordillera de la Costa, 1938, Alcibiades Santa Cruz s. n. (Ba), so determined also by the collector.

Verbena gracilescens (Cham.) Herter — ARGENTINA: Buenos Aires: Barracas al Sud, March 2, 1902, S. Venturi 59 [Herb. Inst. Miguel Lillo 31418] (N), flowers violet. Chaco: Campo Bonazzola, Enrique Urien, dept. Tapenaga, November, 1940, A. P. Rodrigo 2537 (N). Misiones: Posadas, September 7, 1909, D. Rodríguez 69 [Herb. Inst. Miguel Lillo 31425] (N). Santiago del Estero: La Banda, April 14, 1907, M. Lillo 6185 [Herb. Inst. Miguel Lillo 31423] (N). Tucumán: Capital, alt. 480 m, dept. Capital, October 1910,

M. Lillo 10692 [Herb. Inst. Miguel Lillo 31413] (N); Maríño, alt. 400 m, dept. Burruyacu, October 15, 1932, Peyrano s. n. [Herb. Inst. Miguel Lillo 32897] (N); Capital, October 17, 1917, R. Schreiter 73 [Herb. Inst. Miguel Lillo 32767] (N), flowers violet. BOLIVIA: Campo Buyuiri, J. Steinbach 1614 [Herb. Inst. Miguel Lillo 31419] (N), flowers blue. Most of the above specimens were determined as « *Verbena graciliscescens* Cham. » by the collectors.

Verbena hispida Ruiz et Pav. — ARGENTINA: Formosa, dept. Capital, October, 1918, P. Jörgensen 2638 [Herb. Inst. Miguel Lillo 31322] (N), so determined also by the collector. Salta: Río las Piedras, dept. Orán, November 9, 1911, D. Rodríguez 161 [Herb. Inst. Miguel Lillo 31317] (N), so determined also by the collector. Tucumán: Capital, alt. 500 m, dept. Capital, October 10, 1906, M. Lillo 5201 [Herb. Inst. Miguel Lillo 31329] (N), so determined also by the collector; Cerro la Ramada, alt. 500 m, dep. Burruyacu, December, 1914, Monetti 3015 [Herb. Inst. Miguel Lillo 3015] (N), flowers violet, so determined also by the collector; Barrancas Coloradas, alt. 700 m, dept. Capital, May, 1920, S. Venturi 825 [Herb. Inst. Miguel Lillo 31331] (N), so determined also by the collector; Capital, alt. 500 m, dept. Capital, September 20, 1920, R. Schreiter 2359 [Herb. Inst. Miguel Lillo 32785] (N), determined as « *Verbena littoralis* H. B. K. » by the collector; Las Salinas, June 11, 1910, Monetti 1807 [Herb. Inst. Miguel Lillo 31319] (N), flowers blue; so determined also by the collector.

Verbena intermedia Gill. et Hook. — URUGUAY: frequent in fields, Palleros, Río Negro, dept. Cerro Largo, January, 1941, Gallinal, Aragone, Bergalli, Campal y Rosengurtt PE. 4605, in part (N), mixed with *V. carollata*; in wet soil of meadow near river, Paysandú, Río Chapiuy, February 21, 1941, Rosengurtt B. 3246 (N), flowers violet: common along railroad tracks, Pedrera, Canelones, June 6, 1937, Rosengurtt B. 1915 (N); Paysandú, Río Urugnay and Río Chapiuy, February 23, 1941, Rosengurtt B. 3255 (N).

Verbena laciniata (L.) Briq.—CHILE: Talca: 1938, Alcibiades Santa Cruz s. n. (Ba), called « sandia lahuen », determined as *V. erinoides* Lam. by the collector.

LAMIACEAE

(determinations by Carl Epling)

Cunila incana Benth. — ARGENTINA: Misiones: Santa Ana, August, 15, 1912, D. Rodríguez 517 [Herb. Inst. Miguel Lillo 37744] (N).

Cunila microcephala Benth.—URUGUAY: swampy fields, Pálleros, Río Negro, dept. Cerro Largo, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 2376 (N), flowers fragrant, white.

Glechon mariifolia Benth.—URUGUAY: Arroyo La Pantanosa, Rodia, February, 1938, Rosengurtt B. 2486 (N), so determined also by the collector.

Hedeoma medium Epl. — URUGUAY: in rocky fields, Arroyo Negro, Paysandú, November 12, 1937, Rosengurtt B. 2252 (N), determined as *H. multiflora* Benth. by Moldenke.

Hyptis Balansae Briq.—ARGENTINA: Misiones: Loreto, March 16, 1910, D. Rodríguez 193 [Herb. Inst. Miguel Lillo 37561] (N).

Hyptis duplicato-dentata Pohl—BOLIVIA: Santa Cruz: Buena Vista, June, 1915, Steinbach 1476 [Herb. Inst. Miguel Lillo 37569] (N), alt. 450 m.

Hyptis fasciculata Benth.—ARGENTINA: Misiones: Salto Igua-zú, margin of woods, August 23, 1910, D. Rodríguez 421 [Herb. Inst. Miguel Lillo 37651] (N).

Hyptis floribunda Briq.—ARGENTINA: Tucumán: Herreras, dept. Leales, June 9, 1913, Monetti 95 [Herb. Inst. Miguel Lillo 37601] (N).

Hyptis lappacea Benth. — ARGENTINA: Chaco: Colonia Benítez, alt. 55 m, January 18, 1941, T. Meyer 3632 [Herb. Inst. Miguel Lillo 17288] (N), flowers white. Tucumán: Río Salí, dept. Capital, alt. 450 m, February 25, 1922, S. Venturi 1733 [Herb. Inst. Miguel Lillo 37532] (N).

Hyptis Lorentziana Hoffm. — ARGENTINA: Misiones: Salto Iguazú, alt. about 160 m, April 6, 1913, D. Rodríguez 790 [Herb. Inst. Miguel Lillo 37543] (N).

Hyptis mutabilis (Rich.) Briq. — ARGENTINA: Jujuy: Termas de Reyes, alt. about 1800 m, dept. Capital, February 9, 1941, A. T. Hunziker 1383 (N), common. Salta: Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 28, 1941, T. Meyer 3634 [Herb. Inst. Miguel Lillo 17291] (N); plants 1.5 m, tall. Tucumán: Cochuna, dept. Chicligasta, March 4, 1941, C. A. O'Donell 21 [Herb. Inst. Miguel Lillo 36161] (N). *

Hyptis spicigera Lam. — BOLIVIA: Santa Cruz: Cantón Buena Vista, alt. 400 m, prov. del Sara, May 12, 1916, J. Steinbach 2230 [Herb. Inst. Miguel Lillo 37671] (N), flowers bluish-white.

Hyptis vestita Benth. — ARGENTINA: Misiones: Santa Ana, March 12, 1910, D. Rodríguez 176 [Herb. Inst. Miguel Lillo 37566] (N).

Lamium amplexicaule L. — ARGENTINA: Buenos Aires: La Granja, Partido de La Plata, November 10, 1940, A. P. Rodrigo 2347 (N), so determined also by the collector.

Leonurus sibiricus L. — ARGENTINA: Chaco: Campo Bonazzola, Enrique Urien, dept. Tapenaga, November 1940, A. P. Rodrigo 2571 (N), flowers rose or pink. Tucumán: La Ceferrina, dept. Cruz Alta, February 24, 1941, A. Ousset 111 [Herb. Inst. Miguel Lillo 35897] (N).

Marrubium vulgare. — ARGENTINA: Buenos Aires: November 8, 1912, D. Rodríguez 51 [Herb. Inst. Miguel Lillo 37207] (N), flowers white.

Mentha aquatica L. — ARGENTINA : Tucumán : Yerba Buena, alt. 500 m, dept. Tafí, February, 1919, S. Venturi 220 [Herb. Inst. Miguel Lillo 37739] (N).

Minthostachys verticillata (Griseb.) Epl. — ARGENTINA : Tucumán : Cochuna, dept. Chicligasta, March 4, 1941, C. A. O'Donnell 17 [Herb. Inst. Miguel Lillo 36151] (N); Puerto Viejo, Noreo, alt. 1200 m, May 12, 1909, Budin s. n. [Herb. Inst. Miguel Lillo 37716] (N).

Ocimum Selloi Benth. — URUGUAY : common in swamps, Bañado Medina, Cerro Largo, February 19, 1938, Rosengurtt B. 2500 (N), perennial, determined as *O. carnosum* Link et Otto by the collector.

Rhabdocaulon strictus (Benth.) Epl. — URUGUAY : swamp, Río Uruguay to the north of Quegnay, Paysandú, March 22, 1940, Rosengurtt B. 3343 (N), so determined also by the collector.

Salvia cardiophylla Benth. — ARGENTINA : Chaco : Campo Bonazzola, Enrique Urien, dept. Tapenaga, November, 1940, A. P. Rodrigo 2513 (N), flowers white; same locality and date, A. P. Rodrigo 2524 (N).

Salvia Gilliesii Benth. — ARGENTINA : San Luis : Cerro La Aguada, November 5, 1940, G. Covas 1100 (N), flowers blue, so determined also by the collector.

Salvia guaranitica St. Hil. — ARGENTINA : Tucumán : alrededores, alt. 460 m, dept. Capital, October 10, 1906, M. Lillo 5213 [Herb. Inst. Miguel Lillo 17595] (N).

Salvia pallida Benth. — ARGENTINA : Buenos Aires : Salliqueló, Partido de Pellegrini, March 14, 1941, A. L. Cabrera 6977 (N), in meadows, corolla light-blue.

Salvia personata Epl. — ARGENTINA : Tucumán : Cochuna, dept. Chicligasta, March 4, 1941, C. A. O'Donnell 73 [Herb. Inst. Miguel Lillo 17432] (N); La Criolla, alt. 1200 m, March 9, 1912, D. Rodríguez 386 [Herb. Inst. Miguel Lillo 17690] (N), flowers clear-blue.

Salvia procurrens Benth. — ARGENTINA: Buenos Aires: Partido Quilmes, November 15, 1912, D. Rodríguez 66 [Herb. Inst. Miguel Lillo 16456] (N). URUGUAY: grassy slopes, Palleros, Río Negro, dept. Cerro Largo, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt A. 1136 (N), so determined also by E. Nicora.

Salvia rypara Briq. — ARGENTINA: Salta: Coronel Moldes, alt. about 1200 m, dept. La Viña, January 30, 1941, A. T. Hunziker 977 (N), rather frequent; Arroyo de Yacuiba, October, 1915, J. Steinbach 1640 [Herb. Inst. Miguel Lillo 17570] (N), 1.8 m tall; Río de las Piedras; dept. Orán, November 27, 1911, D. Rodríguez 156 [Herb. Inst. Miguel Lillo 37429] (N). Tucumán: El Cadillal, dept. Capital, November 27, 1904, M. Lillo 3825 [Herb. Inst. Miguel Lillo 37423] (N), corolla blue.

Salvia stachidifolia Benth. — ARGENTINA: Tucumán: La Queñoa, alt. 2600 m, March 11, 1912, D. Rodríguez 399 [Herb. Inst. Miguel Lillo 12577] (N).

Salvia uliginosa Benth. — URUGUAY: Paso Pache, Río Sta. Lucía, Florida, February 25, 1940, Rosengurtt B. 3114 (N), so determined also by the collector.

Salvia verbenaca L. — URUGUAY: Sayago, Montevideo, November 29, 1929, G. Herter 85430 [Herb. Inst. Miguel Lillo 37400] (N), flowers pale-lilac, so determined also by the collector.

Satureja parvifolia (Phil.) Epl. — ARGENTINA: Tucumán: Tafí, Quebrada al Norte, alt. 2000 m, dept. Tafí, February 11, 1908, M. Lillo 7616 [Herb. Inst. Miguel Lillo 37474] (N); Cerro Muñoz, Quebrada Río Blanco, alt. 2600 m, February 27, 1905, M. Lillo 4268 [Herb. Inst. Miguel Lillo 37488] (N); Escaba, alt. 2250 m, Río Chico, December 22, 1913, Monetti 1776 [Herb. Inst. Miguel Lillo 37477] (N); Lara, alt. 3200 m, January 22, 1912, D. Rodríguez 266a (N).

Scutellaria racemosa Pers. (= *S. Rojasi* Briq.) — ARGENTINA :

Chaco : Las Palmas, September, 1917, P. Jörgensen 2239 [Herb. Inst. Miguel Lillo 37192] (N). Tucumán : Agua Dulce, dept. Leales, September 26, 1913, Monetti 1162 [Herb. Inst. Miguel Lillo 37196] (N); alt. 420 m, September 11, 1913, Monetti 1108 [Herb. Inst. Miguel Lillo 37197] (N), flowers rosy; dept. Leales, October 16, 1908, Dinelli 8590 [Herb. Inst. Miguel Lillo 37201] (N), flowers rose-pink.

Stachys annua L. — ARGENTINA : Buenos Aires: Partido Quilmes, October 10, 1912, D. Rodríguez 8 (N).

Stachys Micheliana Briq. — URUGUAY : Agronomía, Paysandú, November 9, 1937, Rosengurtt B. 2221 (N).

Stachys petiolosa Briq. — ARGENTINA : Tucumán : dept. Capital, October 10, 1906, M. Lillo 5203 [Herb. Inst. Miguel Lillo 37218] (N), flowers rosy-violet; Quinta Lillo, dept. Capital, October 26, 1940, H. Descole s. n. [Herb. Inst. Miguel Lillo 35942] (N).

Teucrium laevigatum Vahl — ARGENTINA : Tucumán : San Pablo, Sierra San Javier, dept. Famaillá, alt. 1200 m, October 15, 1905, M. Lillo 4546 [Herb. Inst. Miguel Lillo 34080] (N).

Teucrium vesicarium Mill. — ARGENTINA : Misiones : Santa Ana, December 2, 1912, D. Rodríguez 657 [Herb. Inst. Miguel Lillo 34096] (N), flowers pale-pink. URUGUAY : swampy fields, Palleros, Río Negro, dept. Cerro Largo, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt A. 776 (N), so determined also by E. Nicora.

SOLANACEAE

(Nicotiana determinations by T. H. Goodspeed)

Brugmansia bicolor Pers. — BOLIVIA : no locality designated, M. Bang 1942 (C), determined as *Datura sanguinea* R.

et P. by N. L. Britton and as *Brugmansia sanguinea* (R. et P.) G. Don by H. H. Rusby.

Brugmansia candida Pers. — BOLIVIA: in the vicinity of Sorata, prov. Larecaja, G. Mandon 443 (N), cultivated and flowering throughout the year, determined as *Datura arborea* by the collector. CHILE: Tacna-Arica region, Mrs. R. S. Shepard s. n. (N), determined as *Datura candida* (Pers.) Safford at the Gray Herbarium.

Brugmansia sanguinea D. Don — BOLIVIA: no locality designated, M. Bang 1943 (C), determined as *Datura arborea* L. by N. L. Britton and as *Brugmansia arborea* (L.) Steud. by H. H. Rusby.

Brugmansia suaveolens (Humb. et Bonpl.) Bercht et Presl. BOLIVIA: Rurrenabaque, alt. 1000 feet, November 29, 1921, E. O. White 1098 (N), to 6 feet tall, flowers light creamy-yellow, determined as *Datura sp.* by H. H. Rusby; no locality designated, Herb. Mulford Biol. Expl. 1098a (N), determined as *Datura sp.* by H. H. Rusby; Tumupasa, alt. 1800 feet, July, 1902, R. S. Williams 593 (N), determined as *Datura arborea* L. by H. H. Rusby, later changed to *D. suaveolens* H. et B. PARAGUAY: along broocks, Villarrica, P. Jörgensen 7371 (N), shrub 1 to 3 m tall, petals white, determined as «*Datura suaveolens* L.» by the collector.

Datura ferox L. — ARGENTINA: Buenos Aires: Quilmes, La Plata region, C. M. Hicken 968 (N), determined es *D. Stramonium* L. by the collector.

Datura inoxia Mill. — PARAGUAY: Asunción, November 8, 1888, T. Morong 69 (C), «The common *Datura* around Asunción, as frequent there as is our *D. Stramonium* here. A. very beautiful flower, the corolla large, funnel-form, pure-white and very fragrant», determined as *D. Metel* L. by the collector.

Datura Metel L. — PARAGUAY: Asunción, April 3, 1889, T. Morong 652 (C), «the flowers are double, with 1-3 series

of corollas, white and purple-colored. The stem is polished and shining blackish-purple. This plant runs wild in waste grounds around Asunción doubtless escaped from cultivation. The fruit pods are often double or triple like the corolla. It is a favorite flower in Asunción gardens, where it sometimes grows to the height of 5 m or more. Corolla light purple, very large and showy, double. If often escapes into waste grounds where it retains the double corolla, sometimes having as many as 3 corollas, one inside of the other. Running wild, it is very apt to have deformed fruit. Sometimes 2 or 3 imperfectly developed burrs coalesce in one»: determined as *D. fastuosa* L. by the collector.

Datura Stramonium L. — BOLIVIA: Cochabamba: Valle de Cochabamba, alt. 2600 m, December 16, 1928, J. Steinbach 8770 (N).

Nicotiana bonariensis Lehm. — URUGUAY: grassy slopes, San Pedro, Cerro Colorado, det. Florida, December, 1937, Gallinal, Aragone, Bergalli Campal y Rosengurtt B. 708 (N), flowers white, so determined also by the collector.

Nicotiana glauca Grah. — ARGENTINA: Salta: Alemania, alt. 1170 m, dep. Rosario de Lerma, January 13, 1941; T. Meyer 3656 [Herb. Inst. Miguel Lillo 17297] (N), called «palán-palán», 4 m tall, so determined also by the collector.

Nicotiana petunioides Millán — ARGENTINA: Jujuy: Tilcara, alt. 2480 m, dep. Tilcara, February 9, 1940, T. Meyer s. n. [Herb. Inst. Miguel Lillo 33404] (N), herbaceous, 30 to 40 cm tall, flowers greenish.

Nicotiana sylvestris Speg. et Comes — ARGENTINA: Tucumán: Tapia to Raco, alt. 650 m March, 1938, dept. Trancas, H. R. Descole 10661 [Herb. Inst. Miguel Lillo 35089] (N), flowers white.

Nicotiana undulata R. et P. — ARGENTINA : Jujuy : La Quiaca, alt. 3450 m, dept. Yavi, February 15, 1940, T. Meyer s. n. [Herb. Inst. Miguel Lillo 33407] (N), flowers greenish-white.

SCROPHULARIACEAE

(determinations by Francis W. Pennell)

Calceolaria ascendens Lindl. — CHILE : Las Palmas, October, 1914, Mr. and Mrs. J. N. Rose 19361 (N).

Calceolaria ascendens glandulifera (Wit.). — CHILE : San Cristóbal, vicinity of Santiago, October 27, 1900, G. T. Hasting 74 (N), determined as « *Calceolaria adscendens* Lindl. » by doctor Reiche; in thickets, Quillota, October, 1829, Bertero 875 (M), originally determined as *C. nivalis* H. et B., then changed to *C. adscendens* Lindl. by Kränzlin.

Calceolaria biflora Lam. — PATAGONIA : Punta Arenas, Magellan Straits, November 26, 1886, W. E. Saford s. n. (C), determined as *C. plantaginea* L. by the collector; 50/3°, 1882 to 1884, F. P. Moreno y Tonini 245 (N), originally determined as *C. plantaginea*, then as *C. biflora* Lam. and *Fagelia biflora* (Lam.) Kuntze by Otto Kuntze; Lago Viémeda, in woods at 900 m alt., January, 1916, Witte 30 (N), so determined also by Hicken.

Calceolaria cana Cav. — CHILE : Terranes de Chillán, December 31, 1919, Prof. and Mrs. E. W. D. Holway s. n. (N). Cuoricó : Hacienda Monte Grande, alt. about 1600 m, December, 1924, E. Werdermann 504 (N), so determined also by the collector.

Calceolaria corymbosa Ruiz et Pav. — CHILE : Dombey 307 (N-isotype), Valparaíso : Quintero, alt. about 20 m, September, 1923, E. Werdermann 25 (N), so determined also by the collector.

Calceolaria dentata R. et P. — ARGENTINA : Neuquén : San Martín de los Andes, February 14, 1940. A. L. Cabrera 6128 (N).

Calceolaria elatior Griseb. — ARGENTINA: Jujuy: October, 1892, flowers yellow, O. Kuntze s. n. (N), determined as *Fagelia heterophylla* (R. et P.) Kuntze by the collector. BOLIVIA: Santa Cruz: moist thickets, alt. 1200 m, Cerro Tres Cruces, October 8, 1928, S. Steinbach 8136 (N).

Calceolaria Fiebrigiana Kränzl. — ARGENTINA: Salta: vicinity of Nevado del Castillo, March, 1873, G. Hieronymus 48 (N), determined as *C. foliosa* Griseb. and then *Fagelia Grisebachii* Kuntze by Otto Kuntze, later changed to *C. Hieronymi* Kränzl. by Kränzlin. Tucumán: Valle de Tafí, 1908, C. Bruch s. n. (N).

Calceolaria filicaulis Clos — CHILE: Río Quino, February 17, 1892, O. Kuntze s. n. (N), determined as *Fagelia filicaulis* (Clos) Kuntze by the collector.

Calceolaria flabellifolia Kränzl. — ARGENTINA: Mendoza: in wet depressions, frequent along streams between Alverjito and Leñas Amarillas, upper Río Salado, February 9 or 10, 1893, F. Kurtz 7653 (N), determined as *C. plantaginea* L. by the collector; Paso Cruz, 34°, alt. 2500 m, Cordillera, 1892, O. Kuntze 34 (N), determined as *Fagelia biflora* (Lam.) Kuntze var. *uniflora* Kuntze by the collector. CHILE: Curicó: Volcán Peteroa, alt. about 2500 m, January, 1925, E. Werdermann 587 (N-isotype), originally determined as *C. biflora* Lam. by the collector.

Calceolaria Fothergilli Ait. — FALKLAND ISLANDS: 1895, Miss L. H. Firmin s. n. (C), so determined also by N. L. Britton.

Calceolaria Guentheri Kränzl. — BOLIVIA: La Paz: vicinity of Sorata, between Hunaypata and Lucmapampa, prov. Larecaja, alt. 2650 to 3000 m, March or April, 1859, G. Mandon 455 (N).

Calceolaria hypericina Poepp. — CHILE: Paso Cruz, alt. 2300 m, January, 1892. O. Kuntze s. n. (N), determined as *Fagelia hypericina* (Poepp.) Kuntze by the collector; Chili, 1828 to 1834. C. Hay 552 (N), determined as *C. thyrsiflora* Grah. by the collector.

Calceolaria llaimae Kränzl. — CHILE: Cautín : Volcán Llaima, alt. about 1100 m, February, 1927, E. Werdermann 1228 (N-isotype), so determined also by the collector.

Calceolaria Losseni Kränzl. — ARGENTINA: Córdoba : in wet woods, Sierra Achala, January 4, 1895, F. Kurtz 8320 (N), determined as *C. teucrioides* Griseb. by the collector ; Quebrada de Los Gigantes, Sierra Achala, January 22, 1880, C. Galander s. n. (N), determined as *Fagelia scabra* (R. et P.) Kuntze by Otto Kuntze ; Río Arriba, October 6, 1883, C. Galander s. n. (N), determined as *Fagelia scabra*, by Kuntze ; Los Gigantes, dept. Punilla, March 17, 1939, G. Dawson 507 (N) ; Champaqui, September, 1889, F. Kurtz 6885 (N), determined as *C. teucrioides* by the collector and as *Fagelia scabra* by Kuntze ; Pampa de Achala, between La Porta and Merillas, alt. about 1800 m, January or February, 1936, A. P. Rodrigo 493 (D, N).

Calceolaria mimuloides Clos — CHILE: Paso Cruz, alt. 2300 m, January, 1892, O. Kuntze s. n. (N), flowers yellow, determined as *Fagelia racemosa* (Cav.) Kuntze by the collector and cited by Kränzlin.

Calceolaria montana Cav. (*C. villosa* Phil.) — CHILE: 1828 to 1834, C. Gay 108 (N), determined as *C. paralia* Cav. by the collector.

Calceolaria palenae Phil. — ARGENTINA: Neuquén : Quebrada del Arroyo Chacaycó, February 7, 1939, A. Chicchi 79 (N). Lago Fontana, February 28, 1896, J. Koslowsky s. n. (N), determined as *C. nudicaulis* Benth. by A. P. Rodrigo. CHILE: Ñuble : Baños de Chillán, Nieblas, alt. about 2000 m, March, 1927, E. Werdermann 1346 (N), determined as *C. nudicaulis* Phil. by the collector. PATAGONIA : 50/3°, 1882 to 1884, F. P. Moreno y Tonini 422 (N), determined as *Fagelia nudicaulis* (Benth.) Kuntze by Otto Kuntze.

Calceolaria paposana Phil. — CHILE: Antofagasta : Taltal, alt. about 400 m, dept. Taltal, October, 1925, E. Werdermann 847 (N), so determined also by the collector.

Calceolaria pinifolia Cav. — ARGENTINA: Mendoza: El Salto near Cruces, October, 1896. W. Bodenbender s. n. [F. Kurtz 10005] (N), so determined also by the collector.

Calceolaria polyrhiza Cav. — ARGENTINA: Chubut: Choique Vielahne, Lago Musters, 1897, S. Roth s. n. (N), determined as « *Calceolaria Forthergillii* Sol. » by A. P. Rodrigo; Valle del Río Senger, 1897, Moreteau 19 (N), determined as *C. lanceolata* Cav. by A. P. Rodrigo. PATAGONIA: Terr. Santa Cruz, alt. about 250 m, November 20, 1928, A. Donat 24 (N), determined as *C. lanceolata* Cav. by the collector; in the valleys and mountains of the Cordillera of the Andes, in the vicinity of the south shores of Lake Argentine, 30 to 50 km, west from the Santa Cruz river, between November, 1907 and March 1908, C. W. Furlong 117b (N), determined as « *Calceolaria Pritchardi* (Rendle) » by the collector; Killik Aike, Río Gallegos, January 2, 1900, B. Brown 56 (N), determined as *C. biflora* Lam. by the collector; 50/3°, 1882 to 1884, F. P. Moreno y Tonini 420 (N), determined as *Fagelia Volkmannii* (Phil.) Kuntze by Otto Kuntze; same locality and date, E. P. Moreno y Tonini 190 (N), determined as *Fagelia Volkmannii* by Kuntze.

Calceolaria pusilla Witasek. — CHILE: Ñuble: Nieblas alt. about 2000 m, Baños de Chillán, March, 1927, E. Werdermann 1352 (N), determined as *C. lanceolata* Cav. by the collector.

Calceolaria racemosa Cav. — CHILE: Gillies s. n. (T), determined as *C. Paralia* Cav. by the collector; in grassy fields and woods, Quillota, October, 1860, Bertero 874 (T), determined as « *Calceolaria montana*? » by the collector. Aconcagua: between La Ligua and Los Molles, October 22, 1914, Mr. and Mrs. J. N. Rose 19387 (N).

Calceolaria tenella Poepp. et Endl. — PATAGONIA: in the Cerro Huenuel, alt. about 1200 m, Lago Viedma, January, 1916, Witte 32 (N), so determined also by Hicken; in the valleys and mountains of the Cordillera of the Andes, in the vicinity of the south shores of Lake Argentine, 30

to 50 km, west of the Santa Cruz river, between November, 1907 and March, 1908, C. W. Furlong 115 (N), so determined also by the collector.

Calceolaria teucrioides Griseb. — ARGENTINA : Salta : Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 23, 1941, T. Meyer 3619 [Herb. Inst. Miguel Lillo 17275] (N). Tucumán : Valle de Tafí, 1908, C. Bruch s. n. (D, N), determined as *C. extensa* Benth. by A. P. Rodrigo : Estancia Las Pavas, alt. 2900 m, dept. Chicligasta, March 17, 1924, S. Venturi 3008 (N), so determined also by the collector.

Calceolaria thyrsiflora Graham — CHILE : 1884 to 1885, W. H. Statin s. n. (C).

Calceolaria uniflora Lam. — PATAGONIA : by the Río Gallegos, Killikaike, common over southern Patagonia, January, 1900, B. Brown 57 (D, N), determined as *C. Darwinii* Benth. by the collector; in the valleys and mountains of the Cordillera of the Andes, in the vicinity of the south shores of Lake Argentino, 30 to 50 km west of the Santa Cruz river, between November, 1907 and March, 1908, C. W. Furlong 116 (N), so determined also by the collector; in wet meadows, Lago Viedma, January, 1916, Witte 31 (N), determined as *C. Darwinii* Benth. by the collector; Magellan Island, 1866 to 1869, R. O. Cunningham s. n. (N), determined as *C. Darwinii* by the collector; Gregory Bay, Magellan Straits, November 23, 1886, W. E. Safford s. n. (C), determined as *C. nana* Sm. by the collector; Valle del Río Denlas Minas, Punta Arenas, Tierra del Fuego, March, 1897, N. Alboff 144 (N), determined as *C. nana* Sm. by the collector; 50°30' S., 1882 to 1884, F. P. Moreno y Tonini 199 (N), determined as *Fagelia nana* (Sm.) Kuntze by Otto Kuntze.

Calceolaria valdiviana Phil. ? — CHILE : Valdivia : Volcán Chondhucuco, alt. about 1500 m, January, 1928, A. Hollermeyer s. n. [E. Werdermann 1867] (N).

ACANTHACEAE

(determinations by E. C. Leonard)

Beloperone Amherstiae Nees — ARGENTINA : Chaco : Colonia Benítez, alt. 55 m, T. Meyer 3800 [Herb. Inst. Miguel Lillo 35503] (N), plants 1,5 m tall, flowers rose.

Dicliptera jujuyensis Lindau — URUGUAY : San Carlos, dept. Maldonado, January 11, 1941, H. Descole 90 [Herb. Inst. Miguel Lillo 36069] (N).

Dicliptera Tweedieana Nees — ARGENTINA : Tucumán : Cochuna, dept. Chicligasta, March 4, 1941, C. A. O'Donell 56 [Herb. Inst. Miguel Lillo 36194] (N).

Dyschoriste n. sp., undescribed, to be published later. — ARGENTINA : Salta : Campo Quijano, alt. 1200 m, dept. Rosario de Lerma, January 25, 1941, T. Meyer 3629 [Herb. Inst. Miguel Lillo 17286] (N).

Justicia laevilingues (Nees) Lindau — ARGENTINA : Chaco : Margarita Belén, alt. 55 m, February, 1941, T. Meyer 3797 (N), aquatic; same locality and date, T. Meyer 3798 (N).

Justicia riojana Lindau — ARGENTINA : San Luis : vicinity of San Luis, November 5, 1940, G. Covas 1102 (N), flowers white.

Ruellia Lorentziana Griseb. — ARGENTINA : Salta : Cerrillos, alt. 1260 m, dept. Cerrillos, January to February, 1941, T. Meyer 3799 [Herb. Inst. Miguel Lillo 35502] (N), plants 80 cm tall, flowers purple. Tucumán : Parque 9 de Julio, alt. 400 m, dept. Capital, December 8, 1940, T. Meyer 3440 [Herb. Inst. Miguel Lillo 35427] (N), plants 1 m tall, flowers blue.

Ruellia multifolia (Nees) Lindau — ARGENTINA : Salta : Cerro San Bernardo, alt. 1200 m, dept. Capital, T. Meyer 3628 [Herb. Inst. Miguel Lillo 17285] (N), plants 50 cm tall, flowers lilac.

Ruellia Tweedii (Nees) T. Anders. — ARGENTINA: Chaco: Enrique Urien, dept. Tapenaga, November, 1940, A. P. Rodrigo 2702 (N), flowers bluish.

LOBELIACEAE

(determination by H. A. Gleason)

Siphocampylus foliosus Griseb. — ARGENTINA: Córdoba: highway « El Cuadrado », dept. Punilla, March 24, 1941, G. Dawson 1111 (N).

CARDUACEAE

(determinations by H. A. Gleason)

Vernonia echiooides Lees. — URUGUAY: perennial in swamp, Río Uruguay and Arroyo Chapicuy, Paysandú, February 21, 1941, Rosengurtt B. 3200 (N), so determined also by the collector.

Vernonia flexuosa Sims — ARGENTINA: Chaco: Colonia Benítez, alt. 55 m, dept. Resistencia, January 21, 1941, T. Meyer 3518 [Herb. Inst. Miguel Lillo 35784] (N). URUGUAY: grassy slopes, Santa Clara, Timoté, dept. Florida, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt PE. 2914 (N), so determined also by the collectors.

Vernonia incana Less. — URUGUAY: grassy slopes, Palleros, Río Negro, dept. Cerro Largo. December, 1935, Gallinal, Aragone, Bergalli, Campal y Rosengurtt A. 1107 (N), so determined also by Mattfeld.

Vernonia intermedia DC. (ex. char.) — URUGUAY: Pueblo 25 de Agosto, Río Santa Lucía, San José, January 20, 1941, Rosengurtt B. 2401 (N), so determined also by the collector.

Vernonia nitidula Less. — URUGUAY: shrub to 2 m tall, Arroyo Negro, Paysandú, November 12, 1937, Rosengurtt B. 2250 (N), flowers violet, so determined also by A. L. Cabrera.

Vernonia nudiflora Less. — URUGUAY: Pueblo 25 de Agosto, Río Santa Lucía, San José, January 20, 1941, Rosengurtt B. 2400 (N), so determined also by the collector.

Vernonia platensis Less. — URUGUAY: grassy slopes, Palleros, Río Negro, dept. Cerro Largo, December, 1937, Gallinal, Aragone, Bergalli, Campal y Rosengurtt B. 1368 $\frac{1}{2}$ (N), determined as *V. cognata* Less. by A. L. Cabrera; Cerro Pan de Azúcar, Maldonado, February 11, 1940, Rosengurtt B. 3081 (N), so determined also by the collector.