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by

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A review of plants collected in Central Paraguay during the principal flowering season of the year: August-December, with a record of sources and dates of collection, vernacular names in Spanish and Guarani, and notes extracted from the literature on the economic and medicinal values attributed to certain species.

Of the plants recorded in this paper, a selection was retained in Montevideo for the herbarium of the Museo Nacional de Historia Natural, and another was sent from Paraguay, *per* Dr. Teodoro Rojas, Curator, Jardín Botánico, Trinidad, Paraguay, to the Instituto Lillo, Tucumán, Argentina, but the main collection was deposited in the herbarium of the British Museum (Natural History), London, in the year 1957.

The author commenced collecting at the Piraretá Falls, near Asunción, Paraguay, on August 17, 1945, and continued thereafter, with the expert and invaluable assistance of the late Dr. Teodoro Rojas, until December 9, 1945.

All determinations of species were made by Dr. Rojas, whose unique knowledge of the flora of Paraguay had been acquired over the years during which he had worked as a special assistant to the great Swiss botanists, Fiebrig and Hassler.

The numbers (preceded in this paper by the letter "T") appearing against each example are the author's field numbers. All specimens deposited in Montevideo and in London bear these numbers, together with an indication of the source and date of collection.

The opening "unquoted" measurements shown in the body of this paper, in respect of trees and shrubs, were given the author by Dr. Rojas at the time of collection.

As a source of material, the Jardín Botánico at Trinidad, and, to a lesser extent, the Parque Caballero, Asunción, frequently recur, but it should be understood that the 450 hectares comprising the so-called botanical garden, and the 17 hectares of the park, are ancient nature reserves that, apart from later additions, have harboured a wide range of native shrubs and trees from time immemorial.

The Chololó streams —the Guasú (the big) and the Mí (the little)— lie in the district of Piribebuy.

The outpost of the Macá Indians is situated on low-lying ground on the right bank of the Paraguay River, opposite Trinidad, and to which the only means of direct access is a crossing of the river by native piragua.

It will be noticed that no orchidaceous plants appear in this collection. The reason is twofold: the agricultural population of Central Paraguay has long been aware of the commercial value of orchids, and, secondly, the optimal habitat of arboreal orchids and other epiphytes is to be found in much more permanently humid country than that explored.

A striking example of this may be seen in Rambo's analysis (1961: 42) of the flora of Rio Grande do Sul, Brazil: he found that out of 382 recorded species of plants in the eastern forest of that State, over against the Serra do Mar, no less than 226, or 60 per cent, were epiphytes, as compared with only 6 per cent in the western gallery forest along the curve of the Uruguay River; and, furthermore, of the 226 sea-board epiphytes, more than 200 species were orchids.

With regard to the terrestrial orchids, the recorded species, as would be expected in a country bordering on the tropic of Capricorn, are not numerous; and, judging by the flowering season farther south on the Uruguay-Brazil border, would not be in flower before the turn of the year —a period not embraced by this survey.

On the other hand, the examples obtained of the arboreal Bignoniacae and Leguminosae represent a good cross section of the most outstanding trees of these families, some of the tecomas being especially hard to come by in these days.

A find of some interest to phytogeographers was that of an example of the vacciniaceous genus *Gaylussacia* below the falls at Piraretá, the only previous record credited to Paraguay being, it appears from the literature (Croizat 1952: 448; Michalowski 1955, Bol. 189: 12), one from the Sierra de Maracayú on the Paraguay-Brazil border.

As regards the medicinal values given in Boletín 173, upon which the present writer draws, Michalowski states that after carefully revising the scarce literature on the subject (viz. "Plantae Hasslerianae" and Schuster's "Paraguay") and consulting native experts, he, while believing the record to be of some value, does not personally guarantee the efficacy of any remedy in particular, and, moreover, only in respect of those remedies that are included in recognized pharmacopoeias does he indicate the corresponding doses.

The vernacular names in Guarani have been taken primarily from Michalowski's bulletins and only exceptionally, when absent, from Bertoni's dictionary of generic names (see bibliography), but, in the case of the former, with the discrimination necessary in respect of the orthographical variants that not infrequently occur between the names appearing in one bulletin and another, and between those in the body of a bulletin and its index. In every case, however, the present writer has adhered to the principles of Michalowski's orthography, which, in turn, as explained by him, are based on those of Guasch (see Bol. 169: 140).

The vernacular names in Spanish, with a few additions supplied by Dr. Rojas, are those cited by Michalowski, but most, it may be said, are common currency in the countries of the River Plate, and, in confirmation of which, it will be found that despite the less luxuriant flora of Uruguay, nearly 50 per cent of the names appearing in this paper are also cited by Herter (1930) in his "Florula Uruguayensis".

Finally, it should be understood that all textual citations from Michalowski's bulletins have been translated by the author of this paper from the original Spanish into English.

ACKNOWLEDGMENTS

For expert help in the exact translation into English of some of the pharmaceutical terms appearing in Michalowski's "Plantas Medicinales del Paraguay", the writer of this paper is greatly indebted to Dr. William J. L. Sladen and, through him, to Prof. E. Bueding (pharmacology) of the School of Hygiene and Public Health, Johns Hopkins University, Baltimore, Maryland, U.S.A.

He is, also, under no small obligation to Dr. Waldo L. Schmitt of the Smithsonian Institution, Washington, D.C., and, through him, to Dr. Joseph Grossbeck, Deputy Director, Library, United Nations, New York, and to Dr. Conrado H. Hughes, jurisconsult, Montevideo, Uruguay, for enlightenment regarding the laws and practice of copyright in so far as concerns papers devoted to the diffusion of knowledge.

Among the principal officers and specialists of the Museo Nacional de Historia Natural, Montevideo, who have kindly collaborated in the work of extracting from the literature the names of the authors of the species listed in this paper and in bringing up to date some of Rojas's determinations, the writer is very much in the debt of Srs. C. Diego Legrand, Director of the Museum and Curator of Botany, Ricardo Praderi, Ingeniero Agrónomo, and Eduardo Marchesi.

A further expression of thanks is due to Dr. Fernando Mañé Garzón, Sub-Director, and to Sr. Miguel A. Klappenbach, Deputy Sub-Director of the Museum, for their very kind help and encouragement in connection with the preparation and publishing of this paper.

To these acknowledgments, the writer must also add an expression of gratitude towards Messrs. Houlder Brothers & Company (Uruguay) Ltd., coupled with the name of their Director, Mr. A. S. L. Grant, for the safe carriage from Montevideo to London of the collection for the British Museum (Natural History), and to Mr. & Mrs. William Latto, formerly of Sapuey, Paraguay, for their very kind hospitality while the writer was collecting in that district.

To all the aforesaid authorities, specialists and friends, he, therefore, hereby tenders his most grateful thanks.

G. W. T.

GLOSSARY

Bol., Boletín.

fl., in flower.

fr., in fruit.

Med., Medicinally.

s. n. (*sine num.*), not numbered.

T. (for Teague), collector's initial before field number.

V.N., Vernacular name or names.

DICOTYLEDONS

ACANTHACEAE

Beloperone amherstiae NEES

"Half-climber, 4 to 5 m high, with numerous red flowers." MICH., Bol. 169 & 175.

Jard. Bot., Trinidad, Jan. 24, 1946: T. 659, ex herb. Rojas s.n.

Justicia sp.

Patiño, Nov. 23: T. 572.

Ruellia parviflora BALDW. ex NEES

Flowers white. "Common along paths in the monte." MICH., Bol. 169.

Jard. Bot., Trinidad, Sept. 2 (fl.): T. 51; Sapucay, Sept. 29 (fl.): T. 316; Patiño, Nov. 23: T. 577.

Ruellia sp.

Flowers sky-blue.

Arroyo Yhacá, Piribehuy, Sept. 6 (fl.): T. 108.

Ruellia sp.

Patiño, Nov. 23: T. 574; same locality and date: T. 608.

AIZOACEAE

Mollugo verticillata L.

"Ubiquitous weed that often spreads to crops from roadsides."

MICH., Bol. 169.

Caacupé, Oct. 14: T. 359; Patiño, Nov. 23: T. 559.

V. N. Indian chick-weed, alfombra.

AMARANTHACEAE

Alternanthera paronchyoides ST. HIL.

"All species frequent somewhat humid places." MICH., Bol. 169.

Sapucay, Sept. 29: T. 298.

V. N. *Alternanthera* spp.: Yerba de pollo, Aguapé miri.

Alternanthera rosea CHOD.

"Subshrub, from 30 to 50 cm high. Flowers, petals purple.

Possesses very decorative varieties, such as v. *cinnabarina* and v. *atropurpurea*." MICH., Bol. 169 & 175.

Pradera, Jard. Bot., Trinidad, Oct. 3: T. 348; Asunción, on railway embankment Km. 3, Nov. 3: T. 416.

Froelichia lanata MOENCH.

Patiño, Nov. 23: T. 591.

Comphrena decumbens JACQ.

"Widespread tropical weed of well-trodden paths, where it often forms dense mats, spreading at times to crops (sugar cane). Med., var. *roseiflora* used for diabetes. To a decoction of leaves and flowers, tonic and diuretic properties—with special effect upon bladder catarrh—are attributed." MICH., Bol. 169 & 173.

Sapucay, Sept. 30 (fl.): T. 311; San Bernardino, Oct. 14: T. 377; same locality and date (fl., var. *roseiflora*): T. 379.

V. N. Paludilla del campo. Caá pari íté.

Pfaffia sp.

Villarrica, Nov. 12: T. 534.

ANACARDIACEAE

Astronium fraxinifolium SCHOTT.

"Tree, 8 to 10 m high. Campos and borders of montes. Flowers, May-Sept." MICH., Bol. 174 & 189.

Arroyo Chololó Guasú, Sept. 6: T. 74.
V. N. Urundey, *Urundei pará*.

Lithraea molleoides (VELL.) ENGL.

Tree, up to 8 by 0.20 m. "Wood for cabinet work, general carpentry, fencing posts and stakes." MICH., Bol. 189.

Road to Piraretá, Aug. 26 (fl.): T. 16; Villarrica, Nov. 12: T. 499.
V. N. Molle de beber, chichita.

Schinus molle L.

Tree, up to 10 by 0.50 m; *idem*, "10 to 12 m high. Cultivated and spontaneous. Flowers, Aug.-Jan. Produces honey of excellent quality. Wood good, but of little commercial value. *Med.*, an emenagogue." MICH., Bol. 173, 174 & 189.

Sapucay, Sept. 29 (fl.): T. 269.
V. N. Arbol de la pimienta, molle. *Aguará yvá-i*.

Schinus weinmannifolius ENGL.

Colonia Independencia, Nov. 13: T. 447.
V. N. Molle de curtir.

ANNONACEAE

Annona dioica ST. HIL.

"High and sandy campos. Flowers, Oct.-Dec. Wood of *Annona* spp., spongy; used instead of cork. Fruit edible, but not of the quality of the cultivated species, *A. cherimolia* and *A. squamosa*." MICH., Bol. 174, 176 & 189.

Patiño, Nov. 23: T. 569.
V. N. *Araticú guasú ñu*.

Annona nutans R. E. FRIES

Tree. "*Med.*, leaves used for angina; juice of seeds in treatment of scabies, and also as insecticide." MICH., Bol. 169 & 173.
San Bernardino, Sept. 18 (fr.): T. 176; Patiño, Nov. 23: T. 580.
V. N. *Araticú-pé*.

Rollinia emarginata SCHLECHT.

Shrub or small tree, up to 5 by 0.29 m.
San Bernardino, Sept. 18 (fl.): T. 175.
V. N. *Araticú-i*.

Rollinia intermedia R. E. FRIES

Tree.
Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 228.
V. N. *Araticú guasú*.

APOCYNACEAE

Allamanda angustifolia POHL.

Patiño, Nov. 23: T. 561.

Allamanda schotti POHL.

Shrub, cult.

San Bernardino, Oct. 14 (fl.) : T. 372; Jard. Bot., Trinidad, Nov. 17:

T. 510.

V. N. "Allamanda spp.: *Acá pochý* (Brazil)." BERT. 1940: 17.

Aspidosperma quebracho blanco SCHLECHT.

Fairly tall tree, up to 15 by 0.80 m.

"Borders of montes. Flowers, Jan.-Mar. Heavy wood for constructions (but not for humid localities); difficult to bend; used for spokes in cart-wheels, other work and as firewood. *Med.*, tea from bark, at 0.15 %, a diaphoretic and relief for asthma. Used also for bronchitis, pneumonia and tuberculosis." MICH., Bol. 173, 174 & 189.

Jard. Bot., Trinidad, Sept. 2: T. 211.

V. N. Quebracho blanco. "Aspidosperma, spp. *giganteae*: *Peróva*." BERT. 1940: 19.

Forsteronia sp.

Flowers small, white.

Arroyo Piracuré, Sapucay, Sept. 30 (fl.) : T. 323.

Forsteronia sp.

Villarrica, Nov. 12: T. 502.

Haemadyction sp.

Liana.

Parque Caballero, Asunción, Oct. 4 (fr.) : T. 245.

Haemadyction sp.

San Bernardino, Dec. 9: T. 651.

Tabernaemontana ?australis MUELL. ARG.

Shrub or small tree, up to 11 by 0.30 m. "Shrub, from 2 to 5 m high, but at times in monte occurring as tree up to 12 m high. Flowers white, somewhat heliciform. Fruit orange-coloured, but with rose-coloured pulp; seeds black. A typical ruderal shrub, forming with *Seguieria*, *Xylosoma*, *Acacia*, etc., notable roadside associations. A good melliferous plant; flowers, July-Feb. *Med.*, juice used for skin complaints." MICH., Bol. 169, 173 & 174.

Asunción, Sept. 9: T. 95; San Bernardino, Sept. 18 (fl.) : T. 174.

V. N. Palo de víbora, *Spiranguy*.

Thevetia peruviana (PERS.) SCHUM.

Cult.

Villarrica, Nov. 12: T. 530.

Vinca alba L.

Cult.

Flowers nearly all year round.

Jard. Bot., Trinidad, Sept. 2 (fl.) : T. 210.

AQUIFOLIACEAE

Ilex paraguariensis ST. HIL.

Tree, small to moderate.

"From its leaves the famous national drink—mate—is prepared." MICH., Bol. 176.

Parque Caballero, Asunción, Oct. 4 (fl.) : T. 249.

V. N. Yerba mate. "Ilex, et affines, spp.: *Cuá*." BERT. 1940: 28, 98.

ARISTOLOCHIACEAE

Aristolochia gilberti HOOK.

"Very common in humid waste places. Med., roots of this species (and other species of the genus) used in a decoction of 1% for dropsy, paralysis, and dyspepsia." MICH., Bol. 169 & 173.

Patiño, Nov. 23: T. 568; San Bernardino, Dec. 8: T. 645.
V. N. Mil hombres, patito, *Aristolochia* spp.: *Yvotý ré*.

ASCLEPIADACEAE

Asclepias campestris DECNE.

Sapucay, Sept. 30 (fl.): T. 346; Villarrica, Nov. 12: T. 533; Patiño, Nov. 23: T. 588.
V. N. Yerba de la vibora.

Asclepias curassavica L.

"Very common among ruderal associations in humid places, spreading at times to crops. Flowers orange-pink, rather striking. Produces the fibre known as 'vegetable silk.' Med., stalks and leaves, emetics; latex, an antihelminthic." MICH., Bol. 169 & 173.

Sapucay, Sept. 29 (fl.): T. 338.
V. N. Quiebra ojo, flor de calentura, viborrana, *Caá mará tái*.

Calotropis gigantea AIT.

Cult.
Asunción, Nov. 14: T. 526.

Oxypetalum sp.

Sapucay, Sept. 28 (fl.): T. 270.
V. N. *Oxypetalum* spp.: *Ysypó-á acuá*, *Ysypó-á caá*.

BEGONIACEAE

Begonia semperflorens LINK & OTTO

"Med., juice of fresh stalks used as gargle for inflammation of throat." MICH., Bol. 173.

Piraretá, at waters' edge along stream flowing below falls, Aug. 26 (fl.): T. 62; Sapucay, Sept. 29: T. 283.
V. N. Corazón de estudiante. *Begonia* spp.: *Caá hái*.

Begonia sp.

Flowers white, stems reddish.
Arroyo Chololó Mi, Sept. 6 (fl.): T. 124.

Begonia sp.

Colonia Independencia, Nov. 13 (fl.): T. 460.

BIGNONIACEAE

Adenocalymna marginatum P. DC.

"Liana, from 10 to 20 m long. Forests. Flowers large, yellow; Jan.-Mar." MICH., Bol. 169, 174 & 175.

Jard. Bot., Trinidad, Nov. 17: T. 511; Patiño, Nov. 23: T. 615.
V. N. *Ysypó hú*.

Amphilophium vauthieri P. DC.

"Climber or half-climber. Young flowers greenish-yellow, later rose-lilac." MICH., Bol. 169.

San Bernardino, Dec. 9: T. 653.

V. N. *Cai cuchara*, *Ypé yurú*.

Arrabidaea coleocalyx BUR. & K. SCHUM.

"Liana. Flowers rose-colour." MICH., Bol. 175.

Patiño, Nov. 23: T. 617; San Bernardino, Dec. 8 (fl.), *forma albiflora*: T. 644.

V. N. (including other spp.): *Cará yurú*.

Arrabidaea mutabilis BUR. & K. SCHUM.

Liana, from 6 to 8 m long. Flowers pink to white.

Sapucay, Sept. 30 (fl.): T. 341; Jard. Bot., Trinidad, in monte, Sept. 1942: T. 407, *ex herb. Rojas s.n.*

Arrabidaea rhodantha BUR.

"Liana, from 6 to 15 m long. Borders of montes; among bushes in the campo. Flowers rose-colour, Jul.-Aug." MICH., Bol. 169, 174 & 175.

Jard. Bot., Trinidad, Sept. 1 (fl.): T. 42.

V. N. *Cará yurú*.

Chodanthus splendens HASSSL.

Liana, from 8 to 10 m long. "Forests. Flowers rose-violet, Jan.-July." MICH., Bol. 169, 174 & 175.

Jard. Bot., Trinidad, Nov. 1943: T. 408, *ex herb. Rojas s.n.*

V. N. *Ysypó yacaré*, *Ysypó curupí*.

Clytostoma noterophyllum (MART.) BUR.

Liana.

Jard. Bot., Trinidad, Sept. 10 (fl.): T. 166; same locality and date: T. 181.

Cuspidaria pterocarpa P. DC.

Liana, 6 to 8 m long. Flowers mauve to white.

Sapucay, Sept. 30 (fr.): T. 344; same locality and date (fl.): T. 345.

Doxantha unguis cati (L.) MIERS emend. REHDER

"Liana, from 10 to 20 m long. Forests. Flowers yellow with reddish streaks in throat, Oct.-Jan. *Med.*, tubercles possess antirheumatic and laxative properties." MICH., Bol. 173, 174 & 175.

Jard. Bot., Trinidad, Sept. 2 (fl.): T. 48; same locality, Oct. 1943: T. 401, *ex herb. Rojas s.n.*; San Bernardino, Dec. 8: T. 643.

V. N. Uña de gato, *Mbaracayá poapé*.

Jacaranda cuspidifolia MART.

"Ornamental tree, cult. Flowers violet, Sept.-Dec. *Med.*, bark and leaves possess antirheumatic properties." MICH., Bol. 173, 174 & 175.

Jard. Bot., Trinidad, Sept. 4 (fl.): T. 69.

V. N. Jacarandá. *Jacaranda* spp.: *Caá róva*.

Kigelia africana BENTH.

Cult.

Jard. Bot., Trinidad, Sept. 8: T. 146; same locality, Sept. 10 (fl.): T. 168.

Melloa populifolia (P. DC.) BUR.

Liana, up to 30 m long. "Flowers large, golden yellow; very striking." MICH., Bol. 169 & 175.

Jard. Bot., Trinidad, Sept. 2 (not in fl.): T. 55; road to Gruta, San Bernardino, Sept. 18: T. 216.

V. N. *Mbaracayá poapé*.

Pithecoctenium echinatum (JACQ.) K. SCHUM.

Liana. "Flowers white." MICH., Bol. 169 & 175.

Sapucay, Sept. 30 (fl.): T. 314; San Bernardino, Dec. 9: T. 649.

V. N. Peine de mono, *Cai kyguá*.

Pyrostegia venusta (KER-GAWL.) MIERS

Liana, 5 to 6 m long. "Flowers orange-red; pollinated by humming-birds."

An extremely ornamental plant." MICH., Bol. 169 & 175.

Trinidad, Aug. 1943: T. 406, ex herb. *Rojas s.n.*

V. N. Lluvia de fuego, *fuego de San Juan*.

Tabebuia nodosa GRISEB.

Tree, up to 8 by 0.25 m. "Campos and borders of montes." MICH., Bol. 174.

Jard. Bot., Trinidad, Sept. 2 (fl.): T. 60; same locality, Sept. 9 (fl.): T. 254.

V. N. Palo cruz, *Yvyrá tí*.

Tecoma argentea BUR. & K. SCHUM.¹

Tree, 10 to 12 m high. "Campos and borders of montes. An extremely beautiful example of the Paraguayan flora. In flowering season, it appears as one huge bunch of golden blossoms. Flowers golden-yellow, May-July. *Med.*, a febrifuge." MICH., Bol. 173, 174 & 189.

Parque Caballero, Asunción, Sept. 8: T. 148; Jard. Bot., Trinidad, Oct. 1943: T. 404, ex herb. *Rojas s.n.*

V. N. Para todo, *Tayí-i*.

Tecoma integræ (SPRAGUE) HASSL.

Mountain tree, 8 to 10 m high. Flowers rose-yellow.

Sapucay, Sept. 30: T. 340.

V. N. Lapacho crespo, *Tayí pichá-i*.

Tecoma ipe MART. ex K. SCHUM.

Tree, 10 to 15 m high. "Same ecology as that of *T. Argentea*. One of the best of the lapachos: its wood very valuable and the most sought after in foreign markets. Flowers rose-colour, May-July."

MICH., Bol. 174, 175 & 189. FIEBRIG 1922: 25.

Jard. Bot., Trinidad, Aug. 1942: T. 405, ex herb. *Rojas s.n.*

V. N. Lapacho negro, lapacho rosa, *Tayí hú*. *Tecoma*, with *Tabebuia*, spp. (Brazil): *Ypé*.

Tecoma ochracea CHAM.

Large tree, up to 20 by 1 m. Flowers ochre-yellow.

Asunción, Sept. 15 (fl.): T. 133; road to Gruta, San Bernardino, Sept. 18: T. 183; Parque Caballero, Asunción, Nov. 3 (fl.): T. 433.

V. N. Lapacho amarillo, *Tayí pirurú*, *Tayí saiyú*.

N. B. "All [indigenous] species of *Tabebuia* and *Tecoma* considered to be very good melliferous plants, flowering abundantly and much visited by bees. Honey white. Wood much appreciated: used for constructions in general, carpentry, cabinet and turnery work, vehicles." MICH., Bol. 174 & 189.

Tecoma stans (L.) JUSS.

Cult. Indigenous to both North and South America.

Jard. Bot., Trinidad, Sept. 24 (fl.): T. 240.

V. N. Yellow elder.

Tecomaria capensis (THUNB.) SPACH.

Cult.

Jard. Bot., Trinidad, Sept. 10 (fl.): T. 158.

¹As regards the arboreal Bignoniaceae (e.g. *Tecoma* spp.), the writer has maintained, despite later revisions, the nomenclature employed by Rojas at the time of collection.

BIXACEAE

Bixa orellana L.

Bush or small tree, subs spontaneous, up to 5 by 0.20 m; *idem*, "3 to 4 m high. In meadows along rivers and streams; and, also, cultivated. Flowers, Nov.-Dec. *Med.*, fruit possesses tonic and cathartic properties. Crushed seeds used for burns." MICH., Bol. 173 & 174. Jard. Bot., Trinidad, Sept. 2: T. 43. V. N. Achioite. *Bixa* spp.: *Urucú*.

BOMBACACEAE

Ceiba pubiflora K. SCHUM.

Tree. "Timber used for construction of piraguas, but, otherwise, very little valued." MICH., Bol. 189. San Bernardino, Dec. 9: T. 652. V. N. *Samuhú rá*.

Chorisia speciosa ST. HIL.

Tree, up to 22 by 0.65 m; *idem*, "10 to 12 m high. Stony campos. Well known tree for lining side-walks. Flowers white, white with rose-coloured streaks or plain rose; Mar.-May." MICH., Bol. 174 & 175. Jard. Bot., Trinidad, Sept. 4: T. 66. V. N. *Chorisia* and *Pachira* spp.: *Samuhú*.

Pachira insignis SAVIGNY

Tree, up to 15 by 2 m; *idem*, "typical of the Chaco. Flowers cream-coloured, Mar.-May. Same use as above." MICH., Bol. 174 & 175. Jard. Bot., Trinidad, Sept. 10 (fl.): T. 156. V. N. Palo borracho, palo botella, algodonero, *Samuhú del Chaco*.

BORAGINACEAE

Cordia hassleriana CHOD.

"Wood of *Cordia* spp. used for constructions in general, furniture, door and window frames." MICH., Bol. 189. Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 202.

Cordia longipeda MEZ.

"Tree, up to 15 m high with very large leaves. Rather humid places. Forests. Flowers, Apr.-June." MICH., Bol. 169, 174 & 189. Jard. Bot., Trinidad, Sept. 1: T. 41. V. N. Amor seco, *Peterevý moroti*.

Heliotopsis sp.

Colonia Independencia, Nov. 13: T. 454.

Heliotropium sp.

Sapucay, Sept. 28 (fl.): T. 257.

V. N. *Heliotropium* spp.: *Aguará pondá*.

Patagonula americana L.

Tree, sometimes very large, up to 26 by 0.75 m. "Wood for tool handles, oars, agricultural implements, yokes and carts." MICH., Bol. 189. Sapucay, Sept. 29: T. 296. V. N. *Guayayvi*.

Tournefortia salzmanni DC.

Liana. "At times as a ruderal." MICH., Bol. 169.

Jard. Bot., Trinidad, Oct. 3 (fl.): T. 353; San Bernardino, Dec. 9: T. 631.

Tournefortia sp.

Villarrica, Nov. 12: T. 483.

BURSERACEAE

Protium heptaphyllum MARCH.

"Used locally for constructions and for firewood. Med., resin, a remedy for cutaneous affections." MICH., Bol. 173 & 189.

Arroyo Chololó Guasú, Sept. 6 (fl.): T. 106.

V. N. Yvyrá ysý cariba. *Protium* spp.: *Yvyrá ysý*.

CAESALPINIACEAE

Bauhinia microphylla VOG.

Small tree, 2 to 2.50 m high.

Bañados, Río Paraguay, Asunción, Nov. 3: T. 430.

V. N. *Bauhinia* spp.: Pata de buey, *Syi apihuá*.

Cassia alata L.

"Subshrub, 2 to 3 m high. Sandy and somewhat humid places (banks and margins of rivers, streams and lagoons). Marshes. Flowers yellow, in dense clusters, Dec.-Mar. Med., an infusion of flowers used for malaria, influenza and catarrhal affections." MICH., Bol. 169, 173, 174 & 175.

San Bernardino, Oct. 14: T. 365.

V. N. *Cassia* spp.: *Taperyvá*.

Cassia fistula L.

Cult. "Flowers golden yellow, abundant, Dec.-Apr. Med., fruit, a laxative (decoction, dose 30 grams)." MICH., Bol. 173, 174 & 175.

Jard. Bot., Trinidad, Sept. 2: T. 3.

V. N. Lluvia de oro.

Cassia flexuosa L.

"Has the appearance of a Mimosa. Dry places. At times as a ruderal." MICH., Bol. 169.

Patiño, Nov. 23: T. 602.

Cassia leptocarpa BENTH.

"Subshrub, 2 to 4 m high. Flowers orange-colour." MICH., Bol. 169.

San Bernardino, Dec. 8: T. 638.

Cassia macrocarpa MICHELI

Villarrica, Nov. 14: T. 514.

Cassia occidentalis L.

"An annual subshrub, 50 to 80 cm high. Flowers yellow to orange-coloured, Dec.-Mar. Much visited by bees. Med., infusion of leaves and roots used for malaria, and as an antispasmodic and tonic; a 'coffee' from seeds, for pulmonary complaints. Roots used to combat lice." MICH., Bol. 169, 173 & 174.

Arroyo Chololó Guasú, Sept. 9 (fl.): T. 161; San Bernardino, Sept. 18 (fl.): T. 170; Patiño, Nov. 23: T. 567.

V. N. Café cimarrón, *Payé mirí ová*, *Taperyvá rá*.

Cassia piribebuiensis CHOD. & HASSL.

Piraretá, Aug. 26 (fl.) : T. 14.

Cassia rotundifolia PERS.

"A prostrate herb; very common among Bermuda grass on well-trodden paths." MICH., Bol. 169.

Villarrica, Nov. 12: T. 480; Patiño, Nov. 23: T. 592.

Cassia serpens L.

Patiño, Nov. 23: T. 609.

Cassia tora L.

"A woody annual weed." MICH., Bol. 169.

Colonia Independencia, Nov. 13: T. 469.

V. N. Sicklepod, adormidera, *Taperyvá*.

Copaifera langsdorffii DESF.

Tree. "Bark a rich wine-red in colour. Campos. Stony places. Gallery forest margins along water courses. Flowers, Jan.-Feb. *Med.*, fruit used for catarrh, blennorrhea and vulnerary complaints." MICH., Bol. 173 & 174.

Piraretá, Aug. 26 (fr.) : T. 18: Arroyo Chololó Guasú, Sept. 6: T. 19. V. N. *Cupai* (cf. Brazil, "*Copaifera* spp.: *Copaiba*." BERT. 1940: 22, 55; REITZ & KLEIN 1964: 31).

Gleditsia amorphoides (GRIS.) TAUB.

Tree, at times spreading, 15 to 27 by 0.60 m; *idem*, "10 to 12 m. high. Montes, especially where soil is sandy. Flowers, Sept.-Oct. A good melliferous species, visited by bees to such an extent that their humming can be heard from a good way off. *Med.*, powdered fruit, a substitute for snuff." MICH., Bol. 173, 174 & 189.

Jard. Bot., Trinidad, Sept. 10 (fr.) : T. 138; Sapucay, Sept. 29 (fl. ♀) : T. 301.

V. N. Espina de corona, *Yvapó*.

Holocalyx balansae MICH.

Tree, up to 15 by 0.50 m; *idem*, "12 to 25 m high. Montes. Flowers, Sept.-Oct. Timber for carts, turnery work and fencing posts." MICH., Bol. 174 & 189.

Jard. Bot., Trinidad, Sept. 10: T. 139.
V. N. Alecrín, *Yvyrá pepé*.

Peltophorum dubium (SPRENG.) TAUB.

"Tree, from 10 to 25 m high. Borders of montes. Flowers golden yellow, melliferous and abundant, Dec.-Jan., and a second flowering, especially if February be rainy, Mar.-Apr. One of the most beautiful trees of Paraguay; frequently cultivated in parks and gardens." MICH., Bol. 174 & 175.
Jard. Bot., Trinidad, Sept. 2: T. 59; same locality, Feb. 1934: T. 403, *ex herb.* Rojas s.n.; same locality, Feb. 17, 1942: T. 410, *ex herb.* Rojas s.n.; Patiño, Nov. 23 (fl.) : T. 543; same locality and date (fr.) : T. 544.
V. N. *Yvyrá pytá*.

Pterogyne nitens TUL.

"Tree, from 8 to 12 m high. Campos; river margins. Flowers, May-June. Wood for cabinet work, interior panelling, carpentry, carts and railway sleepers (ties)." MICH., Bol. 174 & 189.

Jard. Bot., Trinidad, Sept. 4 (fr.) : T. 214.
V. N. Viraró, palo amargo, *Yvyrá ró mi*.

CALYCERACEAE

Acicarpha tribuloides JUSS.

"Herb, 20/50 cm high. Flowers whitish, very small (*ca.* 3 mm long). Ubiquitous ruderal plant." MICH., Bol. 169.

San Bernardino, Oct. 14: T. 383.

V. N. *Toro rati* (applied also to *Acanthospermum* spp. and to *Leonotis nepetaefolia* (L.) R. BR., MICH., Bol. 169).

CAPPARIDACEAE

Capparis cynophallophora L.

Tree, "Wood of *Capparis* spp. used only for firewood." MICH., Bol. 189. Jard. Bot., Trinidad, Oct. 11 (fl.): T. 387.

V. N. *Capparis* spp.: *Mycuré caá*.

Capparis retusa GRIS.

Bush or small tree, from 4 to 5 m high. Jard. Bot., Trinidad, Oct. 30: T. 413.

V. N. *Yvyrá pororó*.

Cleome aculeata L.

"A common tropical weed. All species of this genus infested by caterpillars. Flowers white." MICH., Bol. 169.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 231.

V. N. *Añá caá*. *Cleome* spp.: *Caá imbé*.

Cleome rosea VAHL ex DC.

Macá Indian outpost, Chaco paraguayo, Sept. 9 (fl.): T. 96: same locality and date (fl.): T. 162.

CARICACEAE

Jacaratia hassleriana CHOD.

Woody shrub, up to 3 m high. *Med.*, "indicated for ankylosis." MICH., Bol. 173 & 176.

Jard. Bot., Trinidad, Sept. 2 (fr.): T. 54.

V. N. *Yacaraty-i* (tree); *Yacaraty-á* (fruit).

CARYOPHYLLACEAE

Drymaria cordata WILLD. ex ROEM.

Villarrica, Nov. 14: T. 465.

Paronychia chilensis DC.

Arid mountain plant. "Prostrate herb, common in sun-steeped, stony places. Very resistant to trampling underfoot." MICH., Bol. 169.

Arroyo Yhacá, Piribebuy, on sandy barranca, Sept. 9 (fl.): T. 85.

V. N. *Paronychia* spp.: *Herniaria*.

Pentacaena polycnemoides BARTL.

Caacupé, Oct. 14: T. 362; Piribebuy, Feb. 3, 1943: T. 394, *ex herb. Rojas s.n.*; Patiño, Nov. 23: T. 553.

CELASTRACEAE

Maytenus ilicifolia MART. ex REISS.

Tree. "Wood of trees of this genus much valued for all kinds of carpentry work and for handles of agricultural implements." MICH., Bol. 189. Jard. Bot., Trinidad, Oct. 24: T. 402.

V. N. Sombra de toro. *Maytenus* spp.: *Acá, Yvyrá yuký.*

COMBRETACEAE

Terminalia balansae HASSL.

Tree, up to 16 by 0.45 m; *idem*, "8 to 12 m high. Montes and borders of montes. Flowers, Sept.-Apr. Wood of *Terminalia* spp. used for furniture and charcoal." MICH., Bol. 174 & 189. Jard. Bot., Trinidad, Sept. 4 (fl. & fr.): T. 68; same locality and month: T. 238.

V. N. *Guayayví saiýú*. *Terminalia* spp.: *Yvyrá saiýú.*

COMPOSITAE

Acanthospermum australe (LOEFL.) KTZE.

"A common tropical weed, especially on rather acid, sandy soils. An annual that spreads rapidly, invading chaeras and quintas, and, at times, coconut groves. Flowers yellowish." MICH., Bol. 169. San Bernardino, Oct. 14: T. 375.

V. N. Yerba de la oveja. *Acanthospermum* spp.: *Nuatí hú, Toro rati.*

Aspilia setosa GRIS.

"Very common among ruderal associations in rather humid places; at times among crops. Flowers very variable; yellow to golden orange; very large and showy." MICH., Bol. 169 & 175.

Jard. Bot., Trinidad, Sept. 2 (fl.): T. 58; Sapucay, Sept. 29 (fl.): T. 304.

Baccharis dracunculifolia DC.

Subshrub, up to 2.50 m high. "Shrub, 2 to 4 m high. Flowers white. Very common among roadside ruderal formations on different types of soil." MICH., Bol. 169.

Piraretá, Aug. 26: T. 17; Sapucay, Sept. 28: T. 261.

V. N. *Baccharis* spp.: Chilca, chirca, *Mboi chiní caá.*

Baccharis petrea HEERING

"Shrub, from 1 to 3 m high. Coconut groves." MICH., Bol. 169. Road to Gruta, San Bernardino, Sept. 18 (fl. ♂): T. 190; same locality and date (fl. ♀): T. 191.

Baccharis sp.

Piraretá, Aug. 26: T. 28.

Blainvillea biaristata DC.

Sapucay, Sept. 30: T. 265.

Calea uniflora LESS.

"Stony places. *Calea* spp.: xerophilous plants in flower all the year round." MICH., Bol. 169 & 174.

Patiño, Nov. 23: T. 562.

V. N. *Calea* spp.: *Aruca-á.*

Centratherum muticum LESS.

Villarrica, Nov. 12: T. 500.

Chaptalia nutans (L.) POLAK.

Flowers yellow. "Shady places on fertile soils in orchards, gardens and waste lands; paths in the monte. Very common." MICH., Bol. 169.
"A medicinal herb; ... its juice is used for malaria." DAWSON 1962: 7.
N.B. This plant does not appear among the medicinal plants listed by Michalowski in Boletin 173.
Sapucay, Sept. 30: T. 307.

V. N. "*Chaptalia* spp.: *Tapyira peó*." BERT. 1940: 61.

Enhydria anagallis GARDN.

"A succulent plant, prostrate, covering the surface of swamps." MICH.,
Bol. 169.
San Bernardino, Oct. 14: T. 370.

Eupatorium balansae HIERON.

"Subshrub, up to 2 m high. Flowers rose-colour. A wayside ruderal weed;
very common; at times covering considerable areas alongside highways.
Appears to avoid soils that are too acid." MICH., Bol. 169.
Patiño, Nov. 23: T. 556; San Bernardino, Dec. 9: T. 641.

Eupatorium christieanum BAKER

"Subshrub, up to 2 m high. Ecology similar to that of the above."
MICH., Bol. 169.
San Bernardino, Dec. 9: T. 625.

Eupatorium laeve DC.

"Leaves broad and tender; yield a blue dye." MICH., Bol. 169.
Sapucay, Sept. 28: T. 278.
V. N. (with *E. ageratoides* L. f.) *Yryvú retymá*.

Eupatorium multicrenulatum SCH. BIP. ex BAKER

"Waste lands." MICH., Bol. 169.
Sapucay, Sept. 28: T. 271.

Eupatorium ostenii B. L. ROBINSON

Patiño, Nov. 23: T. 566.

Eupatorium serratum SPRENG.

"Flowers violet-coloured." REITZ & KLEIN 1964: 45.
Villarrica, Nov. 12: T. 478.

Facelis retusa (LAM.) SCH. BIP.

Sapucay, Sept. 28 (fl.): T. 333.

Jungia floribunda LESS.

Villarrica, Nov. 14: T. 516.

Mikania micrantha HBK.

"Med., a febrifuge; apparently toxic for bees. Indians use leaves to cure
wounds." MICH., Bol. 169 & 173.
San Bernardino, Oct. 14: T. 380.
V. N. (with *M. cordifolia* (L. f.) WILLD.) Guaco, mata campo, *Ysyopó cati*,
Ysyopó ysý.

Pluchea suaveolens (VELL.) O. KTZE.

"Marshy places. At times as a ruderal. Med., a mild stimulant, either as
a liquid concoction or by application of leaves smeared with oil." MICH.,
Bol. 169 & 173.
San Bernardino, Oct. 14: T. 384; Patiño, Nov. 23: T. 547.
V. N. Hierba del lucero, salvia, *Kitó* (cf., Brazil: "Quitóco." BELT. 1962:
289).

Polymnia grandiflora (? *P. grandis* HORT.)

Jard. Bot., Trinidad, Sept. 2: T. 47.

Pterocaulon angustifolium DC.

Patiño, Nov. 23: T. 540.

V. N. "Pterocaulon spp.: Toro caá."

Pterocaulon lorentzii MALME

"Very common among ruderal flora of coconut groves and along roadsides." MICH., Bol. 169.

Patiño, Nov. 23: T. 541.

Pterocaulon sp.

San Bernardino, Oct. 14: T. 376.

Senecio balansae BAKER

"Very common in the campo and along roadsides; at times in great quantities. Spreads to crops (tobacco, cotton). Flowers [yellow] principally Aug.-Oct." MICH., Bol. 169 & 174.

Arroyo Chololó Mí, Sept. 6 (fl.): T. 84; same locality and date (fl.): T. 143; Sapucay, Sept. 29: T. 321.

V. N. *Senecio* spp.: Flor de Agosto, Agosto potý, Caá péry só.

Senecio icoglossus DC.

Piribebuy, Sept. 6 (fl.): T. 165.

Solidago chilensis MEY.

"A robust perennial herb, from 1 to 2 m high. Rather humid campos; ruderal. Flowers very abundant: Jan.-July. A very good melliferous plant: amber-coloured honey. Med., a concoction of flowers (at 0.35 %), an antihelminthic." MICH., Bol. 169, 173 & 174.

Sapucay, Sept. 29: T. 291.

V. N. Golden-rod [flowers bright yellow], vara de oro, romerillo amarillo, *Mbuy mí*, *Mbuy yvotý yú*.

Spilanthes stolonifera DC.

"Humid places, sandy; often in great quantities. Med., considered an antiscorbutic." MICH., 169 & 173.

San Bernardino, 1916: T. 395, ex herb. Rojas s.n.

V. N. *Spilanthes* spp.: Ñambú, Tendy-i.

Spilanthes sp.

Outpost, Macá Indians, Chaco paraguayo, Sept. 9 (fl.): T. 93.

Spilanthes sp.

San Bernardino, Oct. 14: T. 374.

Stevia balansae HIERON.

Patiño, Nov. 23 (fl.): T. 542.

V. N. "Stevia spp.: Caá yupé; sp. dulcis; Caá heé." BERT. 1940: 36, 48, 53.

Tessaria integrifolia RUIZ & PAV.

Patiño, Nov. 23: T. 546.

Verbesina arnottii BAKER

San Bernardino, Dec. 9: T. 635.

V. N. *Verbesina* spp.: Capitaneja, Musambá.

Vernonia chamaedrys LESS.

"Subshrub, 80 to 150 cm high. Acid soil campos. Ruderal. A very trouble-some weed. Flowers violet or whitish, June-Aug." MICH., Bol. 169 & 174. Sapucay, Sept. 29: T. 299; Villarrica, Nov. 12: T. 484.
V. N. *Typychá moroti*.

Vernonia rubicaulis HBK.

"Subshrub, 80 to 200 cm high." MICH., Bol. 169.
Trinidad, ? Jan. 26, 1946: T. 661, ex herb. Rojas s.n.

Vernonia sceptrum CHOD.

"A robust herb, 80 to 120 cm high, erect; terminal inflorescence fairly showy. Campos. Ruderal. Flowers rose-violet or rose-purple, all year round, but principally Dec.-Mar. Very common as roadside weed, at times invading crops (cotton, mandioca, sweet potatoes)." MICH., Bol. 169 & 174. Patiño, Nov. 23: T. 560.
V. N. *Yaguá ráy*. *Vernonia* spp.: *Apereá caá*.

CONVOLVULACEAE

Convolvulus sp.

Sapucay, Sept. 29: T. 288.
V. N. "*Convolvulus* spp., sectio: *Yetý cusú*." BERT. 1940: 22.

Dichondra repens FORST.

"A perennial, prostrate and nearly pan-tropical road weed. Med., a concoction of leaves applied externally as a sedative for ulcers and wounds." MICH., Bol. 169 & 173.

Sapucay, on shady bank, Sept. 30: T. 312.
V. N. *Oreja de ratón*, orejita.

Evolvulus sp.

Flowers light blue.

Arroyo Yhacá, Piribebuy, on sandy bank, Sept. 6 (fl.): T. 110.
V. N. *Evolvulus* spp.: *Yetý rañú*.

Ipomoea acuminata (VAHL) ROEM. & SCHULT.

"Four to six m in length. Flowers rose-purple or violet." MICH., Bol. 169.
Villarrica, Nov. 12: T. 494.

Ipomoea alba L.

"Climber. Margins of streams; also as ruderal and among crops. Nocturnal flowering, Nov.-Apr. Flowers visited by bees at dawn." MICH., Bol. 169 & 174.

Villarrica, Nov. 11: T. 532.
V. N. *Buenas noches*, dama de noche, *Yetý cusú*.

Ipomoea fistulosa MART. ex CHOISY

"Shrubby; up to 4 m high; not voluble. A typical plant of swamps and esteros, forming definite associations and covering wide areas. Flowers, Dec.-July." MICH., Bol. 169 & 174.
Bañados, Río Paraguay, Asunción, Nov. 3: T. 473.

V. N. *Mandy yú rá*.

Ipomoea malvaeoides MEISSN.

"Herbaceous, erect, 50 to 80 cm high. Almost ruderal. Flowers showy, rose-coloured, Oct.-Jan." MICH., Bol. 169 & 174.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 229; Patiño, Nov. 23: T. 558.

V. N. *Caá vó pochý*, *Yetý rá*.

Ipomoea triloba L.

"An annual climber. Flowers, corolla purple. Widely distributed throughout tropical and subtropical America on humid and fertile soils. Very common as a ruderal." MICH., Bol. 169.
Patiño, Nov. 23: T. 571.
V. N. Bejuquillo de puerco.

Ipomoea sp.

Patiño, Nov. 23: T. 552.

Ipomoea sp.

San Bernardino, Dec. 9: T. 654.

CRASSULACEAE

Bryophyllum calycinum SALISB.

"A plant of Asiatic origin, but actually widespread throughout tropical America." MICH., Bol. 169.
Jard. Bot., Trinidad, Sept. 2: T. 1.
V. N. Prodigiosa, siempreviva, hoja bruja.

ERICACEAE

Subf. Vaccinioideae

Gaylussacia brasiliensis (SPRENG.) MEISSN.

Subshrub or shrub. "Hardwood appropriate for turnery." MICH., Bol. 189.
Piraretá, Aug. 26 (fl.): T. 40.
V. N. Michiráca. "*Gaylussacia* spp.: *Michiráca*." BERT. 1940: 26, 57.

ERYTHROXYLACEAE

Erythroxylon cuneifolium O. E. SCHULTZ

Villarrica, Nov. 12: T. 501.
V. N. *Erythroxylon* spp.: *Ypandú*.

EUPHORBIACEAE

Acalypha pusilla (? *A. multicaulis* MUELL. ARG.)

Sapucay, Sept. 30: T. 322.
V. N. "*Acalypha* spp.: *Caá vó tapy-i*." BERT. 1940: 17.

Alchornea iricurana CASAR.

Tree, up to 17 by 0.75 m.
Arroyo Chololó Guasú, Sept. 6: T. 75; same locality and date: T. 119.
V. N. Mora blanca.

Alchornea triplinervia (SPRENG.) MUELL. ARG.

"Tree, from 5 to 8 m high. Common along borders of montes and paths." MICH., Bol. 169.
Arroyo Chololó Guasú, Sept. 6 (fl. ♂): T. 120; Gruta, San Bernardino, Sept. 18 (fl. ♂): T. 188.
V. N. Palo macho, *Tapiá guasú*.

Aporosella chacoensis SPEG.

Río Paraguay, Asunción, Sept. 9 (fl. ♀): T. 154; same locality and date (fl. ♂): T. 155.
V. N. *Yacaré pytó*.

Bernardia pulchella (BAILL.) MUELL. ARG.

Colonia Independencia, Nov. 13: T. 458.

Chiropetalum tricoccum (VELL.) CHOD. & HASSL.

San Bernardino, Dec. 9: T. 626.

Croton hasslerianus CHOD.

"Shrub or subshrub, from 1 to 3 m high. Very common as a wayside ruderal, but rarely invades crops." MICH., Bol. 169.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 208; Villarrica, Nov. 12: T. 535.

Croton paraguayensis CHOD.

Piraretá, Aug. 26: T. 15; Arroyo Chololó Mí, Sept. 6 (fl.): T. 227.

Croton urucurana BAILL.

Tree, up to 15 by 0.40 m; *idem*, "5 to 8 m high. Leaves green and red. Common along margins of streams and in other humid places with acid soils. *Med.*, gum dissolved in alcohol used for wounds and ulcers." MICH., Bol. 169, 173 & 189.

Sapucay, Sept. 28: T. 279.

V. N. Sangre de drago, *Urucúra, Cururú mi.*

Croton sp.

Bañados, Río Paraguay, Asunción, Nov. 3: T. 426.

Croton sp.

Colonia Independencia, Nov. 13: T. 461.

Euphorbia caecorum MART.

"Ruderal and among crops. *Med.*, a purgative." MICH., Bol. 169.

San Bernardino, Dec. 9: T. 623.

V. N. Purgilla.

Euphorbia ovalifolia ENGELM.

"A prostrate herb from 20 to 50 cm high. Very common as a ruderal (resistant to trampling) and among crops." MICH., Bol. 169.

Calle Presidente Francia, Asunción, Nov. 9: T. 435.

V. N. Yerba de la golondrina. "*Euphorbia* spp. *herbaceae repentes: Tupasý cambý.*" BERT. 1940: 25.

Julocroton sp.

Villarrica, Nov. 12: T. 476.

V. N. *Julocroton* spp.: *Caá tí ñumbae.*

Julocroton sp.

Patiño, Nov. 23: T. 555.

Manihot albomaculata AUCT.

"A very common ruderal plant on all soils from acid to alkaline." MICH., Bol. 169.

San Bernardino, Sept. 18 (fl.): T. 187.

V. N. *Manihot* spp.: *Mandió.*

Manihot multifida CRANTZ.

"Subshrub, from 2 to 3 m high. Common as a ruderal." MICH., Bol. 169.

Jard. Bot., Trinidad, Nov. 16: T. 584.

V. N. *Teyú caá.*

Manihot sp.

Villarrica, Nov. 14: T. 506.

Phyllanthus acuminatus VAHL

Jard. Bot., Trinidad, Nov. 17: T. 508.

V. N. "Chirrinchao (Columbia), a fish poison." ARCHER 1937.

In N.E. Brazil, a powder (v.n. «Timbo») derived from crushed roots of certain species of Sapindaceae, Leguminosae and Euphorbiaceae is now being used successfully to exterminate that principal plague of South American inland, tropical waters —the piraña (*Serrasalmus*), including its eggs and fry. See "Pesca y Marina [1963], Los Angeles, California."

Phyllanthus lathyroides HBK.

"A tender ruderal plant found on loose soil in orchards and among most crops; very polymorphous, the typical form sticking closely to the ground. Med., reputed to be a febrifuge." MICH., Bol. 169 & 173.

Sapucay, Sept. 28 (fl.): T. 258; Patiño, Nov. 23: T. 575; San Bernardino, Dec. 9: T. 628.

V. N. Quiebra piedra, Pará paraí mi.

Phyllanthus orbiculatus RICH.

Piraretá, Aug. 26: T. 27.

V. N. *Phyllanthus* spp.: "Munda-i, Munda hú; (sp. *nobilis*) Pucá-i". BERT. 1940: 79, 87.

Sapium haematospermum MUELL. ARG.

Tree, up to 12 by 0.75 m. "Shrub, from 3 to 5 m high. Ruderal. Flowers, Sept.-May." MICH., Bol. 169 & 174.

San Bernardino, Oct. 14: T. 367; Laguna Ypacaraí, Dec. 9: T. 639.

V. N. Lecherón, Curupí caí, Curú pytá.

Sapium longifolium (MUELL. ARG.) HUB.

Tree, up to 9 by 0.38 m; *idem*, "from 4 to 6 m high. Campos, but prefers more humid places than *S. haematospermum*. Flowers, Sept.-May. Med., used popularly as an antitoxin for snake bites." MICH., Bol. 169, 173 & 174. Mercado N° 4, Asunción, Aug. 29: T. 10; San Bernardino, Sept. 18 (fl.): T. 173.

V. N. Same as those for the preceding species.

Sebastiania brasiliensis SPRENG.

"Humid forests. Flowers, Aug.-Nov." MICH., Bol. 174.

Colonia Independencia, Nov. 13: T. 525; Patiño, Nov. 23: T. 578.

V. N. Yvyrá cambý.

Sebastiania hispida (MART.) PAX

Patiño, Nov. 23: T. 601.

Sebastiania sp.

Shrub.

Sapucay, Sept. 29: T. 293.

V. N. *Sebastiania* spp.: Blanquillo.

Sebastiania sp.

Colonia Independencia, Nov. 13: T. 448.

FLACOURTIACEAE

Casearia silvestris Sw.

Tree, up to 10 by 0.35 m. "Small tree or shrub, from 3 to 6 m high. Woods. At times as a ruderal. Flowers small, yellowish, in dense inflorescences; abundant, May-Oct. A good melliferous species. Med., a tonic and an antispasmodic." MICH., Bol. 169, 173 & 174.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 224.

V. N. Palo blanco, palo rajador, Burro caá, Avati timbaví.

Hydnocarpus wightiana BLUME

Cult. Med., source of the antileprous oil, Chaulmoogra.
 Jard. Bot., Trinidad, Sept. 4: T. 64.
 V. N. "Indian Chaulmoogra." Darl. & Ammal. 1945: 112.

Xylosma venosum N. E. BROWN

Shrub, from 2 to 3 m high; *idem*, "or small dioecious tree, from 3 to 4 m high, furnished with long spines. Flowers yellow, Oct.-May. Meliferous. A typical thicket plant." MICH., Bol. 169.
 Campo Grande, Feb. 14, 1946 (fr.): T. 665, ex herb. Rojas s.n.
 V. N. Espina corona, Yukará vai, and with *Solanum sisymbriifolium* Lam., *Nuati* pytá.

GENTIANACEAE

Limnanthemum humboldtianum (KUNTH) GRIS.

"Common in swamps. Med., and infusion or liquid concoction of leaves used as a febrifuge, an antiscorbutic, and also, in strong doses, as a purgative." MICH., Bol. 169 & 173.
 San Bernardino, Oct. 14: T. 369.
 V. N. Trébol de agua.

GESNERIACEAE

Gesneria sceptrum DECNE.

"Flowers red; very ornamental in bunches." MICH., Bol. 175.
 Patiño, Nov. 23: T. 605.

GUTTIFERAE

Rheedia brasiliensis PLANCH & TRIANA

Tree, up to 10 by 0.20 m. "Fruit appreciated locally, and especially that of the var. *salicifolia* [CHOD. & HASSL]." MICH., Bol. 176.
 Arroyo Chololó Guasú, Sept. 6: T. 72.
 V. N. *Rheedia* spp.: *Pacuri*.

HALORAGACEAE

Myriophyllum sp.

Sapuey, Sept. 29: T. 282.

HIPPOCRATACEAE

Hippocratea tenuiflora MART. var. *grisebachii* HASSSL.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 204.
 V. N. "*Hippocratea* spp.: *Ysyropó yvyrá*." BERT. 1940: 27.

Salacia crassifolia (MART.) PEYR.

Jard. Bot., Trinidad, Sept. 2: T. 9.
 V. N. "*Salacia* spp.: *Pacuri ysypó* (modern, *Pacuri loma*)."
 BERT. 1940: 35.

LABIATAE

Hyptis sp.

Villarrica, Nov. 12: T. 505.
 V. N. *Hyptis* spp.: *Caá mará caá*.

Hyptis sp.

San Bernardino, Dec. 9: T. 642.

Leonotis nepetaefolia (L.) R. Br.

"A robust herb or subshrub, from 50 to 150 cm high. Flowers orange-colour. Very common as a gregarious ruderal in rather humid places, but rarely among crops. Of African origin. *Med.*, an infusion of plant used as an antispasmodic and febrifuge. Seeds contain phytin." MICH., Bol. 169 & 173.

Bañados, Río Paraguay, Asunción, Nov. 3: T. 429.

V. N. Cordón de fraile, molinillo, Totá, Toro ratí, Chanuá caá, *Verbena guasú*.

Leonurus sibiricus L.

"Very common as a ruderal on rubbish heaps and on grazings. Greatly attacked by *Cuscuta obtusiflora* HBK. Of Eurasian origin. *Med.*, a cardiac." MICH., Bol. 169 & 173.

Sapucay, Sept. 30: T. 343; Villarrica, Nov. 14: T. 515.

V. N. Agripalma, cebadilla ("No Guaraní name." MICH., Bol. 169).

Ocimum selloi BENTH.

"*Med.*, aromatic, tonic and diuretic." MICH., Bol. 173.

Colonia Independencia, Nov. 13: T. 446.

V. N. *Ocimum* spp.: *Caá catí*.

Salvia rigida BENTH.

"At times as a ruderal. *Med.*, all species have same properties as those recognized in pharmacology in *Salvia officinalis*, but to a weaker degree; they are aromatic, tonic, stomachic and diuretic, and are used in gargling solutions." MICH., Bol. 169 & 173.

Sapucay, Sept. 29 (fl.): T. 315.

Salvia sp.

Flowers red; cult.

Sapucay, Sept. 30 (fl.): T. 262.

Salvia sp.

Flowers blue; cult.

Sapucay, Sept. 30 (fl.): T. 264.

Scutellaria rumicifolia HBK.

Arroyo Yhacá, Piribebuy, in damp sand of stream, Sept. 6 (fl.): T. 111; San Bernardino, Oct. 14: T. 386 (? *S. racemosa* PERS.).

Scutellaria sp.

Patiño, Nov. 23: T. 589.

Stachys sp.

Colonia Independencia, Nov. 13: T. 445.

V. N. "*Stachys* spp. and *Mentha*, species *campestres*: *Caá catí*." BERT. 1940: 49.

LAURACEAE

Ocotea suaveolens BENTH. & HOOK.

Large tree, up to 22 by 0.65 m.

"*Ocotea* spp.: Heavy wood for constructions and excellent for fine furniture. All species good melliferous plants; in flower all year round." MICH., Bol. 174 & 189.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 230; San Bernardino, Dec. 1: T. 612.

V. N. Laurel amarillo. *Ocotea* spp.: *Aguaicá*.

LENTIBULARIACEAE

Utricularia sp.

Piraretá, Aug. 26 (fl.): T. 36.

LOGANIACEAE

Buddleia angustata BENTH.

Flowers yellow.

Arroyo Yhacá, Piribebuy, Sept. 6 (fl.): T. 112.

V. N. *Buddleia* spp.: *Mbuy rá caá*.*Buddleia grandiflora* CHAM. & SCHLECHT.

Shrub, up to 1 m high; *idem*, "up to 2 m high. Flowers showy, orange-coloured, in dense inflorescences. A typical, gregarious ruderal plant (rubbish heaps, coconut groves, roadsides), but rare among crops. A very variable species. *Med.*, an emollient, a sudorific, an expectorant, and a febrifuge." MICH., Bol. 169 & 173.

Bañados, Río Paraguay, Asunción, Nov. 3 (fl.): T. 431.

V. N. Barbasco, verbasco, gordolobo blanco, *Sevoí caá rá*.*Strychnos martii* PROG.Climber, "*Med.*, a tonic to be used with caution." MICH., Bol. 173. Villarrica, Nov. 12: T. 497.V. N. "*Strychnos* spp., *virosae*: *Huy rá ri* (whence *Curarí*, *Curaré* and *Curáre*, the [Indian] poison)." BERT. 1940: 37.

LORANTHACEAE

Phoradendron sp.

Hemiparasite.

Jard. Bot., Trinidad, Sept. 9 (fr.), on *Ruprechtia laxiflora* Meissn., to which it is especially partial: T. 90.V. N. *Phoradendron* spp.: *Caá vó tirey*.*Phoradendron* sp.

Hemiparasite.

Río Paraguay, Asunción, Sept. 9: T. 152.

Psittacanthus cordatus BLUME

Hemiparasite.

Jard. Bot., Trinidad, Sept. 9 (fl.): T. 234.

V. N. *Psittacanthus* spp.: *Yerba de pajarito, Guirá repotí*.

LYTHRACEAE

Cuphea carthaginiensis (JACQ.) MACBR.

Villarrica, Nov. 14: T. 466; Patiño, Nov. 23: T. 607.

V. N. "*Cuphea* spp.: *Ysyopó peré*." BERT. 1940: 22.*Cuphea mesostemon* KOEHNE

"Herb, 20 to 40 cm high; nearly ruderal. Flowers [small, violet], all year round. Melliferous. Very common in campos and woods. *Med.*, an emenagogue, a depurative and a cardiae. In popular medicine considered almost a panacea." MICH., Bol. 169, 173 & 174.

Sapucay, Sept. 28: T. 337; Caacupé, Oct. 14: T. 358; San Bernardino, Oct. 14: T. 385; Villarrica, Nov. 14: T. 467.

V. N. Siete sangrías.

Cuphea racemosa (L. f.) SPRENG.

Patiño, Nov. 23: T. 606.

Cuphea sp.

Sapucay, Sept. 28: T. 259; same locality, Sept. 29 (fl.): T. 268.

Heimia salicifolia (HBK.) LINK

Flowers yellow. "Very common in humid places, and also as a ruderal. Roots very woody and difficult to eradicate. Med., a laxative and a diuretic. For external use, a decoction (at 0.25 %) prepared for ulcers and wounds." MICH., Bol. 169 & 173.

Sapucay, Sept. 29 (fl.): T. 320.

V. N. Quiebra arado, quiebra yugo.

Lagerstroemia indica L.

Cult.

Jard. Bot., Trinidad, Nov. 29: T. 582.

V. N. Grape myrtle, crespón.

MALPIGHIACEAE

Heteropteris amplexicaulis MORONG

Liana. Flowers small, yellow.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 223.

V. N. "Heteropteris spp.: Ysypó paraguá." BERT. 1940: 27.

Heteropteris angustifolia GRISEB.

Jard. Bot., Trinidad, Sept. 10 (fr.): T. 132; Villarrica, Nov. 12: T. 503.

V. N. Flor de mosca.

Janusia guaranitica (ST. HIL.) A. JUSS.

"Dry campos; at times as a ruderal and among crops." MICH., Bol. 169.

Villarrica, Nov. 12: T. 496; Patiño, Nov. 23: T. 586.

Mascagnia anisopetala (A. JUSS.) GRIS.

Liana.

Sapucay, Sept. 28: T. 281.

Stigmatophyllum jatrophaeifolium (LAM.) JUSS.

Liana.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 215.

V. N. Zarza.

MALVACEAE

Asterochlaena sidaefolia HASSL.

Barranca, Km. 3, Asunción, Nov. 3: T. 417.

Bastardioxisis densiflora HASSL.

Tree, up to 19 by 0.75 m; *idem*, "from 10 to 12 m high. Montes. Flowers abundant, July-Oct.; much visited by bees. Honey of excellent quality." MICH., Bol. 174.

Jard. Bot., Trinidad, Sept. 24: T. 241.

V. N. Loro blanco.

Hibiscus sp.

Outpost, Macá Indians, Chaco paraguayo, Sept. 9 (fl.): T. 163.

Modiola sp.

Sapucay, Sept. 28 (fl.): T. 260.

V. N. Mercurio.

Pavonia sepium ST. HIL.

Jard. Bot., Trinidad, at edge of monte, Feb. 1, 1946 (fl.) : T. 663, ex herb.
Rojas s.n.

V. N. Malva grande, *Pavonia* spp.: *Guachí*.

Sida ciliaris L.

"A suffruticose plant, 5 to 15 cm high. Flowers reddish-yellow or reddish-orange, with fine marginal cilia." MICH., Bol. 169.
 Bañados, Río Paraguay, Asunción, Nov. 3: T. 428.
 V. N. *Sida* spp.: *Typychá*.

Sida cordifolia L.

"A perennial herb, up to 1.5 m high. Med., roots, an astringent and a tonic; leaves contain ephedrine and are used for ophthalmia; seeds, a diuretic and an appetizer. Plant is also an emollient." MICH., Bol. 169 & 173.

San Bernardino, Oct. 14: T. 382.
 V. N. Malva blanca, malva corazón.

Sida linifolia JUSS. ex CAV.

"A hemicryptophytic plant with strong, but little branched, roots, woody or slightly woody, erect; 80 to 100 cm high. Flowers: petals white or whitish-yellow." MICH., Bol. 169.
 Patiño, Nov. 23: T. 587.

Sida spinosa L.

"A widespread ruderal weed. Med., used as a sedative and as an emollient. Flowers small, pale yellow or cream." MICH., Bol. 169 & 173.
 Road to Gruta, San Bernardino, Sept. 18: T. 226.
 V. N. Escoba dura. *Sida* spp.: *Typychá hú*.

Sida viarum ST. HIL.

"A common wayside weed. Flowers: corolla white or cream, with reddish base and interior." MICH., Bol. 169.
 Patiño, Nov. 23: T. 610.

MELASTOMACEAE

Acisanthera alata COGN.

San Bernardino, Dec. 9: T. 650; Patiño, Nov. 23: T. 598.

Miconia sp.

Piraretá, Aug. 26 (fl.): T. 273.

V. N. "Miconia" spp.: *Yvyrá tacuá*. BERT. 1940: 30.

Ossaea sp.

Arroyo Chololó Guasú, Sept. 6: T. 122.

Ossaea sp.

Piraretá, Aug. 26 (fl.): T. 274.

Pterolepis balansaei COGN.

San Bernardino, Dec. 9: T. 632.

Rhynchanthera rosea COGN.

"At times as a ruderal." MICH., Bol. 169.

Villarrica, Nov. 14: T. 517.

Tibouchina gracilis COGN.

Villarrica, Nov. 14: T. 518; Patiño, Nov. 23: T. 597.

V. N. *Tibouchina* spp.: *Cuipé hú*.

MELIACEAE

Cabralea multijuga C. DC.

Tree. "Wood of *Cabralea* spp. used for every class of construction, cabinet work and furniture." MICH., Bol. 189.

Arroyo Chololó Guasú, Sept. 6: T. 123.

V. N. *Cabralea* spp.: *Cancharana, Cedro rá.*

Cedrela balansae C. DC.

Jard. Bot., Trinidad, Sept. 2: T. 56.

V. N. *Cedrela* spp.: *Ygarý.*

Cedrela fissilis VELL.

Tree,¹ up to 30 by 1.50 m; *idem*, "from 6 to 10 m high. Montes. Flowers, Dec.-Jan. Wood of *Cedrela* spp. used for all classes of work, especially for fine furniture, interior panelling and cigar boxes. *Med.* bark (tea at 2 %) of *C. fissilis*, a febrifuge; roots and juice possess emetic properties; infusion of wood shavings used for cleansing ulcers and wounds." MICH., Bol. 173 (and app.), 174 & 189.

Jard. Bot., Trinidad, Sept. 2: T. 57.

V. N. *Cedro*, *Cedro pytá.*

Guarea pohlii C. DC.

Tree, up to 12 by 0.18 m. "Wood of white cedars (*Guarea* spp.) used for furniture and interior fittings." MICH., Bol. 189.

Arroyo Chololó Guasú, Sept. 6: T. 76.

V. N. *Guarea* spp.: *Cedro blanco, Guaré, Guaimí piré.*"

Guarea silvatica C. DC.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 222.

Melia azederach L.

Small tree of Himalayan origin. Cult. Flowers lilac-colour. Greatly used as shade tree (and as source of fuel) around estancias in the countries of the River Plate (Río de la Plata). *Med.*, "roots, an antihelminthic." MICH., Bol. 173.

Sapucay, Sept. 29 (large leafed variety): T. 356; same locality and date: T. 357.

V. N. *Paraíso*, Persian lilac.

Trichilia catigua A. JUSS.

"Tree of rather humid forests, margins of rivers. Flowers all year round; melliferous. *Med.*, bark (containing tannin), an astringent." MICH., Bol. 169, 173, 174 & 189.

Jard. Bot., Trinidad, Nov. 30: T. 618.

V. N. *Catiguá pytá*. *Trichilia* spp.: *Caá tiguá.*

Trichilia elegans A. JUSS.

Shrub or small tree, up to 7 by 0.10 m.

Sapucay, Sept. 29: T. 285.

Trichilia spondioides JACQ.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 200; same locality and date (fr.): T. 201.

¹RAMBO (1961: 16) places *C. fissilis* among tall trees forming canopy of the South Brazilian rain forest.

MENISPERMACEAE

Cissampelos glaberrima ST. HIL.

Climber, voluble, 2 to 3 m long

Posta Yvieuá, Dec. 25: T. 658, ex herb. Rojas s.n.

Cissampelos pareira L.

"Pan-American tropical climber. Med., roots contain alkaloids pelosine (or hebeleine) and sangoline, constituents of the well known drug *radix pareirae bravae*—a powerful diuretic, a diaphoretic and depurative. A popular remedy (since Guarani days) for liver and urinary complaints." MICH., Bol. 169 & 173.

Patíño, Nov. 23: T. 563.

V. N. Pareira brava, Caá péva.

Hyperbaena sp.

Arroyo Chololó Guasú, Sept. 6 (fr.): T. 167.

MIMOSACEAE

Acacia farnesiana (L.) WILLD. var. *paraguariensis* HASSL.

Bush. "A typical inhabitant of slightly saline soils; very common in the Chaco. Flowers yellow, abundant, and very aromatic. Med., juice of fruit, an astringent." MICH., Bol. 169, 173, 175 & 189.

Bañados, Río Paraguay, Asunción, Nov. 3: T. 424.

V. N. Aroma olorosa, aromita, espinillo, Pari caá rá.

Acacia lutea LEAVENW.

Jard. Bot., Trinidad, Sept. 24 (fl. & fr.): T. 239.

Acacia parviceps (SPEC.) BURK.

"Swamps; margins of rivers and streams." MICH., Bol. 169.

Jard. Bot., Trinidad, April 18: T. 400, ex herb. Rojas s.n.

Trinidad, Nov. 8: T. 475.

V. N. Maricá.

Acacia riparia HBK.

Shrub or small tree with climbing branches, 3 to 5 m high.

"Banks of rivers, streams and lagoons." MICH., Bol. 169.

Bañados, Río Paraguay, Asunción, Nov. 3: T. 414.

V. N. Yukerí guasú.

Acacia sp.

Sapucay, Sept. 28 (fr.): T. 336.

Acacia sp.

Villarrica, Nov. 12: T. 536.

Calliandra bicolor BENTH.

"Ornamental bush. Flowers: stamens bicoloured, white and purple." MICH., Bol. 175.

Piraretá, Aug. 26 (fl.): T. 12; Arroyo Yhaguí Guasú, Piribebuy, Sept. 6 (fl.): T. 101.

V. N. Flor de seda, flor de cielo.

Calliandra tweediei BENTH. var. *sanctipauli* HASSL.

Bush or small tree, up to 11 by 0.15 m. "Flowers of *C. tweediei* BENTH., red." REITZ & KLEIN, 1964: 45.

Jard. Bot., Trinidad, Sept. 20 (fl.): T. 134; Sapucay, Sept. 28: T. 280.

V. N. Plumerillo, niño azote, chicote de niño.

Enterolobium contortisiliquum (VELL.) MORONG

Tree, up to 25 by 1 m; *idem*, "15 to 25 m high. Montes. Flowers, Sept.-Nov. Timber used for making piraguas [dug-outs]." MICH., Bol. 174 & 189.

Road to Gruta, San Bernardino, Sept. 18 (fr.): T. 277.
V. N. *Timbó colorado*, oreja de negro.¹

Enterolobium guaraniticum (CHOD. & HASSL.) HASSSL.

An endemic Paraguayan tree,² bigger still than *E. contortisiliquum*; leaves and pods also larger. "Timber for furniture, windows and doors." MICH., Bol. 189.

Road to Gruta, San Bernardino, Sept. 18 (fr., recently fallen): T. 217.
V. N. *Timbó blanco*.

Inga affinis DC.

Tree, up to 12 by 0.50 m; *idem*, "6 to 8 m high. Margins of rivers and streams. Flowers all year round; fruit edible. Med. (*I. affinis* and other spp.), decoction of bark (at 0.2 %), an astringent and haemostatic. Indicated for vaginal ulcers and for gargles." MICH., Bol. 173, 176 & 189. Arroyo Chololó Guasú, Sept. 6: T. 71.

V. N. *Ingá del agua*, *Ingá guasú*.

Inga uruguensis HOOK & ARN.

Small tree, up to 8 by 0.40 m.
Jard. Bot., Trinidad, Aug. 30: T. 21; road to Gruta, San Bernardino, Sept. 18: T. 218.
V. N. *Ingá colorado*.

Mimosa bimucronata (DC.) KUNTZE

Small tree, up to 9 by 0.40 m. "Small woods. Margins of rivers and streams. Flowers, Dec.-Feb." MICH., Bol. 174.

Jard. Bot., Trinidad, Sept. 9: T. 92.

V. N. *Mimosa* spp.: *Yukerí*.

Mimosa pigra L.

"Bush, 1 to 3 m high. Flowers rose-violet, Nov.-Mar. and July. Typical swamp plant that can become a serious plague in neighbouring chacras, on account of its rapid growth." MICH., Bol. 169 & 174.

Bañados, Río Paraguay, Asunción, Nov. 3: T. 427.

V. N. Adormidera, carpinchera, sensitiva, *Yukerí del campo*.

Mimosa strigillosa TORR. & GRAY

"A ground plant, indicator of nitrous soils." MICH., Bol. 169.
Parque Caballero, Asunción, Sept. 17: T. 244.

Mimosa sp.

Colonia Independencia, Nov. 13: T. 459.

Piptadenia macrocarpa BENTH.

Tree, up to 20 by 0.75 m; *idem*, "8 to 20 m high. Isolated woods in campos; borders of montes. Flowers, Oct.-Dec. Med., bark, which contains 25 % tannin, an astringent." MICH., Bol. 173, 174 & 189.

Jard. Bot., Trinidad, Sept. 8 (fr.): T. 145; Sapucay, Sept. 30 (fl.): T. 263; San Bernardino, Dec. 8: T. 647.

V. N. Curupay, cebil colorado, *Curupái curú*. "Piptadenia spp., p. parte: Yarupí." BERT. 1940: 33, 64.

¹An allusion to shape and colour of pod.

²Reported to have been found later in Matto Grosso, Brazil, but pods sent by the writer by airplane (courtesy Capt. George Hammond, D.S.O., R.N.) soon after collection, to the Jard. Bot., Rio de Janeiro, and now in the Herbarium collection, were the first to be received there.

Piptadenia rigida BENTH.

"Tree, from 10 to 15 m high. Borders of montes and margins of rivers and streams. Flowers, Oct.-Dec. *Med.*, gum possesses emollient properties: used for bronchitis." MICH., Bol. 173, 174 & 189.
 Jard. Bot., Trinidad, Sept. 24 (fr.): T. 236.
 V. N. Cebil, angico colorado, *Curupá rá*.

Pithecellobium hassleri CHOD.

Tree, up to 30 by 0.75 m; *idem*, "from 15 to 20 m high. Borders of montes. Flowers, Nov.-Jan. Much visited by bees." MICH., Bol. 174 & 189.
 Jard. Bot., Trinidad, Sept. 10 (fr.): T. 140; Parque Caballero, Asunción, Sept. 17: T. 243.
 V. N. Palo amarillo, *Yvyrá yú*.

Pithecellobium scalare GRIS.

Tree, up to 15 by 0.80 m.
 Jard. Bot., Trinidad, Sept. 9 (fl. & fr.): T. 149.
 V. N. Palo cascarudo, espinillo, *Tataré*.

Pithecellobium tortum MART.

Tree, up to 12 by 0.50 m. "Bush or small tree, 3 to 4 m high. Isolated woods in the campo. Flowers, Jan.-Mar." MICH., Bol. 174.
 Jard. Bot., Trinidad, Sept. 2: T. 8; same locality, Aug. 30 (fl.): T. 22.
 V. N. Palo cascarudo, *Timbó-i, Tataré sayú*.

Prosopis algarobilla GRIS.

Tree, up to 12 (and over) by 1 m. "Open places. Flowers, Oct.-Jan. *Med.*, decoction, a laxative. Indicated for bronchial complaints. From fruit of the algarrobos (*Prosopis* spp.), the drink 'aloja' is fermented; flour from crushed seeds used for tortillas." MICH., Bol. 173, 174 & 176.
 Trinidad, Oct. 30 (fl.): T. 412; Patiño, Nov. 23: T. 593.
 V. N. Calden, espinillo colorado. *Prosopis* spp.: Algarrobo, *Yvopé*.

Prosopis sp.

Jard. Bot., Trinidad, Sept. 2 (fl.): T. 2.

MORACEAE

Cecropia adenopus MART.

Tree, up to 12 by 0.50 m; *idem*, "usually found in the monte, but not uncommonly forms part of the roadside ruderal flora. *Med.*, an infusion of leaves used for bronchitis and coughs. Leaves possess, also, anti-diarrhetic properties." MICH., Bol. 169 & 173.
 Jard. Bot., Trinidad, Oct. 5: T. 397.
 V. N. Ambay, palo de lija, *Ambai*.

Chlorophora tinctoria (L.) GAUD., subsp. *mora* (GRIS.) HASSL.

Tree, up to 20 by 0.80 m; *idem*, "from 4 to 6 m high. At times as a ruderal along forest tracks. Wood, a beautiful yellow. Fruit edible. Flowers, July-Oct." MICH., Bol. 169, 174 & 176.
 Jard. Bot., Trinidad, Sept. 10 (fl. ♀): T. 131; same locality and date (fl. ♀): T. 164; same locality, Sept. 9 (fl. ♂): T. 151.
 V. N. Mora, palo amarillo, *Tatay yva*.

Dorstenia brasiliensis LAM. var. *major* CHOD.

"*Med.*, decoction of leaves, a diaphoretic and stimulant." MICH., Bol. 173.
 Patiño, Nov. 23: T. 550.
 V. N. Higuerita, contrayerba, *Taropé*.

Sorocea ilicifolia Miq.

Tree, up to 12 by 0.20 m. "Of flexible wood; used for barrel hoops." MICH., Bol. 189.

Arroyo Chololó Guasú, Sept. 6: T. 73.

V. N. Soroco, Ñandypá mi. "Sorocea spp.: Soro caá." BERT. 1940: 36.

MYRTACEAE

Blepharocalyx brunneus BERG

Piraretá, April 22: T. 398, ex herb. Rojas s.n.

V. N. *Blepharocalyx* spp.: Arrayán.

Britoa sellowiana BERG

Small tree, up to 6 by 0.15 m.

Jard. Bot., Trinidad, Sept. 2 (in bud): T. 53; same locality, Nov. 29: T. 583.

V. N. *Britoa* spp.: Ñandú apysá.

Campomanesia xanthocarpa BERG

"Tree, from 10 to 12 m high. Montes. Flowers very abundant: July-Sept." MICH., Bol. 174.

Arroyo Gruta, San Bernardino, Sept. 18 (fr.): T. 179; Sapucay, Sept. 30 (fl.), in garden in pueblo: T. 317.

V. N. Guavirá pytá.

Eugenia uniflora L.

Low tree.

Jard. Bot., Trinidad, Sept. 2: T. 5; road to Gruta, Sept. 18 (fr.): T. 206; Sapucay, Sept. 30 (fl.): T. 308.

V. N. Arrayán mato, Ñanga pirí, Añanga pirí.

Eugenia uvalha CAMB.

Piraretá, April 22: T. 399, ex herb. Rojas s.n.

Eugenia sp.

Tree, from 5 to 6 m high.

Arroyo Chololó Guasú, in humid hill country, Sept. 6 (fl.): T. 105.

Eugenia sp.

Colonia Independencia, Nov. 13: T. 443.

Hexachlamys edulis (BERG) LEGR. & KAUSEL

"Tree, not large. Woods. Campos. Flowers, July-Oct. A good melliferous species. Med., fruit, a laxative." MICH., Bol. 173, 174 & 189.

Jard. Bot., Trinidad, Sept. 2: T. 212.

V. N. Ubajay, Yvá hái.

Jambosa malaccensis DC.

Jard. Bot., Trinidad, Sept. 2: T. 4.

Myrcia assumptionis MOR.

Jard. Bot., Trinidad, Nov. 30: T. 621.

V. N. "Myrcia spp.: Acambi." BERT. 1940: 40.

Myrcia bombycinia (BERG) KIAERSK.

Colonia Independencia, Nov. 13: T. 462; Villarrica, Nov. 12: T. 498; San Bernardino, Dec. 2: T. 531; Piraretá, Apr. 22: T. 538, ex herb. Rojas s.n.

Myrcia sp.

Patiño, Nov. 23 (fl.): T. 545.

Myrcianthes pungens (BERG) LEGR., comb. nov.

"Tree. Woods. Flowers, July-Sept. Another good melliferous species." MICH., Bol. 174 & 189.

Road to Gruta, San Bernardino, Sept. 18: T. 220.
V. N. Guaviyú, Yvá viyú.

Myrciaria trunciflora BERG

"Woods and forests. Flowers, Aug.-Oct. Valuable melliferous species." MICH., Bol. 174.

Jard. Bot., Trinidad, Sept. 2: T. 6; same locality, Oct. 11: T. 389; Piraretá, Aug. 26: T. 388, Road to Gruta, Sept. 18 (fl.): T. 203.
V. N. *Myrciaria* spp.: Yvá purú.

Myrciaria sp.

Colonia Independencia, Nov. 13: T. 437.

Psidium guineense Sw.

"Campos. Flowers, July-Sept., and once again in December. *Med.*, tea from roots, a purgative. General decoction, an astringent and an emenagogue." MICH., Bol. 173 & 174.

Jard. Bot., Trinidad, Sept. 10: T. 137; Sapucay, Sept. 30: T. 325.
V. N. Arasá ñu.

Psidium kennedyanum MOR.

Small tree, up to 6 by 0.30 m.

Arroyo Yuquyry, Piribebuy, Aug. 28 (fl.): T. 20.
V. N. Arasá hái.

NYCTAGINACEAE

Reichenbachia hirsuta SPRENG.

"Subshrub, up to 5 m high. Fairly common at edge of montes and on margins of streams." MICH., Bol. 169.

Villa Mora, Nov. 4: T. 419; Jard. Bot., Trinidad, Nov. 17: T. 507.
V. N. Yvyrá ñandi.

OCHNACEAE

Sauvagesia erecta L.

San Bernardino, Dec. 9: T. 630.

OLEACEAE

Jasminum azoricum L.

Jard. Bot., Trinidad, Sept. 2 (cult., fl.): T. 45.
V. N. Jazmín de Iluvia.

ONAGRACEAE

Jussiaea brachycarpa MICH.

"Common in swamps, on margins of rivers, along roadsides, and generally in wet places." MICH., Bol. 169.

San Bernardino, Oct. 14: T. 366.

Jussiaea montevidensis SPRENG.

Villarrica, Nov. 14: T. 529.

Jussiaea repens L.

"Prostrate plant of wet places. Parts exposed to air usually hirsute. Common along roadsides." MICH., Bol. 169.
San Bernardino, Oct. 14: T. 371; Villarrica, Nov. 1942: T. 522, ex herb.
Rojas s.n.
V. N. Enramada de tarariras. *Jussiaea* spp.: *Cambará mbaé*.

Jussiaea sericea CAMB. var. *vilosissima*. MICH.

Villarrica, Nov. 14: T. 521; San Bernardino, Dec. 9: T. 636.

Jussiaea suffruticosa L.

Villarrica, Nov. 14: T. 523.
V. N. Duraznillo del agua.

Jussiaea sp.

Villarrica, Nov. 14: T. 470.

Jussiaea sp.

Arroyo Tebicuary Guasú, Piribebuy, Sept. 6 (fl.): T. 86.

PAPILIONACEAE

Aeschynomene sp.

Patiño, Nov. 23: T. 570.

Arachis marginata GARD.

"Very common along roadsides, in parks, and also among crops. Flowers bright yellow." MICH., Bol. 169 & 175.
Arroyo Yhacá, Piribebuy, Sept. 6 (fl.): T. 107; Patiño, Nov. 23: T. 611.
V. N. *Arachis* spp.: *Manduvi*, *Amanduvi*.

Clitoria ternatea L.

Flowers blue. "Among crops and as a garden escape. Flowers blue and white." MICH., Bol. 175.
Jard. Bot., Trinidad, Sept. 20 (fl. & fr.): T. 177.
V. N. Papito, butterfly pea.

Desmodium albiflorum SALZM.

Sapucay, Sept. 29: T. 290; Patiño, Nov. 23: T. 564.

Desmodium cuneatum HOOK. & ARN.

"Herb, 150 to 200 cm high. Flowers rose-colour, Sept.-Nov. A forage plant. Spreads easily by means of its fruit, which sticks to both animals and man. Often to be seen among crops." MICH., Bol. 169 & 174.
Sapucay, campo alongside railway line, Sept. 29 (fl., sky blue): T. 306.
V. N. *Desmodium* spp.: *Tahá-tahá*.

Desmodium sp.

Colonia Independencia, Nov. 13: T. 450.

Erythrina coralodendron L.

Bush or small tree. Flowers deep rose-coral.
Jard. Bot., Trinidad, Sept. 15 (fl. & fr.): T. 185.

Erythrina crista-galli L.

"Bush or small tree, spinous, 2 to 5 m high. Flowers large, striking, orange-red, Apr.-June. Common on banks of rivers and streams. Med. contains the alkaloid erythrin: a sedative and narcotic. Astringent." MICH., Bol. 169 & 173.

Villarrica, Nov. 14: T. 520; Patiño, Nov. 23: T. 600.
V. N. Ceibo, seivas, búcares, *Mulungú*, *Syi vá*.

Erythrina dominguezii HASSL.

Tree, up to 10 m high. Flowers deep salmon-pink.
Parque Caballero, Asunción, Oct. 4 (fl.) : T. 248.
V. N. Ceibo del Chaco.

Ferreirea spectabilis ALLEM

Tree, up to 15 m high. Flowers small, yellow. "Heavy and durable timber." MICH., Bol. 189.
Jard. Bot., Trinidad, Sept. 10 (fl.) : T. 141.
V. N. Taperyá guasú.

Ferreirea spectabilis ALLEM var. *paraguariensis* CHOD. & HASSL.

Tree, 10 to 15 m high.
Jard. Bot., Trinidad, Oct. 23 : T. 409.

Galactia jussieuana KUNTH, var. *volubilis* BENTH.

"Common in the campo." MICH., Bol. 169.
San Bernardino, Dec. 9 : T. 624.

Indigofera sp.

Bañados, Río Paraguay, Asunción, Nov. 3 : T. 425.
V. N. *Indigofera* spp.: Caá chira.

Machaerium paraguariense HASSL.

Tree, up to 26 by 0.60 m; *idem*, "5 to 8 m high. In humid places. Flowers, Nov.-Mar." MICH., Bol. 174 & 189.
Road to Gruta, San Bernardino, Sept. 18 (fr.) : T. 182.
V. N. Ysapý guasú.

Myrocarpus frondosus FR. ALL.

Mountain tree, 6 to 8 m high and, also, giant tree up to 25 by 1.10 m.
"Tree, 15 to 20 m high. Forests; margins of rivers and streams. Flowers, Oct.-Nov. *Myrocarpus* spp.: strong and heavy wood for constructions." MICH., Bol. 174 & 189.
Road to Gruta, San Bernardino, Sept. 18 : T. 219; Sapucay, Sept. 28 (fr.) : T. 350.
V. N. *Myrocarpus* spp.: Incienso, Yvyrá payé.

Phaseolus prostratus BENTH.

Colonia Independencia, Nov. 13 : T. 456.
V. N. "*Phaseolus* spp. *silvestres*: Cumandá caá guý." BERT. 1940: 32.

Sesbania marginata BENTH.

Subshrub, 2 to 3 m high. Flowers yellow. "A very typical wayside weed of somewhat humid places." MICH., Bol. 169.
Trinidad, Jan. 26, 1946 : T. 660, ex herb. Rojas s.n.
V. N. Zará, acacia mansa.

Stylosanthes viscosa SWARTZ

Patiño, Nov. 23 : T. 551.

Sweetia elegans BENTH.

"Tree, 6 to 8 m high. Campos. Flowers, Oct.-Nov. Good hardwood, but scarcity renders it of little economic value." MICH., Bol. 174 & 189.
San Bernardino, Dec. 9 : T. 648.
V. N. Lapachillo, Pero mirí.

Tipuana tipu (BENTH.) O. KTZE.

Leafy tree, up to 30 by 1.50 m. Common along roadsides. "Flowers [inconspicuous, yellow] Dec.-Feb. Timber used for furniture and vehicles." MICH., Bol. 174 & 189.

Jard. Bot., Trinidad, Sept. 2 (fl.) : T. 49.
V. N. Tipa blanca, palo mortero, Tipú.

Zornia diphylla (L.) PERS.

"A weed of the tropics and subtropics around the world." Cowan 1957: 22.
Villarrica, Nov. 12: T. 479; Patiño, Nov 23: T. 579.

PASSIFLORACEAE

Passiflora caerulea L.

Climber. "In somewhat damp places. Borders of montes. Pathways. Ornamental. Flowers greenish-yellow or violet. Fruit edible. Med., leaves and flowers, a sedative; used also as an antihelminthic and antispasmodic." MICH., Bol. 169, 173 & 175.

Trinidad, Oct. 3 (fl.): T. 352.

V. N. Blue crown passion flower, flor de pasión, pasionaria. "*Passiflora* spp. *edulis*: *Mburucuyá*." BERT. 1940: 32.

Passiflora cincinnata MAST.

Climber. "Flowers white and lilac-coloured." MICH., Bol. 175.
Trinidad, Oct. 5: T. 355.

PHYTOLACCACEAE

Achatocarpus obovatus SCHINZ & AUTRAN

Jard. Bot., Trinidad, Nov. 30: T. 622.

V. N. "*Achatocarpus* spp.: *Yuati hú* (Asunción: *Yvyrá hú*)."
BERT. 1940: 17, 65.

Microtea sp.

Colonia Independencia, Nov. 13: T. 444.

Petiveria alliacea L.

Shrub, 0.50 by 1.00 m; *idem*, "ca. 1 m high. Beautiful little, white, star-like flowers. Leaves dark. Strong repugnant smell... transmitted to milk of cows that habitually graze in meadows where plant grows. A pan-American species preferring damp, shady places. Med., a decoction of roots (in moderate doses), a diuretic and an antihelminthic." MICH., Bol. 169 & 173.

Jard. Bot., Trinidad, in montes, Feb. 1, 1946 (fl.): T. 664, *ex herb. Rojas s.n.*

V. N. Guinea-hen weed, *Pipí*, *Hierba de pipí*.

Seguieria guaranitica SPEC.

"Rather rarer than *S. paraguayensis*. Prefers damper places: along streams etc." MICH., Bol. 169.

Patiño, Nov. 23: T. 576.

V. N. *Seguieria* spp.: *Yoavý*, *Yvyrá yvý*.

Seguieria paraguayensis MORONG

Tree, from 10 to 15 m high. "Bush, 1 to 2 m high. Borders of montes. Flowers, Oct.-Jan. Very common among ruderal formations along roadsides." MICH., Bol. 169 & 174.

Avda. Artigas, Trinidad, Dec. 27 (fl.): T. 656, *ex herb. Rojas s.n.*

V. N. *Yoavý guasú*, *Mboi ray*.

PIPERACEAE

Piper fulvescens DC.

Shrub, up to 4 m high. "Humid montes. Flowers, Nov.-Mar." MICH., Bol. 169 & 174.

Arroyo Chololó Guasú, Sep. 6 (fr.): T. 104.

V. N. *Pariparóva*, *Piper* (with *Ottonia*) spp.: *Yagua randi*.

Piper medium JACQ.

"Same ecology as the above. Flowers, Oct.-Mar." MICH., Bol. 174.
 San Bernardino, Dec. 9: T. 637.
 V. N. Ambai mi.

Piper sp.

Gruta, San Bernardino, Sept. 18 (fl.) : T. 196.
 "The species of this genus are common weeds in the ruderal formations along paths. Seeds germinate easily and plant grows rapidly. All species melliferous and of prolonged flowering." MICH., Bol. 169.

PODOSTEMONACEAE

Unidentified.
 Piraretá, Aug. 26: T. 30.

POLYGALACEAE

Polygala oxyrynchos CHOD.

Villarrica, Nov. 14: T. 471; Patiño, Nov. 23: T. 596.
 V. N. Polygala spp.: Caá membé.

POLYGONACEAE

Rumex cuneifolius CAMPD.

Bañados, Rio Paraguay, Asunción, Nov. 3: T. 432.
 V. N. Lengua de vaca. "Rumex spp.: Caá rurú hái." BERT. 1940: 80.

Ruprechtia laxiflora MEISSN.

Tree, up to 18 by 0.75 m. "Wood of *Ruprechtia* spp. used for interior fittings, floors and simple furniture." MICH., Bol. 189.
 Jard. Bot., Trinidad, Sept. 9 (fl. ♂) : T. 150; San Bernardino, Sept. 18 (fl. ♀) : T. 198; same locality and date (fl. ♂) : T. 199.
 V. N. *Ruprechtia* spp.: Viraró, marmelero, Yvyrá ró.

PORTULACACEAE

Portulaca sp.

Caacupé, Oct. 14: T. 361; Calle Presidente Franco, Asunción, Nov. 9: T. 436.
 V. N. *Portulaca* spp.: Purslane, verdolaga, Caá pungá.

Talinum patens (JACQ.) WILLD.

"A perennial herb; geophyte. Flowers whitish rose or whitish yellow. A pan-tropical species. Spreads to chaeras, but with preference for rather acid soils. Suspected as host of tobacco virus." MICH., Bol. 169.
 Patiño, Nov. 23: T. 614.
 V. N. Carne gorda. "*Talinum* (with *Calandrinia* and *Portulaca*) spp.: Caá rurú kyrá." BERT. 1940: 37, 52.

PRIMULACEAE

Anagallis pumila Sw.

Villarrica, Nov. 14: T. 468.

PROTEACEAE

Grevillea robusta A. CUNN.

Cult. "Tree, up to 7 m high. Flowers, Sept.-Oct. *Med.*, tea from leaves used for asthma, diabetes and affections of the liver." MICH., Bol. 173 (app.) & 174.

San Bernardino, Sept. 18 (fl.): T. 171.

Roupala gardneri MEISSN.

Tree.

Colonia Independencia, Nov. 13: T. 438.

RHAMNACEAE

Hovenia dulcis THUNB.

Cult. A favourite sidewalk tree in suburbs of Asunción.

Asunción, Sept. 4: T. 61; Mercado N° 2, same locality, Aug. 29: T. 253.
V. N. Raisin tree.

Rhamnidium elaeocarpus REISS.

"Shrub or small tree, from 2 to 6 m high. Edge of montes. Flowers, Oct.-May. *Med.*, leaves, a diuretic and an antirheumatic." MICH., Bol. 173, 174 & 189.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 205.
V. N. *Yvá hú, Tarumá-i.*

ROSACEAE

Prunus subcordiacea (CHOD. & HASSL.) KOEHNE

Tree, up to 19 by 0.40 m. "Shrub. Toxic for cattle: leaves when eaten form cyanide. Widely distributed throughout country. Melliferous. Flowers in August." MICH., Bol. 169.

Stream by Gruta, San Bernardino, Sept. 18 (fl. & fr.): T. 180.
V. N. Persiguero bravo, *Prunus* spp.: *Yvá ró.*

RUBIACEAE

Anisomeris obtusa (CHAM. & SCHL.) K. SCHUM.

Jard. Bot., Trinidad, Nov. 13: T. 619.
V. N. Espina blanca.

Basanacantha calycina K. SCHUM.

San Bernardino, Dec. 9: T. 634.

Basanacantha spinosa K. SCHUM.

Tree, up to 11 by 0.20 m. "Tall shrub, from 4 to 5 m high, with scarce foliage. Sandy margins of rivers. Flowers white, Nov.-Mar. Fruit yellow. A very variable species. *Med.*, a febrifuge." MICH., Bol. 169, 173, 174 & 189.
Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 209; Patiño, Nov. 23: T. 581; same locality and date: T. 616.
V. N. *Nuati curusú, Mboruró.*

Basanacantha sp.

Sapucay, Sept. 29: T. 300.

Calycophyllum multiflorum GRIS.

Tree.

Jard. Bot., Trinidad, Sept. 10 (fr.): T. 130; Sapucay, Sept. 30: T. 329.
V. N. *Calycophyllum* spp.: Palo blanco, *Yvrá moroti.*

Diodia kuntzei K. SCHUM.

San Bernardino, Oct. 14: T. 390.
V. N. *Diodia* spp.: *Poayá*.

Genipa americana L.

Tree, up to 15 by 0.40 m. "Med., decoction, a purge and antirheumatic." MICH., Bol. 173.
Parque Caballero, Asunción, Sept. 8: T. 157; Jard. Bot., Trinidad, Sept. 9 (fr.): T. 88; same locality, Nov. 16: T. 527.
V. N. *Genipa* spp.: *Yenipá*.

Oldenlandia thesiifolia (ST. HIL.) K. SCHUM.

"At times as a ruderal." MICH., Bol. 169.
Arroyo Chololó Mí, Sept. 6: T. 125.

Psychotria ?leiocarpa CHAM. & SCHLECHT.

Patiño, Nov. 23: T. 573.

Spermacoce verticillata L.

"From 10 to 50 cm high. Flowers white. The most widespread ruderal species of the genus. Very common as a wayside weed and among crops (mandioca, cotton, sweet potatoes), spreading, also, to yerba mate plantations (yerbales). Med., a substitute for ipecacuanha." MICH., Bol. 169 & 173.
Caacupé, Oct. 14: T. 360; Patiño, Nov. 23: T. 595.
V. N. Falsa ipecacuanha, botón blanco. "Spermacoce, with *Richardia*, spp.: *Ypé rupá*." BERT. 1940: 45.

Spermacoce sp.

Colonia Independencia, Nov. 13: T. 442; same locality and date: T. 457.

RUTACEAE

Esenbeckia densiflora HASSL.

"Shrub, from 2 to 4 m high. Flowers white. At times as a ruderal along roadsides." MICH., Bol. 169.
Jard. Bot., Trinidad, Nov. 30: T. 620.
V. N. (with *E. febrifuga* A. JUSS.) *Guatambú mi*.

Esenbeckia febrifuga A. JUSS.

"Shrub or tree, from 2 to 4 m high. Montes and borders of montes. Flowers, Jan.-Mar. Med., a febrifuge." MICH., Bol. 173 & 174.
Colonia Independencia, Nov. 13: T. 452.

Fagara hiemalis (ST. HIL.) ENGL.

"Small tree, up to 10 m high." Rambo 1961: 19.
"Med., infusion of leaves, an antihelminthic, a diuretic and diaphoretic." MICH., Bol. 173 & 189.
San Bernardino, Dec. 9: T. 646.
V. N. *Curatú rá*.

Fagara naranjillo (GRISEB.) ENGL.

Tree, up to 16 by 0.33 m. "Trees of this genus provide wood for fine furniture and cabinet work. They are more or less xerophilous and of value in apiculture, on account of their prolonged flowering throughout the year." MICH., Bol. 174 & 189.
Villa Mora, Nov. 4: T. 420.
V. N. *Fagara* spp.: *Tembetarý*.

Helietta longifoliata BRITT.

Low tree, from 4 to 8 m high. "Wood for tool handles, loom shuttles and turnery. *Med.*, bark, an aphrodisiac." MICH., Bol. 173 & 189.
Road to Gruta, San Bernardino, Sept. 18 (fl. & fr.) : T. 193.
V. N. *Yvyrá ovi*.

Pilocarpus pennatifolius LEM.

Shrub or tree, up to 9 by 0.25 m. "Shrub, from 1 to 2 m high. Flowers dark purple, in long inflorescences. Common in ruderal shrub associations, especially on alkaline soils. *Med.*, leaves, officinal (like those of *P. officinalis* PEOHL.), due to presence of the alkaloid pilocarpine." MICH., Bol. 169 & 189.

Sapucay, Sept. 29: T. 284.

V. N. (with *P. selloanus* ENGL.) *Yvyrá tái*.

SALICACEAE

Salix martiana LEYB.

Tree, up to 10 by 0.75 m. "An immigrant from the Amazonic region. *Med.*, bark a febrifuge." MICH., Bol. 169 & 173.
Piraretá, Aug. 26: T. 13; Río Paraguay, Asunción, Sept. 9 (fl. ♀) : T. 255;
same locality and date (fl. ♂) : T. 256.
V. N. Sauce álamo, sauce colorado, sauce criollo. *Salix* spp.: *Yvyrá pucú*.

SANTALACEAE

Acanthosyris falcata GRIS.

Tree, up to 12 by 0.40 m. "Of no commercial possibilities." MICH., Bol. 189.
Outpost, Macá Indians, Chaco paraguayo, Sept. 4 (fr.) : T. 67.
V. N. *Sacha pera* (a Quechua-Spanish bilingual!), *Yvá he-é*.

Santalum album L.

Cult.
Jard. Bot., Trinidad, Sept. 4: T. 63.
V. N. Indian sandal-wood.

SAPINDACEAE

Allophylus edulis (ST. HIL.) RADLK.

Tree, up to 15 by 0.37 m; *idem*, "or shrub, from 5 to 6 m high. Small dry woods and isolated woods in the campo. Flowers white, July-Sept. Fruit globular, reddish, and of a sweet and agreeable taste. Used as shade tree for coffee plantations. *Med.*, extract of leaves used for jaundice." MICH., Bol. 169, 173 & 174.

Jard. Bot., Trinidad, Sept. 10 (fr.) : T. 135.

V. N. Chalchal (Argentina and Uruguay). *Cocú*.

Diantenopteryx sorbifolia RADLK.

Big tree, with wide spread, up to 25 by 0.60 m. "Timber for carpentry." MICH., Bol. 189.

Sapucay, Sept. 29: T. 297; same locality and date (fr., samara with rose-coloured wings) : T. 303.

V. N. *Yvyrá pi-hú*.

Matayba elaeagnoides RADLK.

"Shrub or tree,¹ from 2 to 3 m high. Humid places. At times as a ruderal. Melliferous. Flowers white, Aug.-Sept." MICH., Bol. 169 & 174.
Sapucay, Sept. 30 (fl.): T. 324; Colonia Independencia, Nov. 13: T. 451.
V. N. Caboa tár. "Matayba spp.: Mataíva." BERT. 1940: 78, 86.

Melicocca lepidopetala RADLK.

Tree. "Wood of good quality for interior fittings, but subject to rot." MICH., Bol. 169 & 189.
Mercado N° 4, Asunción, Aug. 29: T. 11; Jard. Bot., Trinidad, Sept. 3: T. 252; same locality, Sept. 4: T. 251.
V. N. Yvá povó.

Paullinia elegans CAMB.

Climber. "Fairly common among ruderal plants, spreading also to crops (mandioca, sweet potatoes). Dried and powdered by Indians, it produces a narcotic for fishes." MICH., Bol. 169.
Patiño, Nov. 23: T. 599.
V. N. *Paullinia* spp.: *Ysyopó piriri*.

Paullinia pinnata L.

Arroyo Tebicuary, Nov. 2, 1944 (fl.): T. 655, ex herb. Rojas s.n.

Sapindus saponaria L.

Tree, up to 10 by 0.35 m. "Timber of little value. Cult., but spontaneous in San Bernardino and Santa Rosa." MICH., Bol. 189.
Jard. Bot., Trinidad, Sept. 8 (fr.): T. 100.
V. N. Casita, palo jabón, Yeky tí.

Serjania glabrata HBK.

Liana, from 5 to 6 m long. Flowers white.
Avenida Artigas, Trinidad, Dec. 28: T. 657, ex herb. Rojas s.n.
V. N. *Serjania* spp.: *Tamuya*, *Ysyopó timbó*.

Serjania perulacia RADLK.

"Humid places." MICH., Bol. 169.
Road to Gruta, Sept. 18 (fr.): T. 221.

SAPOTACEAE

Bumelia obtusifolia ROEM & SCHULT.

Mountain tree, from 6 to 10 m high. "But little used in spite of wood being hard and strong." MICH., Bol. 189.
Sapucay, Sept. 30 (fl.): T. 349.
V. N. Poro hú, Sapití.

Chrysophyllum gonocarpum (MART. & EICHL.) ENGL.

Tree, up to 12 by 0.50 m; *idem*, "from 6 to 8 m high. Rather humid forests. Flowers, Nov.-June." MICH., Bol. 174.
Jard. Bot., Trinidad, Sept. 4: T. 65.
V. N. *Chrysophyllum* spp.: *Aguai*.

Chrysophyllum marginatum (HOOK. & ARN.) RADLK.

Tree, up to 10 m high.
Villa Mora, Nov. 4: T. 422.

¹RAMBO (1961: 19) includes this species among the tall trees that form the canopy of tropical forests.

Lucuma paraguayensis CHOD. & HASSL.

"Wood, tough and of good quality for constructions; very resistant to decay." MICH., Bol. 189.

Road to Gruta, San Bernardino, Sept. 18 (fl.): T. 207.

V. N. Mataojo. "Lucuma and *Chrysophyllum* spp., *tomentosae*: *Aviyú*, corrup. *Aviú*." BERT. 1940: 75, 78, 83.

Pouteria glomerata (MIQ.) RADLK.

Shrub or small tree, up to 8 by 0.30 m.

Jard. Bot., Trinidad, on barranca Río Paraguay, Sept. 10: T. 136; baños, Río Paraguay, Asunción (shrub, from 2 to 3 m high), Nov. 3: T. 415. V. N. *Aguáí saiýú*.

Pouteria migonei HASSSL.

Jard. Bot., Trinidad, Sept. 8 (fl.): T. 121.

SCROPHULARIACEAE

Angelonia hassleriana CHOD.

"Flowers rose, purple or violet, in thick bunches." MICH., Bol. 175. Patiño, Nov. 23: T. 565.

V. N. *Angelonia* spp.: Angelón.

Angelonia integrerrima SPRENG.

"Preference for shady places. Flowers lilac, rose or whitish." MICH., Bol. 169 & 175.

Sapucay, campo by railway, Sept. 29 (fl.): T. 347.

Angelonia scaberrima (? *A. integrerrima* SPRENG.)

Villarrica, Nov. 12 (fl.): T. 504.

? *Angelonia* sp.

Subspontaneous.

Sapucay, Sept. 30: T. 342.

Bacopa flagellaria HAUMAN-MERCK

San Bernardino, Oct. 14: T. 373.

Buchnera lobelioides CHAM. & SCHLECHT.

Patiño, Nov. 23: T. 539.

Gerardia communis CHAM. & SCHLECHT.

Colonia Independencia, Nov. 13: T. 449.

Micranthemum orbiculatum MICHX.

Piraretá, Aug. 26: T. 33.

Scoparia montevidensis (SPRENG.) R. E. FRIES

"A yellow-flowered prostrate herb. A wayside weed of well-trodden paths. Prefers rather acid soils." MICH., Bol. 169.

Outpost, Macá Indians, Chaco paraguayo, Sept. 9 (fl.): T. 94; Patiño, Nov. 23: T. 590.

V. N. *Scoparia* spp.: *Typychá curatú*.

Scoparia plebeia CHAM. & SCHLECHT.

Arroyo Chololó Mí, on roadside barranca, Sept. 6 (fl.): T. 127.

Stemodia lanceolata BENTH.

Patiño, Nov. 23: T. 549.

SIMAROUBACEAE

Picramnia sellowii PLANCH.

"At times as a ruderal." MICH., Bol. 169.
Road to Gruta, San Bernardino, Sept. 18 (fr.) : T. 233.
V. N. Cedrillo, Tariri.

SOLANACEAE

Acnistus spinescens DAMMER

"Common among ruderal shrub formations on somewhat alkaline soils. Variable. Used by Indians as a fish narcotic. Med., credited with antirachitic and antimalarial properties, while being used also for bladder and liver complaints." MICH., Bol. 169.
Road to Gruta, San Bernardino, Sept. 18 (fl. & fr.) : T. 178.
V. N. Urupéba, Syi rembiú, Yu-á.

Brunfelsia uniflora D. DON.

"Shrub or small tree, from 1 to 4 m high. Rather humid places. At times as a roadside ruderal. Med., infusion of roots used as an emetic and expectorant; and also for sciatica. In strong doses, it can be toxic." MICH., Bol. 169 & 173.

Cultivated in countries of the River Plate (Río de la Plata) as an ornamental shrub for patios.
Jard. Bot., Trinidad, Sept. 24: T. 237.
V. N. Jazmín del Paraguay, azucena. *Brunfelsia* spp.: Manacá.

Cestrum sp.

Jard. Bot., Trinidad, Nov. 16: T. 524.
V. N. *Cestrum* spp.: Cai hurá.

Petunia violacea LIND.

"A very common ruderal plant; rare among crops. Ornamental. Many varieties cultivated." MICH., Bol. 169.
Piraretá, Aug. 26 (fl.) : T. 250; road to Gruta, San Bernardino, Sept. 18 (fl.) : T. 232; Sapucay, Sept. 28 (fl.) : T. 334.
V. N. Petý mirí.

Petunia sp.

Flowers blue.
Arroyo Yhacá, Piribebuy, Sept. 6 (fl.) : T. 109.

Schwenckia americana L.

Patiño, Nov. 23: T. 554.

Solanum bonariensis L. var. *villaricense* (MORONG) CHOD.

Villarrica, Nov. 12: T. 490.
V. N. Duraznillo.

Solanum sisymbriifolium LAM.

"A very common ruderal plant; invades crops. Med., a decoction of roots, at 0.2 %, used for bladder, intestinal and liver complaints." MICH., Bol. 169 & 173.

Sapucay, Sept. 28 (fl.) : T. 351.
V. N. Revienta caballo, espina colorada, and with *Xylosma venosum*
N. E. Brown, Mboi rembiú.

Solanum verbascifolium (L.) VAHL

"Subshrub, shrub or small tree, up to 8 m high. Flowers all year round. Melliferous. Leaves used as forage. Very common in rather dry places. Very variable." MICH., Bol. 169.
 Jard. Bot., Trinidad, Sept. 2 (fl.): T. 46.
 V. N. Turkey berry, fumo bravo, and with *S. auriculatum* Ait., Caá ti guasú.

STERCULIACEAE

Brachychiton populneum R. BR.

Cult.
 Jard. Bot., Trinidad, Sept. 2: T. 213.

Guazuma ulmifolia LAM.

Tree, up to 15 by 0.75 m. "Woods. Flowers, Oct.-Mar. Honey of good quality." MICH., Bol. 174.
 Jard. Bot., Trinidad, Sept. 8 (fr.): T. 98.
 V. N. Cambá acá guasú. *Guazuma* spp.: Guasúma.

Sterculia chicha ST. HIL.

Jard. Bot., Trinidad, Sept. 2: T. 7.
 V. N. "Sterculia spp.: Manduvi guasú, Amanduvi guasú." BERT. 1940: 36, 41, 56.

TILIACEAE

Luehea divaricata MART. & ZUCC.

Tree, up to 23 by 0.80 m; *idem*, "from 6 to 8 m high, with rose-coloured flowers, Dec.-Jan. Wood of *Luehea* spp. used for interiors, carpentry, ordinary furniture, brushes, clogs and saddle frames," MICH., Bol. 174 & 189.

Road to Gruta, San Bernardino, Sept. 18 (fr.): T. 186; Sapucay, Sept. 30 (fr.): T. 326.

V. N. Azota caballo, árbol de San Francisco, Caá oveti guasú.

Luehea uniflora ST. HIL.

"Tree, from 10 to 12 m high, with white flowers. *Med.*, (this and other species) tea (at 1 %), an astringent." MICH., Bol. 173, 174 & 189.
 Jard. Bot., Trinidad, Sept. 8: T. 99; road to Gruta, San Bernardino, Sept. 18 (fl.): T. 189.
 V. N. Caá oveti tí.

TURNERACEAE

Turnera sp.

Flowers yellow. "*Med.*, infusions of *T. ulmifolia* L., in moderate doses, a sedative, being used for neuralgia and headaches." MICH., Bol. 173.
 San Bernardino, Sept. 18 (fl.): T. 172.
 V. N. "*Turnera* spp.: Catú avá caá." BERT. 1940: 38.

Turnera sp.

Patiño, Nov. 23: T. 557.

ULMACEAE

Celtis sp.

"*Celtis* spp.: timber for construction of vehicles, tool handles and anything requiring a hard and strong wood." MICH., Bol. 174 & 189. Villa Mora, Nov. 4: T. 423; Villarrica, Nov. 12: T. 482.

V. N. *Celtis* spp.: Tala, palo amargo, and with *Zizyphus* spp., *Yuasý-i*.

Phyllostylon rhamnoides TAUB.

Tree, up to 25 by 0.75 m, but usually from 6 to 8 m high. "Wood for agricultural implements and furniture." MICH., Bol. 189. Barranca, Km. 3, Asunción, Nov. 3: T. 411.

V. N. Palo de lanza, *Yvyrá catú*.

Trema micrantha (L.) BLUME

Small tree, up to 6 m high. "A typical plant of the borders of recently thinned montes. Produces charcoal of good quality." MICH., Bol. 169 & 189.

Parque Caballero, Sept. 8: T. 147; Villa Mora, Nov. 4: T. 421.
V. N. Tala blanca, *Curundy-i*.

UMBELLIFERAE

Bowlesia sp.

Arroyo Piracuré, Sapucay (seasonal), Sept. 30: T. 327.

Centella hirtella NANNE.

Cult.

Gruta, San Bernardino, Sept. 18: T. 225.

Eryngium balansae H. WOLFF.

"Tall and robust; common in somewhat humid places." MICH., Bol. 169. Villarrica, Nov. 14: T. 513.

Eryngium serra CHAM. & SCHLECHT.

Patiño, Nov. 23: T. 603.

Hydrocotyle leucocephala CHAM. & SCHLECHT.

"A perennial plant, common on damp soils in shady places. Riverside woods. At times becomes a ruderal and spreads to crops (sweet potatoes), where it forms colonies. Med., macerated leaves used externally for cutaneous affections." MICH., Bol. 169 & 173.

Gruta, San Bernardino, Sept. 18 (fl.): T. 192.

V. N. *Hydrocotyle* spp.: Hierba de San Roque, *Acarysó*.

Hydrocotyle ranunculoides L. f.

Arroyo Yhagui Guasú, Piribebuy, Sept. 6: T. 102: San Bernardino, Oct. 14: T. 368.

URTICACEAE

Urera aurantiaca WILLD. var. *scandens* WEDD.

Shrub or small tree, up to 6 by 0.25 m. "Edge of montes. Flowers, Aug.-Dec. Melliferous." MICH., Bol. 169 & 174.

Parque Caballero, Asunción, Oct. 4 (fl. ♀): T. 246; same locality and date (fl. ♂): T. 247.

V. N. *Cará pochý*. *Urera* spp.: *Pynó*, ortiga.

VERBENACEAE

Aegiphila hassleriana BRIQ.

"Wood for boxes, clogs and cheap furniture." MICH., Bol. 189.

Villarrica, Nov. 12: T. 528.

Aloysia ligustrina (LAG.) SMALL

"Med., an infusion of leaves indicated for stomach trouble." MICH., Bol. 173.

Jard. Bot., Trinidad, Sept. 17 (fl.): T. 184; Villarrica, Nov. 12: T. 495.
V. N. Poleo. *Aloysia* spp.: see *Lippia* spp.

Aloysia virgata (RUIZ. & PAV.) A. L. JUSS.

"Med., tea from leaves (at 1.5 %) taken as an antispasmodic, an antirheumatic and, also, for coughs; applied externally for skin trouble." MICH., Bol. 173.

Calle Presidente Franco, Asunción, Nov. 9: T. 434; Villarrica, Nov. 12: T. 493.

Duranta plumieri JACQ.

Jard. Bot., Trinidad, Nov. 17: T. 509; San Bernardino, Dec. 1: T. 613.

Glandularia megapotamica (SPRENG.) CABR. & DAWSON

"Flowers scarlet, rarely white or blue; very ornamental in large masses. Very common in the campo and along borders of roads as a ruderal, spreading at times among crops, but not too troublesome." MICH., Bol. 169 & 175.

Jard. Bot., Trinidad, Sept. 2 (fl.): T. 52; Sapucay, Sept. 29: T. 310.
V. N. Margarita del campo, *Yvotá la novia*.

Glandularia tenuisecta (BRIQ.) SMALL

"Flowers violet-coloured. Very common as a ruderal weed. Appears at times in great quantities and spreads to crops. Med., a diuretic and laxative." MICH., Bol. 169 & 173.

Jard. Bot., Trinidad, Sept. 2 (fl.): T. 44; same locality, Nov. 17: T. 512;
Sapucay, Sept. 29: T. 289.

Lantana balansae BRIQ.

"Subshrub, from 60 to 100 cm high. Flowers rose-violet. Very common as a ruderal wayside weed, but rare among crops." MICH., Bol. 169.
Sapucay, Sept. 30: T. 309; Villarrica, Nov. 12: T. 485.

Lantana brasiliensis LINK

Colonia Independencia, Nov. 13: T. 439.

Lantana camara L.

"Subshrub or shrub, from 60 to 100 cm high, of Mexican origin. Flowers yellow, which in time turn: (a) violet-red or (b) orange. Cultivated as an ornamental plant, but very dangerous as it can easily become a troublesome weed. Med., tea from leaves (at 1%) possesses carminative, stomachic and stimulative properties. Plant contains the alkaloid lantanine and is efficacious in the treatment of malaria. Fruit edible." MICH., Bol. 169 & 173.

Villarrica, Nov. 12: T. 491.

V. N. Cinco negritos. "*Lantana* spp.: *Caá mará-i* (whence Linnaean specific name), and also current contraction, *Caamará*." MICH., Bol. 169.

Lantana trifolia L.

Villarrica, Nov. 12: T. 492.

Lippia globuliflora O. KTZE.

"Subshrub, from 1 to 2 m high. Flowers: corolla rose-colour." MICH., Bol. 169.

Outpost, Macá Indians, Chaco paraguayo, Sept. 9 (fl.): T. 91; San Bernardino, Oct. 14: T. 378.

V. N. *Lippia* and *Aloysia* spp.: *Paí rá yvotý*, reseda del campo.

Lippia recolletae MORONG

"Coarse herb with broad leaves and orange-coloured flowers. Common as a ruderal, spreading sometimes to crops (cotton, mandioca), but not in large quantities." MICH., Bol. 169.

Sapucay, Sept. 29 (fl.): T. 267.

Lippia reptans HBK.

Patiño, Nov. 23: T. 548.

Lippia sp.

Sapucay, Sept. 29 (fl.): T. 266.

Lippia sp.

Villarrica, Nov. 12: T. 477.

Verbena bonariensis L.

"50 to 100 cm high. Flowers greyish-blue. Very common as a ruderal weed." MICH., Bol. 169.

Jard. Bot., Trinidad, Sept. 15 (fl.): T. 197.

V. N. *Verbena* spp.: *Caá mará ruguay*.

Verbena sp.

A spontaneous hybrid.

Jard. Bot., Trinidad, Sept. 10: T. 169.

Vitex cymosa BERT.

Tree, up to 12 by 0.20 m; *idem*, "6 to 10 m high. Woods. Flowers [mauve], August. Wood for shelves and carpentry in general. *Med.*, credited with antiluetic properties. *Cult.*" MICH., Bol. 173, 174 & 189; Jard. Bot., Trinidad, Sept. 24 (fl.): T. 242; same locality, Jan. 2 (fr.), 1946: T. 662, *ex herb.* Rojas s.n.

V. N. *Vitex* spp.: *Tarumá*.

ZYGOHYLLACEAE

Bulnesia bonariensis GRIS.

Bush or small tree, up to 4 by 0.10 m. *Hab.*: Chaco paraguayo.

Jard. Bot., Trinidad, Sept. 2 (fl.): T. 50.

V. N. Jaboncillo, guacle. "*Bulnesia* spp.: *Yvyrá ocá-i*." BERT. 1940: 20.

MONOCOTYLEDONS

ALSTROEMERIACEAE

Alstroemeria inodora HERB.

"At times as a ruderal on humid soils." MICH., Bol. 169.

Arroyo Chololó Mi, Sept. 6: T. 159.

AMARYLLIDACEAE

Haemanthus africana HORT.

Cult.

Patio, Casa Gordon, Asunción, Nov. 6 (fl.): T. 418.

ARACEAE

Pistia stratiotes L.

"An aquatic and fairly troublesome weed, covering at times surface of water like a dense carpet. Cosmopolitan, both tropical and subtropical. *Med.*, possesses diuretic, diaphoretic and depurative properties." MICH., Bol. 169 & 173.

Piraretá, Aug. 26: T. 37; San Bernardino, Oct. 14: T. 364.
V. N. Water lettuce, llantén de agua, *Caá pé-i*.

BROMELIACEAE

Bromelia balansae MEZ.

"A very gregarious species, forming dense and nearly impenetrable thickets on borders of montes and woods. Flowers, Oct.-Mar. Melliferous. A valuable textile plant. *Med.*, fruit possesses antihelminthic and diuretic properties; roots, in a 2 % decoction, furnish an appetizer and diuretic." MICH., Bol. 169 & 173.

Railway embankment, Km. 3, Asunción, Nov. 3: T. 474.
V. N. *Caraguatá*.

Pseudananas sagenarius (ARR. CAM.) CAMARGO

"Seen at times as a ruderal along picadas. Fruit edible." MICH., Bol. 169.
Sapucay, Sept. 29: T. 396.

Tillandsia streptocarpa BAKER

Golf course, Asunción, Nov. 25: T. 537.

CYPERACEAE

Bulbostylis capillaris (L.) C. B. CL.

"Sandy margins of streams and lagoons. A very variable plant." MICH., Bol. 169.
San Bernardino, Dec. 9: T. 629.

Cyperus giganteus ROTTB.

Steep bank, Río Paraguay, Asunción, Sept. 9: T. 97.

Cyperus surinamensis ROTTB.

"At times as a ruderal, especially on rather acid, sandy soils; 50 to 100 cm high." MICH., Bol. 169.
San Bernardino, Oct. 14: T. 381.

Heleocharis sp.

Arroyo Yhacá, Piribebuy, Sept. 6 (fl.): T. 113.

Kyllinga brevifolia ROTTB.

San Bernardino, Oct. 14: T. 392.

Kyllinga odorata VAHL

"*Med.*, root an antispasmodic. Indicated for stone." MICH., Bol. 173.
Sapucay, Sept. 28: T. 286; San Bernardino, Oct. 14: T. 391.
V. N. "*Kyllinga* spp.: (*pro parte*) *Caá pi-i catí*." BERT. 1940: 50.

DIOSCOREACEAE

Dioscorea multiflora PRESL.

Trinidad, Nov. 17: T. 585.

ERIOCAULACEAE

Eriocaulon planifolium BONG.

Piraretá, Aug. 26: T. 34; Arroyo Chololó Mí, Sept. 6: T. 160,

GRAMINEAE

Aristida sp.

Sapucay, on railway embankment, Sept. 29: T. 302.
V. N. *Aristida* spp.: *Caá pi-i atá*.

Briza sp.

Villarrica, Nov. 14: T. 463.
V. N. *Briza* spp.: *Caá pi-i chiní*.

Chusquea ramosissima LINDM.

Slender cane reaching 7 by 0.03 m. "Very common along picadas in the monte." MICH., Bol. 169.
Arroyo Chololó Guasú, Sept. 6: T. 70; same locality and date: T. 129.
V. N. *Tacuá rembó*.

Cynodon dactylon (L.) PERS.

"Cosmopolitan plant of warm climates, penetrating also into temperate zones. An excellent forage grass, but, nevertheless, considered as one of the world's worst weeds, owing to its great vital force, its wonderful adaptive powers, its resistance to both drought and humidity, and its easy propagation by seed and rhizomes. A perennial, flowering principally Oct.-Mar. Med., fresh juice used for mange. Roots possess febrifuge properties." MICH., Bol. 169, 173 & 174.

San Bernardino, Oct. 14: T. 393.

V. N. Bermuda grass, pata de perdiz, *Caá pi-i pe poi*.

Digitaria sp.

Colonia Independencia, Nov. 13: T. 455.

V. N. *Digitaria* spp.: Large crab grass, pasto de cuaresma, gramilla.

Olyra glaberrima RADDI

Arroyo Chololó Guasú, growing in mass, 2 m high, in shady monte on rocky bank of stream, Sept. 6 (fl.): T. 115.
V. N. "*Olyra* spp., *majores*: *Tacuápi-i*; spp., *minores*: *Tacuápi poñi*."
BERT., 1940: 31, 60.

Olyra micrantha H. B. & K. Nov.

Sapucay, Sept. 29: T. 287.

Olyra pauciflora Sw.

Sapucay, Sept. 29: T. 313.

Paspalum sp.

Sapucay, Sept. 29: T. 354.

Paspalum dilatatum POIR.

Villarrica, Nov. 14: T. 464.

V. N. Golden crown grass, pasto Dallis, pasto miel.

Rhynchelytrum repens (WILLD.) C. HUBBARD

Sapucay, on railway embankment, Sept. 29: T. 305.

V. N. Natal grass.

HYPOXIDACEAE

Hypoxis decumbens L.

"A very common roadside weed." MICH., Bol. 169. "Flowers yellow."

REITZ & KLEIN 1964: 49.

Colonia Independencia, Nov. 13: T. 441.

V. N. *Mbari rysó*.

IRIDACEAE

Sisyrinchium sp.

Arroyo Piracuré, Sapucay, on barranca, Sept. 30: T. 328.

V. N. Blue-eyed grass. *Sisyrinchium* spp.: *Cancha lagua*.

JUNCACEAE

Juncus sp.

Arroyo Chololó Mi, Sept. 6: T. 142.

V. N. "Juncus spp.: *Piri poty*." Bert. 1940: 59.

LILIACEAE

Herreria ?bonplandi LECOMPTE

San Bernardino, Dec. 9: T. 627.

Herreria montevidensis KLOTZ.

"Med., roots a diuretic and depurative." MICH., Bol. 173.

San Bernardino, Dec. 9: T. 640.

V. N. Zarzaparrilla.

Nothoscordum sp.

Tablada, Asunción, Nov. 3: T. 472.

PONTEDERIACEAE

Eichornia azurea (Sw.) KUNTH

Río Paraguay, Asunción, Sept. 9 (fl.): T. 89.

V. N. *Mbororé*.

Eichornia crassipes (MART.) SOLMS.

"Forms the famous 'floating islands'. Med., infusion of flowers, at 1%, a diuretic and febrifuge; considered also to have aphrodisiac properties." MICH., Bol. 169 & 173.

San Bernardino, Oct. 14: T. 363.

V. N. Camalote, jacinto de agua, *Aguapé puruá*.

Heteranthera reniformis RUIZ & PAY.

"Flowers white." REITZ & KLEIN 1964: 50.

Arroyo Yhagui Guasú, Piribebuy, Sept. 6: T. 103.

Heteranthera zosterifolia MART.

Piraretá, Aug. 26: T. 35.

Pontederia cordata L.

Flowers sky-blue. "A plant of a very ample distribution from Canada to Argentina." MICH., Bol. 169.

Arroyo Yhagui Guasú, Piribebuy, Sept. 6 (fl.): T. 114; Sapucay, Sept. 29: T. 339; Villarrica, Nov. 14: T. 519.

V. N. Pickerelweed, camalote, *Aguape*.

POTAMOGETONACEAE

Potamogeton striatus RUIZ & PAV.

Patiño, July 1931: T. 481, ex herb. Rojas s.n.

PTERIDOPHYTES

CYATHEACEAE

?Alsophila sp.

Piraretá, Aug. 26: T. 275.

V. N. *Alsophila* spp.: *Amambay guasú*.*Cyathea vestita* MART.

Tree fern.

Arroyo Chololó Guasú, Sept. 6, on rocky barranca: T. 116.

V. N. *Cyathea* spp.: *Chachi*.*Cyathea* sp.

Tree fern.

Arroyo Chololó Guasú, Sept. 6: T. 79.

LYCOPODIACEAE

Lycopodium cernuum L.

Piraretá, Aug. 26: T. 31.

V. N. *Lycopodium* spp.: Colchon de pobre, *Tatú ruguay*.

POLYPODIACEAE

Subf. Asplenioideae

Asplenium auritum Sw.

Piraretá, Aug. 26: T. 25.

V. N. Spleenwort. *Asplenium* spp.: *Amambay pucú*.*Asplenium* sp.

Arroyo Chololó Guasú, Sept. 6: T. 276.

Diplazium sp.Arroyo Chololó Guasú, Sept. 6: T. 77; Gruta, San Bernardino, Sept. 18:
T. 194.

Subf. Blechnoideae

Blechnum brasiliense DESV.

Arroyo Chololó Guasú, Sept. 6: T. 83.

V. N. *Blechnum* spp.: *Amambay*.

Subf. Dennstaedtioideae

Dennstaedtia sp.

Camino Chololó Mi, Sept. 6: T. 128.

V. N. *Dennstaedtia* spp.: *Amambay*.

Subf. Dryopteridoideae

Didymochlaena truncatula (Sw.) J. SM.

Giant fern.

Arroyo Chololó Guasú, Sept. 6: T. 87; Gruta, San Bernardino, Sept. 18: T. 195.

V. N. *Didymochlaena* spp.: *Amambay guasú*.

Dryopteris serrata (CAV.) C. CHR.

Patiño, Nov. 23: T. 594.

Dryopteris sp.

Arroyo Chololó Guasú, Sept. 6: T. 81; Sapucay, Sept. 29: T. 294.

Leptochilus crenatus (PRESL) C. CHR. var. *contaminoides* (CHR.) HASSL.

Arroyo Chololó Guasú, Sept. 6: T. 78; Gruta, San Bernardino, Sept. 18: T. 272.

Subf. Gymnogrammoideae

Adiantum raddianum PRESL

Camino Chololó Guasú, Sept. 6: T. 118.

"Med., infusion of foliage used for chest complaints and as a sudorific, an appetizer and a diuretic." MICH., Bol. 173.

V. N. *Adiantum* spp.: Culantrillo, culandrillo, *Amambay miri*.

Anogramma chaerophylla (DESV.) LINK

Arroyo Piracuré, Sapucay, Sept. 30: T. 318.

Cheilanthes chlorophylla Sw.

Patiño, Nov. 23: T. 604.

V. N. *Cheilanthes* spp.: *Amambay*.

Cheilanthes pedata (HK.) A. BR.

Colonia Independencia, Nov. 13: T. 453.

Cheilanthes radiata (L.) J. SM.

Arroyo Chololó Guasú, Sept. 6: T. 80.

Doryopteris concolor (LANGSD. & FISCH.) KUHN

Jard. Bot., Trinidad, Sept. 24: T. 235; Sapucay, Sept. 28: T. 330.

Doryopteris pedata (L.) FÉE

Arroyo Chololó Guasú, Sept. 6: T. 117; Sapucay, Sept. 28: T. 319.

Pityrogramma calomelanos (L.) LINK

Piraretá, Aug. 26: T. 24.

V. N. *Pityrogramma* spp.: *Amambay*.

Pityrogramma trifoliata (L.) TRYON

Arroyo Chololó Mí, Sept. 6: T. 126; Sapucay, Sept. 29: T. 295.

Subf. Pteridoideae

Pteridium aquilinum (L.) KUHN

Colonia Independencia, Nov. 13: T. 440.

V. N. *Pteridium* spp.: *Amambay ñu*.

Pteris denticulata Sw.

Sapucay, Sept. 28: T. 331; same locality and date: T. 332.

V. N. *Pteris* spp.: *Amambay*.

Pteris sp.

Arroyo Chololó Guasú, Sept. 6: T. 82.

SCHIZAEACEAE

Anemia phyllitidis (L.) Sw.

Sapucay, Sept. 28: T. 335.

V. N. *Anemia* spp.: Doradilla, doradita, *Amambay* mi.

Anemia tomentosa Sw.

Sapucay, Sept. 28: T. 292.

Lygodium polymorphum (CAV.) HBK.

Climbing fern.

Piraretá, Aug. 26: T. 23.

V. N. *Lygodium* spp.: *Amambay ysypó*.

SELAGINELLACEAE

Selaginella excurens SPRING

Piraretá, Aug. 26: T. 32.

V. N. "Selaginella" spp.: *Amambay yvý bebuý*." Bert. 1940: 41.

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II

ERRATA

- Page 6, line 28: for "occuring" read "occurring," and on line 30, for *Xylosoma* read *Xylosma*.
" 13, " 36: for "resistent" read "resistant."
" 16, " 22: (and subsequently) for "perrenial" read "perennial."
" 21, " 14: for "and" read "an."
" 38, " 40: for *Diantenopteryx* read *Diatenopteryx*.
" 41, " 45 et seq.: for "and with *Xylosma venosum* ... *Mboi rembiū*" read "*Mboi rembiū*, and with *Xylosma venosum* ..., *Nuatí pytá*."

Index:

in Index to Genera,		
for <i>Aescnynomene</i>	read	<i>Aeschynomene</i>
" <i>Allmanda</i>	"	<i>Allamanda</i>
" <i>Beleporone</i>	"	<i>Beloporone</i>
" <i>Caloptropis</i>	"	<i>Calotropis</i>
" <i>Clystostoma</i>	"	<i>Clytostoma</i>
" <i>Diaptenopteryx</i>	"	<i>Diatenopteryx</i>
" <i>Sisyrinchium</i>	"	<i>Sisyrinchium</i>

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