

FLORA OF EASTERN TABASCO AND ADJACENT MEXICAN AREAS*

THROUGH 1938 six expeditions for botanical exploration in the Mayan area were sent out under the joint auspices of the University of Michigan and the Carnegie Institution of Washington. These undertook surveys in Yucatán, Campeche, Quintana Roo, British Honduras, the Department of Petén, Guatemala, and the Huastecán country of San Luis Potosí.

None of the expeditions visited the extreme western part of the Yucatán Peninsula and adjacent lowlands of southeastern Mexico. Few areas of equal size or importance in Mexico had been so completely neglected by botanists. Prior to 1939, not a single plant collection worthy of note had ever been made in eastern Chiapas, eastern Tabasco, or extreme western Campeche. The writer in 1932 explored the San Pedro de Mártir River in Petén almost to the Mexican border,¹ and this preliminary reconnaissance trip established that the forest of that area was similar in aspect to the forest of central Campeche and central Petén. To obtain additional data regarding the vegetation, a representative plant collection from various sectors of the region was desirable.

Mr. Eizi Matuda, who has collaborated with the University of Michigan Herbarium in his study of the Mexican flora, was induced by the writer in 1939 to botanize along the Usumacinta River and tributaries. The trip was financed in part by a grant from the Carnegie Institution of Washington and by the sale of duplicate sets of specimens. From May 9 through July 28, 1939, Matuda collected in the region. His field work began at Balancán, extended up the San Pedro de Mártir River to the Petén border, across to Tenosique through San Isidro, along the Usumacinta River from Estapilla south again to the Petén border near Piedras Negras, across to the Chacamax River in Chiapas, up to Palenque,

* This paper has been published with funds derived from the income of the endowment of the Horace H. Rackham School of Graduate Studies of the University of Michigan.

¹ C. L. Lundell, *The Vegetation of Petén*, *Carnegie Inst. Wash. Publ.*, No. 478. 1937.

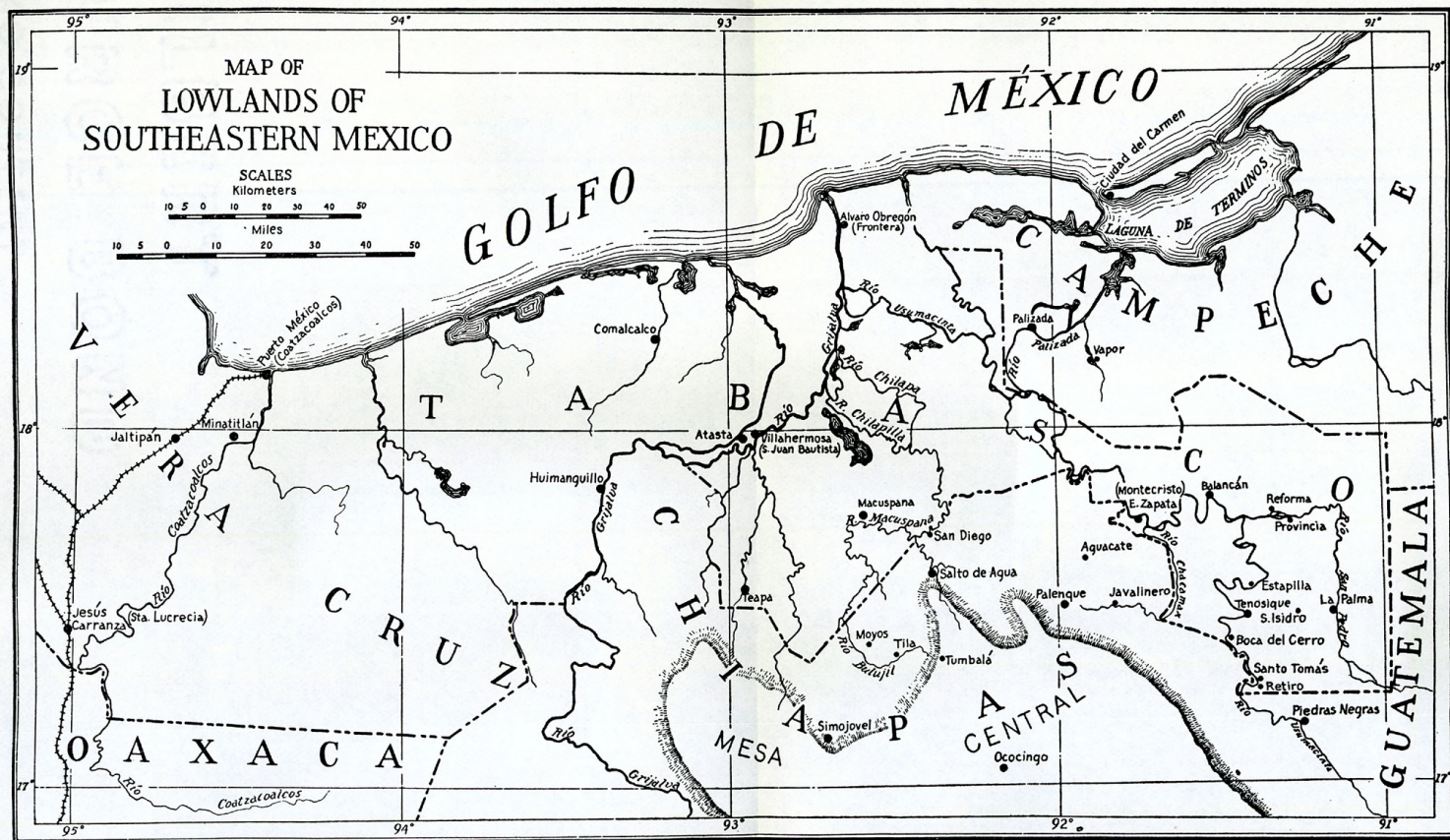
northeast to Aguacate and E. Zapata, and down the Usumacinta River to Palizada, Campeche. From Palizada he went to Vapor where the final collections of the trip were made. The principal localities are designated on Map 1.

Matuda obtained 911 numbers of plants, his series 3003 through 3914, a total of 5230 specimens representing approximately 700 species. The first set of the collection is in the University of Michigan Herbarium.

His collection localities, some of which were only temporary camps (*champas*), are listed below approximately in the order in which he visited them. Matuda often abbreviated localities on the labels, and his abbreviations (or misspellings) are enclosed by parentheses. Further, in giving the locality in which a particular collection was made, he indicated first the last large town through which he had passed, or the principal town in the district. Hence for his collections at La Palma, which is quite removed from Balancán (Map 1), his labels read "Tabasco, Balancán, La Palma." Although at times confusing, his practice has much to commend it where obscure localities are involved.

TABASCO

1. Balancán—on the Usumacinta River below the mouth of the San Pedro de Mártir River.
2. Mercedes—west of Balancán on the road to Las Cruces.
3. Achotal—about eight miles east of Balancán.
4. Ojo de Agua (Ojo' Agua)—about five miles southeast of Balancán.
5. Reforma—a *finca* east of Balancán and north of Limón on the San Pedro de Mártir River. Most of the collections were made at a camp set up by Matuda and his assistants in the high forest about ten miles north of Reforma.
6. La Lucha—about six miles south of Balancán.
7. Provincia—near Reforma on the San Pedro de Mártir River. Near Reforma the river is practically impassable, and boats operating into Petén make headquarters at Provincia.
8. La Palma—on the San Pedro de Mártir River east of Teno-sique and near the Petén border.



MAP 1

9. San Isidro (S. Isidro)—an overnight muleteer camp (*champa*) in high forest about midway between La Palma and Tenosique.

10. Juarez—about five miles from Tenosique.

11. Tenosique—on the Usumacinta River south of Balancán.

12. Retiro—south of Tenosique near the Petén boundary. Collections from this locality were made southward into Petén and northward to a point on the Usumacinta River called Santo Tomás (a *champa*).

13. Estapilla—on the Usumacinta River north of Tenosique.

14. Boca del Cerro (Boca Cerro)—a gorge on the Usumacinta River southwest of Tenosique (Pl. I). It is near the place designated on some maps as Santa Margarita.

CHIAPAS

15. Javalinero (also spelled Jabalinero)—a ranch on the bank of the Chacamax River about twelve miles below Palenque (Pl. IV).

16. Palenque (Rvina)—ruins of the ancient Mayan city.

17. Sierra de Palenque (Cerro de Palenque)—the ridge south and southwest of Palenque.

18. Aguacate—a ranch in the savanna country midway between Palenque and E. Zapata (formerly Montecristo).

CAMPECHE

19. Palizada—a town about midway down the Palizada River.

20. Vapor—a ranch on the Marente River east of Palizada.

From the collections, Matuda's diary, which gives a brief account of the country traversed, and his photographs, it is evident that the vegetation of the region differs little from that of Petén. In the vicinity of old towns and settlements, savannas alternate with second growth, and these give way to old advanced forest in outlying districts. The savanna country of the Palenque sector (Pl. III) is almost identical with that of the La Libertad country of Petén;² differences in the flora are negligible. Old advanced forest is to be found in remote localities such as San Isidro, Retiro, Boca del Cerro (Pls. I and II), and Javalinero (Pl. IV). Most of the

² *Ibid.*, Pl. 35.

species have been collected elsewhere in the Yucatán Peninsula, and the others doubtless will be found in adjacent areas of Campeche and Petén. Although his collection probably represents less than a third of the total fern and phanerogamic flora of the areas traversed, we can anticipate that the whole flora is essentially the same as that of the southern two-thirds of the Yucatán Peninsula.

Explorations of Mr. Llewelyn Williams in the isthmus of Tehuantepec, Mexico³ and the writer's collections from Tamazunchale, San Luis Potosí,⁴ indicate that many elements of this wet lowland flora range northward along the coast to the Panuco River.

Since the collection is the first of importance from eastern Tabasco and adjacent Mexican areas, the following enumeration is the first major contribution to our knowledge of the flora of the region. Approximately 700 species are listed in the following catalogue. Although no novelties are described in this report, thirty-eight published elsewhere have been based primarily on the collection. All notes on habit, habitats, vernacular names, etc., were supplied by Matuda on the labels of the first set of specimens now in the University of Michigan Herbarium. Six of the species described from the collection and two others of particular interest are illustrated.

POLYPODIACEAE

(Determined by W. R. Maxon, Washington)

ACROSTICHUM DANEIFOLIUM L. & F.—Tabasco: Boca del Cerro, in swamp, July 1–5, *Matuda* 3547.

ADIANTOPSIS RADIATA (L.) Fée.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3330.

ADIANTUM DECORATUM Maxon & Weatherby.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3328.

ADIANTUM LATIFOLIUM Lam.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3678.

³ Llewelyn Williams, "Arboles y arbustos del istmo de Tehuantepec, Mexico," *Lilloa*, 4: 137–71. 1939.

⁴ C. L. Lundell, "Studies of Mexican and Central American Plants—IV," *Field and Lab.*, 6: 9–16. 1937.

ADIANTUM OBLIQUUM Willd.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3325.

ADIANTUM PETIOLATUM Desv.—Tabasco: San Isidro, June 7–11, *Matuda* 3336.

ADIANTUM VILLOSUM L.—Tabasco: Reforma, in advanced forest, May 22–26, *Matuda* 3205.

ADIANTUM WILSONI Hook.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3616.

ASPLENIUM CRISTATUM Lam.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3307.

ASPLENIUM FORMOSUM Willd.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3331.

ASPLENIUM SERRATUM L.—Tabasco: Retiro, on limestone in advanced forest, June 19–25, *Matuda* 3463.

BLECHNUM FRAXINEUM Willd. (?).—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3612.

BLECHNUM SERRULATUM Rich.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3088.

BOLBITIS CLADORHIZANS (Spreng.) Ching.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda* 3379.

CYCLOPELTIS SEMICORDATA (Sw.) J. Sm.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3436.

DICTYOXIPHIMUM PANAMENSE Hook.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3606.

DRYOPTERIS DENTATA (Forsk.) C. Chr.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda* 3363, 3366A.

DRYOPTERIS GONGYLODES (Schk.) Kuntze.—Tabasco: San Isidro, in swamp, June 7–11, *Matuda* 3338.

DRYOPTERIS LIEBMANNII M. & M.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3603.

DRYOPTERIS SERRATA (Cav.) C. Chr.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3301.

GYMNOPTERIS RUFA (L.) Bernh.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3415.

NEPHROLEPIS BISERRATA (Sw.) Schott.—Tabasco: Mercedes, on palm tree at riverside, May 9–14, *Matuda* 3021.

NEPHROLEPIS PENDULA (Raddi) J. Sm.—Tabasco: La Palma, on tree at edge of forest, June 1–6, *Matuda* 3332.

POLYPODIUM ANGUSTIFOLIUM Sw.—Chiapas: ruins of Palenque, on tree, July 10–12, *Matuda* 3705.

POLYPODIUM PALMERI Maxon.—Tabasco: La Palma, on tree, June 1–6, *Matuda* 3304. Campeche: Vapor, July 25–28, *Matuda* 3884.

POLYPODIUM PECTINATUM L. (?).—Tabasco: San Isidro, June 7–11, *Matuda* 3372.

POLYPODIUM PHYLLITIDIS L. (?).—Tabasco: San Isidro, on tree at lakeside, June 7–11, *Matuda* 3368.

POLYPODIUM POLYPODIOIDES (L.) Watt.—Tabasco: Boca del Cerro, on tree, July 1–5, *Matuda* 3572.

PTERIS GRANDIFOLIA L.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3442; Boca del Cerro, at edge of swamp, July 1–5, *Matuda* 3534, 3554.

PTERIS LONGIFOLIA L.—Tabasco: Boca del Cerro, on limestone, July 1–5, *Matuda* 3535.

STENOCHLAENA RECURVATA (Fée) Liebm.—Chiapas: Javalinero, on tree in advanced forest, July 6–9, *Matuda* 3652.

TECTARIA HERACLEIFOLIA (Willd.) Underw.—Tabasco: Retiro, June 19–25, *Matuda* 3416.

VITTARIA LINEATA (L.) J. E. Sm.—Tabasco: Reforma, May 22–26, *Matuda* 3212.

SCHIZAEACEAE

(Determined by W. R. Maxon, Washington)

LOPHIDIUM ELEGANS (Vahl) Presl.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3662.

LYGODIUM HETERODOXUM Kunze.—Chiapas: Sierra de Palenque, in advanced forest, July 14, *Matuda* 3720, a vine.

LYGODIUM MEXICANUM Presl.—Chiapas: Sierra de Palenque, at edge of forest, July 14, *Matuda* 3716.

SALVINIACEAE

(Determined by W. R. Maxon, Washington)

SALVINIA AURICULATA Aubl.—Tabasco: La Palma, in lake, June 1–6, *Matuda* 3274.

LYCOPODIACEAE

(Determined by W. R. Maxon, Washington)

LYCOPODIUM CERNUUM L.—Chiapas: Aguacate, in savanna, July 16–18, *Matuda* 3781.

SELAGINELLACEAE

SELAGINELLA sp.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3676.

SELAGINELLA sp.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3691.

SELAGINELLA sp.—Chiapas: ruins of Palenque, July 10–12, *Matuda* 3702.

CYCADACEAE

ZAMIA FURFURACEA L. f.—Tabasco: Ojo de Agua, southeast of Balancán, in savanna, May 9–14, *Matuda* 3117.

POTAMOGETONACEAE

POTAMOGETON sp.—Campeche: Vapor, in lake, July 25–28, *Matuda* 3876.

ALISMACEAE

SAGITTARIA LANCIFOLIA L.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3251. Campeche: Palizada, in swamp, July 25–28, *Matuda* 3840; Vapor, in swamp, July 25–28, *Matuda* 3886, flowers white. The specific determination is somewhat uncertain, and more than one species may be represented.

GRAMINEAE

(Determined by Agnes Chase, Washington;

LeRoy H. Harvey, Ann Arbor)

ANDROPOGON BICORNIS L.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3726.

ANDROPOGON BOURGAEI Hack.—Chiapas: Aguacate, July 16–18, *Matuda* 3795.

ANDROPOGON CONDENSATUS H. B. K.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3741.

ANDROPOGON SELLOANUS (Hack.) Hack.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3723.

ARTHROSTYLIDIUM SPINOSUM Swallen, *Journ. Wash. Acad. Sci.*, 28: 6. 1938.—Tabasco: Retiro, in advanced forest, June 19–25. *Matuda* 3454, 7–9 m. high, 2–3 cm. in diameter, clambering.

AXONOPUS PURPUSII (Mez) Chase.—Tabasco: Achotal, east of Balancán, May 9–14 *Matuda* 3089. Chiapas: Palenque, in savanna July 9–14, *Matuda* 3737.

BOUTELOUA HIRSUTA Lag.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3506.

CENCHRUS BROWNII R. & S.—Tabasco: La Palma, in second growth, June 1–6, *Matuda* 3248.

ECHINOCHLOA WALTERI (Pursh) Heller.—Campeche: Palizada, in swamp, July 25–28, *Matuda* 3839, 3842.

ERAGROSTIS ELLIOTTII S. Wats.—Chiapas: Aguacate, July 16–18, *Matuda* 3799.

ERAGROSTIS HYPNOIDES (Lam.) B. S. P.—Tabasco: Reforma, May 22–26, *Matuda* 3158. Campeche: Palizada, swampside, July 25–28, *Matuda* 3864, vernacular name, *pan caliente*.

ERIOCHLOA PUNCTATA (L.) Desv.—Tabasco: Retiro, riverside, June 19–25, *Matuda* 3431. Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3759.

ERIOCHRYSIS CAYENNENSIS Beauv.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3750.

GUADUA ACULEATA Rupr.—Tabasco: Reforma, May 22–26, *Matuda* 3198, trunk 8 cm. in diameter.

HETEROPOGON CONTORTUS (L.) Beauv.—Tabasco: Estapilla, June 27, *Matuda* 3509.

HOMOLEPIS ATURENSIS (H. B. K.) Chase.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3736.

HYMENACHNE AMPLEXICAULIS (Rudge) Nees.—Campeche: Vapor, swampside, July 25–28, *Matuda* 3892.

LASIACIS DIVARICATA (L.) Hitchc.—Tabasco: La Palma, in second growth, June 1–6, *Matuda* 3242.

LASIACIS PROCERRIMA (Hack.) Hitchc.—Chiapas: Sierra de Palenque, southern slope, July 14, *Matuda* 3718.

LASIACIS RUSCIFOLIA (H. B. K.) Nees.—Tabasco: La Palma, June 1–6, *Matuda* 3292.

LEPTOCORYPHIUM LANATUM (H. B. K.) Nees.—Tabasco: Achotal, east of Balancán, May 9–14, *Matuda* 3106. Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3760.

MANISURIS GUIANENSIS Hitchc.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3144A. According to Mrs. Chase, this species has been known previously only from British Guiana and Brazil.

MANISURIS RAMOSA (Fourn.) Hitchc.—Chiapas: Aguacate, July 16–18, *Matuda* 3774.

MESOSETUM BLAKEI Swallen.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3738, 3743 (det. Swallen).

OLYRA YUCATANA Chase.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3244.

ORYZA LATIFOLIA Desv.—Campeche: Vapor, in swamp, July 25–28, *Matuda* 3901.

PANICUM CYANESCENS Nees.—Chiapas: Aguacate, July 16–18, *Matuda* 3769, 3792.

PANICUM HIRSUTUM Swartz.—Tabasco: Boca del Cerro, in second growth, July 1–5, *Matuda* 3577. Chiapas: Javalinero, in second growth, July 6–9, *Matuda* 3632.

PANICUM HIRTICAULE Presl.—Chiapas: Javalinero, in second growth, July 6–9, *Matuda* 3640.

PANICUM ICHNANTHOIDES Fourn.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3722.

PANICUM LAXUM Swartz.—Campeche: Vapor, July 25–28, *Matuda* 3899.

PANICUM RUDGEI Roem. & Schult.—Tabasco: Achotal, east of Balancán, May 9–14, *Matuda* 3087.

PANICUM ZIZANIOIDES H. B. K.—Campeche: Vapor, July 25–28, *Matuda* 3896.

PASPALUM CAESPITOSUM Flügge.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3289.

PASPALUM LINEARE Trin.—Chiapas: Aguacate, July 16–18, *Matuda* 3772, 3800. According to Mrs. Chase, this is the first record for the species on the continent north of Costa Rica.

PASPALUM ORBICULATUM Poir.—Tabasco: Reforma, May 22–26, *Matuda* 3206.

PASPALUM PLICATULUM Michx.—Tabasco: Achotal, east of Balancán, May 9–14, *Matuda* 3069.

PASPALUM VIRGATUM L.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3519.

PENTARRHAPHIS SCABRA H. B. K.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3503. Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3742.

PHARUS LATIFOLIUS L.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3604.

SETARIA GENICULATA (Lam.) Beauv.—Tabasco: Retiro, river-side, June 19–25, *Matuda* 3430.

SETARIA TENAX (L.) Desv.—Chiapas: Aguacate, July 16–18, *Matuda* 3806.

SORGHASTRUM SETOSUM (Griseb.) Hitchc.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3733; Aguacate, July 16–18, *Matuda* 3770, 3773.

STREPTOGYNE CRINITA Beauv.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3637.

TRACHYPOGON ANGUSTIFOLIUS (H. B. K.) Nees.—Tabasco: Achotal, east of Balancán, May 9–14, *Matuda* 3105; Estapilla, in savanna, June 27, *Matuda* 3505.

TRICHACHNE INSULARIS (L.) Nees.—Chiapas: Javalinero, in second growth, swampside, July 6–9, *Matuda* 3628.

CYPERACEAE

(Determined by Hugh O'Neill, Washington)

CALYPTROCARYA GLOMERULATA (Brongn.) Urban.—Chiapas: Javalinero, at edge of river, July 6–9, *Matuda* 3610.

CLADIUM JAMAICENSE Crantz.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3316 (det. Lundell), 2–3 m. high.

CYPERUS ARTICULATUS L.—Tabasco: Estapilla, swampside, June 18, *Matuda* 3483. Campeche: Palizada, in swamp, July 25–28, *Matuda* 3868.

CYPERUS BREVIFOLIUS Rottb.—Tabasco: Boca del Cerro, in swamp, July 1–5, *Matuda* 3559.

CYPERUS DIGITATUS Roxb.—Campeche: Palizada, in swamp, July 25–28, *Matuda* 3851.

CYPERUS EGGERSSII Boeckl.—Tabasco: Retiro, riverside, June 19–25, *Matuda* 3451.

CYPERUS GIGANTEUS Vahl.—Tabasco: San Isidro, in swamp, June 7–11, *Matuda* 3350, 2.5 m. high.

CYPERUS HUMILIS Kunth.—Tabasco: Boca del Cerro, in swamp, July 1–5, *Matuda* 3574.

CYPERUS LIGULARIS L.—Tabasco: Retiro, riverside, June 19–25, *Matuda* 3452.

CYPERUS LUZULAE (L.) Retz.—Chiapas: Javalinero, swampside, July 6–9, *Matuda* 3629.

CYPERUS MACROCEPHALUS Liebm.—Campeche: Palizada, in swamp, July 25–28, *Matuda* 3869.

CYPERUS OCHRACEUS Vahl.—Tabasco: Boca del Cerro, in swamp, July 1–5, *Matuda* 3578.

CYPERUS UNIOLIODES R. Br.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3744.

DICHROMENA COLORATA (L.) Hitchc.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3260.

ELEOCHARIS CELLULOSA Torr.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3259.

ELEOCHARIS GENICULATA (L.) R. & S.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3262.

FIMBRISTYLIS MONOSTACHYA (L.) Hassk.—Tabasco: Estapilla, June 27, *Matuda* 3497.

FUIRENA SIMPLEX Vahl.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3321, 3322; San Isidro, in swamp, May 9–14, *Matuda* 3360.

HYPOLYTRUM NICARAGUENSE Liebm.—Tabasco: San Isidro, June 7–11, *Matuda* 3337.

RHYNCHOSPORA CEPHALOTES (L.) Vahl.—Tabasco: Ojo de Agua, southeast of Balancán, in savanna, May 9–14, *Matuda* 3120.

RHYNCHOSPORA CYPEROIDES (Sw.) Mart.—Campeche: Vapor, July 25–28, *Matuda* 3911.

RHYNCHOSPORA FASCICULARIS (Michx.) Vahl.—Tabasco: Aho-tal, east of Balancán, in savanna, May 9–14, *Matuda* 3057; Ojo de Agua, southeast of Balancán, in savanna, May 9–14, *Matuda* 3128.

RHYNCHOSPORA sp.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3052.

RHYNCHOSPORA sp.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3090.

RHYNCHOSPORA sp.—Tabasco: Ojo de Agua, southeast of Balancán, lakeside, May 9–14, *Matuda* 3127.

RHYNCHOSPORA sp.—Tabasco: Provincia, May 29, *Matuda* 3222.

RHYNCHOSPORA sp.—Tabasco: Boca del Cerro, in swamp, July 1–5, *Matuda* 3539.

SCLERIA BRACTEATA Cav.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3092, vernacular name, *navajuela*.

SCLERIA MELALEUCA Reichenb.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3326.

SCLERIA MICROCARPA Nees.—Tabasco: Reforma, May 22–26, *Matuda* 3228.

PALMAE

ACOELORRAPHE sp.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3070.

BACTRIS sp.—Tabasco: Reforma, May 22–26, *Matuda* 3192.

BACTRIS sp.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3478, 2.5 m. high, 1.5–2 cm. in diameter.

BACTRIS sp.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3479, 2–2.5 m. high.

CHAMAEDOREA sp.—Tabasco: Reforma, in advanced forest, May 22–26, *Matuda* 3153, 1.5 m. high.

CHAMAEDOREA sp.—Tabasco: Reforma, in advanced forest, May 22–26, *Matuda* 3232, 2 m. high.

CHAMAEDOREA sp.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3275, 80–100 cm. high.

CHAMAEDOREA sp.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3466.

CHAMAEDOREA sp.—Chiapas: Javalinero, July 6–9, *Matuda* 3650, 1–1.3 m. high.

DESMONCUS sp.—Tabasco: Reforma, May 22–26, *Matuda* 3196.

GEONOMA sp.—Tabasco: Retiro, June 19–25, *Matuda* 3443.

GEONOMA sp.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3477, 3 m. high, 2–3 cm. in diameter.

ARACEAE

ANTHURIUM MYOSUROIDES (H. B. K.) Endl.—Chiapas: Javalinero, on tree in advanced forest, July 6–9, *Matuda* 3644.

MONSTERA TUBERCULATA Lundell, *Lloydia*, 2: 78. 1939.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3308, fruits white, edible, vernacular name, *chile montaña*; Estapilla, June 27, *Matuda* 3495. This is the first record for the species outside of British Honduras.

PISTIA STRATIOTES L.—Tabasco, San Isidro, aquatic, June 7–11, *Matuda* 3387.

SPATHIPHYLLUM LACUSTRE Lundell, *Contrib. Univ. Mich. Herb.*, 6: 4. 1941.—Tabasco: Ojo de Agua, southeast of Balancán, lakeside, May 9–14, *Matuda* 3136 (type collection).

SYNGONIUM PODOPHYLLUM Schott.—Chiapas: Aguacate, epiphyte, July 16–18, *Matuda* 3825.

XYRIDACEAE

XYRIS AMBIGUA Beyr.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3728. No authentic material of the species has been available for comparison, but the specimens from Chiapas agree closely with Malme's description (*North Amer. Fl.*, 19: 8. 1937). This plant, widespread in the southern United States, has been reported from Cuba and British Honduras (*ibid.*).

XYRIS JUPICAI Rich.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3109, corolla yellow.

BROMELIACEAE

AECHMEA KIENASTII E. Morr.—Tabasco: San Isidro, on tree at riverside, June 7–11, *Matuda* 3365.

BILLBERGIA VIRIDIFLORA Wendl.—Tabasco: San Isidro, on tree, June 11, *Matuda* 3400.

CATOPSIS MORRENIANA Mez.—Tabasco: San Isidro, June 11, *Matuda* 3394 (det. L. B. Smith).

PITCAIRNIA PUNICEA Scheidw.—Chiapas: Javalinero, epiphyte, July 6–9, *Matuda* 3660, 3661.

TILLANDSIA BRACHYCAULOS Schlecht.—Campeche: Vapor, epiphyte, July 25–28, *Matuda* 3882.

TILLANDSIA BULBOSA Hook.—Tabasco: Reforma, epiphyte, May 22–26, *Matuda* 3180.

TILLANDSIA FESTUCOIDES Brongn.—Tabasco: Reforma, on tree, May 22–26, *Matuda* 3144; San Isidro, June 7–11, *Matuda* 3389.

TILLANDSIA JUNCEA LeC.—Tabasco: Reforma, epiphyte, May 22–26, *Matuda* 3183.

TILLANDSIA POLYSTACHYA L.—Campeche: Vapor, on tree, July 25–28, *Matuda* 3880 (det. L. B. Smith).

TILLANDSIA SCHIEDEANA Steud.—Tabasco: Reforma, on tree, May 22–26, *Matuda* 3143.

TILLANDSIA STREPTOPHYLLA Scheidw.—Tabasco: La Palma, on riverside tree, June 1–6, *Matuda* 3305.

TILLANDSIA USNEOIDES L.—Chiapas: Aguacate, on tree, July 16–18, *Matuda* 3812. Campeche: Palizada, on tree at lakeside, July 25–28, *Matuda* 3828.

COMMELINACEAE

COMMELINA ELEGANS H. B. K.—Chiapas: Aguacate, July 16–18, *Matuda* 3802, flowers blue.

PONTEDERIACEAE

PONTEDERIA LANCEOLATA Nutt. (?).—Tabasco: La Palma, edge of lake, June 1–6, *Matuda* 3302. Chiapas: ruins of Palenque, July 10–12, *Matuda* 3688.

ZOSTERELLA LONGITUBA Alexander, *North Amer. Fl.*, 19: 52. 1937.—Campeche: Vapor, in lake, July 25–28, *Matuda* 3872, flowers yellow.

LILIACEAE

DRACAENA AMERICANA Donn. Sm.—Tabasco: Tenosique, in advanced forest, June 14–16, *Matuda* 3404, tree 8–10 m. high, 40 cm. in diameter.

SMILACACEAE

(Verified by C. V. Morton, Washington)

SMILAX ARISTOLOCHIAEFOLIA Mill.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda* 3015.

SMILAX LANCEOLATA L.—Chiapas: ruins of Palenque, at edge of forest, July 10–12, *Matuda* 3674.

SMILAX LUCULENTA Killip & Morton, *Carnegie Inst. Wash. Publ.*, 461: 289. 1936.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3709.

SMILAX MOLLIS H. & B.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3072; Estapilla, June 18, *Matuda* 3487. Chiapas: Aguacate, July 9–14, *Matuda* 3762.

SMILAX SPINOSA Mill.—Tabasco: Ojo de Agua, southeast of Balancán, in second growth, May 9–14, *Matuda* 3135; Reforma, May 22–26, *Matuda* 3159, 3177, 3199; Boca del Cerro, in advanced forest, July 1–5, *Matuda* 3556.

HAEMODORACEAE

XIPHIDIUM CAERULEUM Aubl.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3701, flowers white.

AMARYLLIDACEAE

CURCULIGO SCORZONERIFOLIA (Lam.) Baker.—Chiapas: Aguacate, July 16–18, *Matuda* 3794, perennial herb.

HYMENOCALLIS LITTORALIS (Jacq.) Salisb.—Chiapas: Aguacate, in wet savanna, July 16–18, *Matuda* 3797. Campeche: Vapor, in swamp, July 25–28, *Matuda* 3885.

ZEPHYRANTHES CITRINA Baker (?).—Tabasco: Tenosique, in second growth, June 14–16, *Matuda* 3407, flowers white.

DIOSCOREACEAE

DIOSCOREA BARTLETTII Morton, *Carnegie Inst. Wash. Publ.*, 461: 242. 1936.—Tabasco: La Palma, in second growth, June 1–6, *Matuda* 3318. Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3669, a vine.

DIOSCOREA BERNOULLIANA Prain & Burk.—Chiapas: Aguacate, in savanna, July 16–18, *Matuda* 3767.

IRIDACEAE

CIPURA PALUDOSA Aubl.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3511, flowers white. Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3729, flowers white.

MARICA GRACILIS Herb.—Tabasco: La Palma, June 1–6, *Matuda* 3281.

NEMASTYLIS BEQUAERTII Standl., *Journ. Arnold Arb.*, 11: 47. 1930.—Chiapas: Aguacate, July 16–18, *Matuda* 3815.

MUSACEAE

(Determined by L. B. Smith, Cambridge)

HELICONIA AURANTIACA Ghiesbr.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda* 3385.

HELICONIA COLLINSIANA Griggs (?).—Chiapas: Aguacate, in advanced forest, July 16–18, *Matuda* 3823, flowers scarlet.

HELICONIA CRASSA Griggs.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda* 3385A. This species probably is not distinct from *H. aurantiaca* Ghiesbr.

HELICONIA HIRSUTA var. CANNOIDEA (L. C. Rich.) Bak.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3639, flowers red.

HELICONIA LATISPATHA Benth.—Tabasco: Estapilla, June 27, *Matuda* 3494.

HELICONIA LIBRATA Griggs.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3465.

HELICONIA SCHIEDEANA Kl. (?).—Tabasco: Boca del Cerro, riverside, July 1–5, *Matuda* 3541.

HELICONIA sp.—Chiapas: ruins of Palenque, in forest, July 10–12, *Matuda* 3683.

ZINGIBERACEAE

COSTUS VILLOSISSIMUS Jacq.—Tabasco: Reforma, May 22–26, *Matuda* 3213.

RENEALMIA AROMATICA (Aubl.) Griseb.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda* 3386.

MARANTACEAE

MARANTA ARUNDINACEA L.—Chiapas: Aguacate, July 16–18, *Matuda* 3791.

CALATHEA MACROCHLAMYS Woodson & Standl., *Field Mus. Bot.*, 22: 134. 1940.—Tabasco: Tenosique, in advanced forest, June 14–16, *Matuda* 3399 (type collection), flowers yellowish.

CALATHEA MICANS (Math.) Koern.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3418, flowers white.

PLEIOSTACHYA PRUINOSA (Regel) Schum.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3680.

BURMANNIACEAE

BURMANNIA CAPITATA (Walt.) Mart.—Chiapas: Aguacate, in savanna, July 16–18, *Matuda* 3778.

ORCHIDACEAE

(Determined by Charles Schweinfurth, Cambridge)

BRASSAVOLA NODOSA (L.) Lindl.—Campeche: Vapor, on tree, July 25–28, *Matuda* 3879, flowers white.

CATASETUM INTEGERRIMUM Hook.—Campeche: Palizada, on tree, July 25–28, *Matuda* 3830.

EPIDENDRUM ALATUM Batem.—Tabasco: Ojo de Agua, south-east of Balancán, May 9–14, *Matuda* 3111, flowers reddish, fragrant. Campeche: Vapor, on tree, May 25–28, *Matuda* 3893.

EPIDENDRUM COCHLEATUM L.—Tabasco: La Palma, on tree in advanced forest, June 1–6, *Matuda* 3303.

EPIDENDRUM DEAMII Schltr.—Tabasco: Reforma, on tree, May 22–26, *Matuda* 3163. Campeche: Vapor, on tree, July 25–28, *Matuda* 3900.

EPIDENDRUM DIFFORME Jacq.—Tabasco: Reforma, May 22–26, *Matuda* 3165, flowers yellow. Campeche: Vapor, on tree, July 25–28, *Matuda* 3878.

EPIDENDRUM IMATOPHYLLUM Lindl.—Tabasco: Balancán, May 20, *Matuda* 3179.

EPIDENDRUM NOCTURNUM Jacq.—Campeche: Palizada, July 25–28, *Matuda* 3826.

EPIDENDRUM POLYANTHUM Lindl.—Tabasco: San Isidro, lake-side, June 7–11, *Matuda* 3349.

EPIDENDRUM RADIATUM Lindl.—Chiapas: Aguacate, on tree in savanna forest, June 16–18, *Matuda* 3824, flowers fragrant.

EPIDENDRUM RIGIDUM Jacq.—Tabasco: Ojo de Agua, south-east of Balancán, in advanced forest, May 9–14, *Matuda* 3114; La Palma, on riverside tree, June 1–6, *Matuda* 3317.

IONOPSIS UTRICULARIOIDES (Sw.) Lindl.—Tabasco: Retiro, on tree at riverside, June 19–25, *Matuda* 3464. Chiapas: Javalinero, on tree, July 6–9, *Matuda* 3646.

ONCIDIUM LINDENII Brongn.—Tabasco: Reforma, on tree, May 22–26, *Matuda* 3230.

ONCIDIUM PUSILLUM (L.) Rchb. f.—Tabasco: San Isidro, lake-side, June 7–11, *Matuda* 3352.

PLEUROTHALLIS GROBYI Lindl. *P. marginata* Lindl.—Tabasco: Reforma, on tree, May 22–26, *Matuda* 3150, flowers white. Campeche: Vapor, July 25–28, *Matuda* 3895.

SCHOMBURGKIA TIBICINIS Batem.—Tabasco: Balancán, May 18, *Matuda* 3145A.

PIPERACEAE

PEPEROMIA CHICBULANA Trel., *Field Mus. Bot.*, 17: 230. 1937.—Tabasco: San Isidro, June 7–11, *Matuda* 3370.

PEPEROMIA LUNDELLII Trel., *Field Mus. Bot.*, 12: 406. 1936.—Tabasco: Reforma, May 22–26, *Matuda* 3164. This species is very near if not conspecific with *P. glutinosa* Millsp.

PEPEROMIA PETENENSIS Trel., *Field Mus. Bot.*, 17: 230. 1937.—Tabasco: Reforma, epiphyte, May 22–26, *Matuda* 3214.

PEPEROMIA TREMULAEFORMIS Trel., *Field Mus. Bot.*, 9: 276. 1940.—Chiapas: Palenque, on trees in advanced forest along river, July 10–12, *Matuda* 3671.

PIPER ANDRESENSE Trel., *Field Mus. Bot.*, 17: 230. 1937.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3065. The collection agrees so closely with the isotype of *P. andresense* from Petén (*Lundell* 3203) that I do not hesitate to refer it to this species.

PIPER AURITUM H. B. K.—Tabasco: La Palma, June 1–6, *Matuda* 3234.

PIPER HISPIDUM Sw.—Tabasco: Retiro, in second growth, June 19–25, *Matuda 3411*.

PIPER MATUDAI Lundell, *Lloydia*, 4: 44. 1941.—Chiapas: along Chacamax River at Palenque, July 10–12, *Matuda 3697* (type collection), spikes white.

PIPER PSILORHACHE C. DC.—Tabasco: La Palma, in forest, June 1–6, *Matuda 3246*, a shrub.

PIPER USUMACINTENSE Lundell, *Lloydia*, 4: 44. 1941.—Tabasco: Boca del Cerro, in advanced forest, July 1–5, *Matuda 3589* (type collection), a shrub.

PIPER YUCATANENSE C. DC.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda 3382*, a shrub.

SALICACEAE

SALIX CHILENSIS Molina.—Campeche: Palizada, July 25–28, *Matuda 3855*.

FAGACEAE

QUERCUS OLEOIDES Cham. & Schlecht.—Tabasco: Ojo de Agua, southeast of Balancán, in advanced forest, May 9–14, *Matuda 3129*, a tree, 13 m. high, 60 cm. in diameter. Chiapas: Palenque, in savanna, July 9–14, *Matuda 3732*, a tree, 15 m. high, 55–60 cm. in diameter, vernacular name, *roble*.

ULMACEAE

TREMA FLORIDANA Britton.—Tabasco: Boca del Cerro, in second growth, July 1–5, *Matuda 3575*.

MORACEAE

CECROPIA sp.—Tabasco: La Palma, June 1–6, *Matuda 3240*.

CHLOROPHORA TINCTORIA (L.) Gaud.—Campeche: Palizada, in swampside forest, July 25–28, *Matuda 3850*, a tree, 5–6 m. high, 30 cm. in diameter.

COUSSAPOA OLIGOCEPHALA Donn. Sm.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda 3300*, a tree, 20 m. high, 45 cm. in diameter.

DORSTENIA CONTRAJERVA L.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda 3276*.

FICUS INVOLUTA (Liebm.) Miq.—Tabasco: Boca del Cerro, swampside, July 1–5, *Matuda* 3552, a tree, 12 m. high, 50 cm. in diameter.

FICUS OERSTEDIANA Miq.—Chiapas: Palenque, in savanna forest, July 9–14, *Matuda* 3724, a tree, 10 m. high, 50 cm. in diameter; Aguacate, in savanna forest, July 16–18, *Matuda* 3805, a tree, 15 m. high, 60 cm. in diameter.

FICUS PADIFOLIA H. B. K.—Tabasco: Reforma, May 22–26, *Matuda* 3176, a tree.

FICUS RADULA Willd.—Tabasco: Reforma, riverside, May 22–26, *Matuda* 3162, a tree, 10 m. high, 45 cm. in diameter; San Isidro, lakeside, June 7–11, *Matuda* 3346, a tree, 14 m. high, 45 cm. in diameter.

FICUS TUERCKHEIMII Standl.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3250, a tree, 20 m. high, 60 cm. in diameter.

PIRATINERA TERRABANA (Pittier) Lundell, *Carnegie Inst. Wash. Publ.*, 478: 208. 1937.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3625, a tree, 10 m. high, 25 cm. in diameter.

POULSENIA ARMATA (Miq.) Standl.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3645, a tree, 15 m. high, 30 cm. in diameter.

URTICACEAE

(Determined by E. P. Killip, Washington)

BOEHMERIA CYLINDRICA (L.) Sw.—Tabasco: San Isidro, in swamp, June 7–11, *Matuda* 3357.

BOEHMERIA RAMIFLORA var. *CUSPIDATA* Wedd.—Tabasco: Retiro, in second growth, June 19–25, *Matuda* 3441.

PILEA PUBESCENS Liebm.—Tabasco: Retiro, in virgin forest, June 19–25, *Matuda* 3462.

POUZOLZIA OBLIQUA Wedd.—Tabasco: Retiro, in second growth, June 19–25, *Matuda* 3475 (det. Lundell).

URERA ELATA (Sw.) Griseb.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3699, a small tree, 3 m. high.

LORANTHACEAE

PHORADENDRON CHEIROCARPUM Trel.—Chiapas: Palenque, in savanna forest, July 9–14, *Matuda* 3727.

PHORADENDRON FRANCISCANUM Trel., *Field Mus. Bot.*, 17: 236. 1937.—Campeche: Palizada, on tree, July 25–28, *Matuda* 3849.

PHORADENDRON PIPEROIDES (H. B. K.) Trel.—Chiapas: Palenque, on tree in savanna forest, July 9–14, *Matuda* 3721.

PSITTACANTHUS AMERICANUS (Jacq.) Mart.—Campeche: Vapor, on tree, July 25–28, *Matuda* 3898, flowers red.

STRUTHANTHUS CASSYTHOIDES Millsp., *Field Mus. Bot.*, 8: 7. 1930.—Tabasco: Reforma, May 22–26, *Matuda* 3200.

STRUTHANTHUS MACROSTACHYUS Lundell, *Lloydia*, 4: 45. 1941.—Chiapas: Palenque, in savanna forest, July 9–14, *Matuda* 3731 (type collection).

STRUTHANTHUS PHANERONEURUS Standl., *Field Mus. Bot.*, 9: 285. 1940.—Campeche: Palizada, on tree, July 25–28, *Matuda* 3856. The Campeche collection considerably extends the range of this parasite, which was recently described from Honduras. The original description, based evidently on imperfect material, may now be amplified.

Leaves obovate-elliptic or elliptic, up to 6 cm. long, 3.7 cm. wide. Inflorescences axillary, solitary or fasciculate, narrowly paniculate, usually sessile, up to 5 cm. long. Flowers sessile or subsessile, about 4.2 mm. long, in clusters of 3, the clusters borne on peduncles about 1.5 mm. long. Bractlets deciduous. Calyx truncate, obscurely denticulate. Petals 6, linear, 3.4 mm. long. Style straight, 3 mm. long.

OLACACEAE

HEISTERIA MEDIA Blake, *Contrib. U. S. Nat. Herb.*, 24: 3. 1922. *H. Chippiana* Standl., *Field Mus. Bot.*, 11: 130. 1932.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3690, a tree, 20 m. high, 40 cm. in diameter.

XIMENIA AMERICANA L.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3074, 3075, a shrub, 2 m. high.

BALANOPHORACEAE

HELOSIS MEXICANA Liebm.—Tabasco: Boca del Cerro, in advanced forest, July 1–5, *Matuda* 3558.

POLYGONACEAE

COCCOLOBA COZUMELENSIS Hemsl.—Tabasco: Reforma, May 22–26, *Matuda 3173*, a tree, 15 m. high, 35 cm. in diameter.

COCCOLOBA MAYANA Lundell, *Bull. Torrey Bot. Club*, 64: 547. 1937.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3634*, a tree, 12 m. high, 50 cm. in diameter.

GYMNOPODIUM FLORIBUNDUM Rolfe (?).—Tabasco: Reforma, May 22–26, *Matuda 3182*, a small tree.

POLYGONUM MEXICANUM Small.—Tabasco: Boca del Cerro, swampside, July 1–5, *Matuda 3544*.

CHENOPODIACEAE

CHENOPODIUM AMBROSIOIDES L.—Tabasco: La Palma, in second growth, June 1–6, *Matuda 3256*.

AMARANTHACEAE

ACHYRANTHES ASPERA L.—Tabasco: La Palma, in forest, June 1–6, *Matuda 3294*.

IRESENE NIGRA Uline & Bray (?).—Tabasco: Reforma, May 26, *Matuda 3203*.

NYCTAGINACEAE

NEEA BELIZENSIS Lundell, *Contrib. Univ. Mich. Herb.*, 7: 9. 1942.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda 3076*, a shrub, 50 cm. high.

PHYTOLACCACEAE

ACHATOCARPUS MEXICANUS H. Walt.—Tabasco: Estapilla, riverside, June 18, *Matuda 3489*, a shrub.

RIVINA HUMILIS L.—Tabasco: Retiro, riverside, June 19–25, *Matuda 3446*. Campeche: Palizada, July 25–28, *Matuda 3852*.

NYMPHAEACEAE

CABOMBA AQUATICA Aubl.—Tabasco: Reforma, May 22–26, *Matuda 3191*. Campeche: Vapor, in lake, July 25–28, *Matuda 3874*.

NELUMBO LUTEA (Willd.) Pers. (?).—Campeche: Palizada, in lake, July 25–28, *Matuda 3833*, flowers white.

NYMPHAEA AMPLA (Salisb.) DC.—Tabasco: Reforma, May 22–26, *Matuda* 3190, flowers white. Campeche: Vapor, in lake, July 25–28, *Matuda* 3877.

MENISPERMACEAE

CISSAMPELOS PAREIRA L.—Tabasco: Achotal, east of Balancán, in second growth, May 9–14, *Matuda* 3058. Chiapas: Aguacate, July 16–18, *Matuda* 3809, a vine.

CISSAMPELOS TROPAEOLIFOLIA DC.—Tabasco: Retiro, in second growth, June 19–25, *Matuda* 3457. Chiapas: ruins of Palenque, in second growth, July 10–12, *Matuda* 3686.

HYPERBAENA NECTANDRIFOLIA Standl.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda* 3380, a tree, 10 m. high, 25 cm. in diameter.

ANONACEAE

CYMBOPETALUM PENDULIFLORUM (Dunal) Baill.—Tabasco: La Palma, June 1–6, *Matuda* 3237.

GUATTERIA AMPLIFOLIA Triana & Planch.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3684, 3685, a small tree, flowers yellow.

XYLOPIA FRUTESCENS Aubl.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3094, 3095, a tree, 13 m. high, 25 cm. in diameter. Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3607, a tree, 15 m. high, 30 cm. in diameter.

MONIMIACEAE

SIPARUNA NICARAGUENSIS Hemsl.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3413; Boca del Cerro, July 1–5, *Matuda* 3553.

LAURACEAE

CASSYTHA FILIFORMIS L.—Chiapas: Aguacate, in savanna, July 16–18, *Matuda* 3780.

NECTANDRA PERDUBIA Lundell, *Lloydia*, 4: 47. 1941. —Tabasco: Boca del Cerro, in second growth, July 1–5, *Matuda* 3576 (type collection), a tree, 10 m. high, 25 cm. in diameter.

NECTANDRA SANGUINEA Rottb.—Tabasco: Mercedes, in second growth along river, May 9–14, *Matuda* 3027, a tree, 4–5 m. high,

10–15 cm. in diameter; Tenosique, in advanced forest, June 14–16, *Matuda* 3402, a tree, 7 m. high, 39 cm. in diameter, flowers white. Although the flowers are smaller than those typical for this tree, the species is quite variable, and the collections appear to be referable here.

NECTANDRA TABASCENSIS Lundell, *Lloydia*, 4: 48. 1941.—Tabasco: La Palma, June 1–6, *Matuda* 3299 (type collection), a tree.

PHOEBE LONGICAUDATA Lundell, *Bull. Torrey Bot. Club*, 64: 548. 1937.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3643, a small tree, 3–4 m. high.

CAPPARIDACEAE

CAPPARIS TUERCKHEIMII Donn. Sm.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda* 3099, a tree, 2–3 m. high, flowers white; Reforma, May 22–26, *Matuda* 3185, a shrub.

CRATAEVA GLAUCA Lundell, *Bull. Torrey Bot. Club*, 69: 389. 1942.—Tabasco: Boca del Cerro, at edge of swamp, July 1–5, *Matuda* 3533, a tree, 5 m. high, 25 cm. in diameter. Campeche: Palizada, swampside, July 25–28, *Matuda* 3863 (type collection), a small tree, 7 m. high, 30 cm. in diameter, flowers greenish yellow, vernacular name, *crusita*.

DROSERACEAE

DROSERA CAPILLARIS Poir.—Veracruz: Minatitlán, lakeside, May 1, *Matuda* 3023. Tabasco: La Lucha, south of Balancán, in savanna, May 20, *Matuda* 3175.

ROSACEAE

CHRYSOBALANUS ICACO L.—Tabasco: Ojo de Agua, southeast of Balancán, in savanna, May 9–14, *Matuda* 3132, vernacular name, *cacco*.

COUEPIA DODECANDRA (DC.) Hemsl.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3102, a tree, 15–18 m. high, 35 cm. in diameter; Boca del Cerro, riverside, July 1–5, *Matuda* 3585, a tree, 15 m. high, 55 cm. in diameter. Chiapas: Aguacate, in savanna, July 16–18, *Matuda* 3798.

HIRTELLA AMERICANA L.—Tabasco: La Palma, in advanced

forest, June 1-6, *Matuda* 3270, a tree, 20 m. high, 55 cm. in diameter, vernacular name, *icatillo*; San Isidro, in advanced forest, June 7-11, *Matuda* 3343, a tree, 20 m. high, 40 cm. in diameter.

HIRTELLA RACEMOSA Lam.—Tabasco: Achotal, east of Balancán, in second growth, May 9-14, *Matuda* 3097.

LICANIA HYPOLEUCA Benth.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9-14, *Matuda* 3054, a tree, 3-4 m. high; Ojo de Agua, southeast of Balancán, in advanced forest, May 9-14, *Matuda* 3110, a tree, 7-8 m. high, 25 cm. in diameter; Ojo de Agua, *Matuda* 3142, a tree, 10 m. high, 35-40 cm. in diameter; Boca del Cerro, in advanced forest, July 1-5, *Matuda* 3565, a tree, 15 m. high, 40 cm. in diameter.

CONNARACEAE

ROUREA GLABRA H. B. K.—Tabasco: Mercedes, lakeside, May 9-14, *Matuda* 3004, a woody vine, flowers white.

LEGUMINOSAE

I. MIMOSEAE

ACACIA FARNESIANA (L.) Willd.—Tabasco: Boca del Cerro, in second growth, July 1-5, *Matuda* 3587, 3588, a shrub.

ACACIA MAYANA Lundell, *Carnegie Inst. Wash. Publ.*, 478: 210. 1937.—Tabasco: Retiro, in advanced forest, June 19-25, *Matuda* 3410, a shrub, 3 m. high. This exceptionally well-marked species has been known only from the type collection made in southern Petén by Mercedes Aguilar H.

ACACIA USUMACINTENSIS Lundell, *Contrib. Univ. Mich. Herb.*, 4: 8. 1940.—Tabasco: La Palma, in advanced forest, June 1-6, *Matuda* 3323, 3324, a tree, 15 m. high, 45 cm. in diameter; Boca del Cerro, July 1-5, *Matuda* 3550 (type collection), a tree, 14 m. high, 40 cm. in diameter.

ALBIZZIA TOMENTOSA (Micheli) Standl.—Tabasco: La Palma, at edge of forest, June 1-6, *Matuda* 3267 (det. Morton), a tree, 13 m. high, 55 cm. in diameter.

CALLIANDRA DEAMII (B. & R.) Standl.—Tabasco: Reforma, May 22-26, *Matuda* 3202, a shrub, flowers red; San Isidro, in advanced forest, June 7-11, *Matuda* 3340, a tree, 3 m. high, 9 cm. in diameter. *C. Deamii* and *C. yucatanensis* are quite variable,

especially in pubescence. When additional collections become available, a further division of the complexes may be desirable.

CALLIANDRA YUCATANENSIS (B. & R.) Standl.—Campeche: Palizada, July 25–28, *Matuda* 3871, a shrub, flowers red.

INGA EDULIS Mart.—Tabasco: Achotal, east of Balancán, May 9–14, *Matuda* 3038, a tree, 3–4 m. high, 30 cm. in diameter.

INGA LEPTOLOBA Schlecht.—Tabasco: Boca del Cerro, swamp-side, July 1–5, *Matuda* 3548, a tree, 10 m. high, 40 cm. in diameter.

INGA PINETORUM Pittier.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3098, a shrub, 1.5 m. high.

INGA PUNCTATA Willd.—Tabasco: Reforma, May 22–26, *Matuda* 3220, a tree.

LYSILOMA DESMOSTACHYS Benth.—Tabasco: Estapilla, edge of savanna, June 27, *Matuda* 3520, a tree, 10 m. high, 45 cm. in diameter.

MIMOSA SOMNIANS Humb. & Bonpl.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3734.

NEPTUNIA PUBESCENS Benth.—Chiapas: Aguacate, July 16–18, *Matuda* 3810, flowers yellow.

PITHECOLOBIUM ALBICANS (Kunth) Benth. *Albizzia rubiginosa* Standl., *Carnegie Inst. Wash. Publ.*, 461: 58. 1935, not Miquel, 1855. *Albizzia Lundellii* Standl., *Trop. Woods*, 52: 26. 1937.—Chiapas: Aguacate, in savanna, July 16–18, *Matuda* 3801, a tree, 10 m. high. Campeche: Vapor, July 25–28, *Matuda* 3912, a tree, 7 m. high, 30 cm. in diameter, flowers white.

PITHECOLOBIUM ARBOREUM (L.) Urban.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3290, a tree, 10 m. high, 40 cm. in diameter.

PITHECOLOBIUM BELIZENSE Standl., *Field Mus. Bot.*, 4: 212. 1929.—Tabasco: Tenosique, riverside, June 14–16, *Matuda* 3409, a tree, 7 m. high, 40 cm. in diameter.

PITHECOLOBIUM CAMPECHENSE Lundell, *Phytologia*, 1: 481. 1941.—Campeche: Palizada, in swampside forest, July 25–28, *Matuda* 3866 (type collection), a tree, 7–10 m. high, 30–60 cm. in diameter, vernacular name, *tinta*.

PITHECOLOBIUM DISCIFERUM Lundell, *Contrib. Univ. Mich. Herb.*, 6: 27. 1941.—Tabasco: Reforma, riverside, May 22–26, *Matuda* 3211, a tree, 10 m. high, 30 cm. in diameter; Retiro, on

limestone rock at riverside, June 19–25, *Matuda* 3468, a shrub. Campeche: Vapor, July 25–28, *Matuda* 3908 (type collection), a tree, 10–15 m. high, 30–40 cm. in diameter.

PITHECOLOBIUM ENGLESINGII (Standl.) Standl., *Trop. Woods*, 34: 40. 1933. *Inga Englesingii* Standl., *Trop. Woods*, 17: 27. 1929; *Field Mus. Bot.*, 4: 211. 1929.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3665, a tree, 15 m. high, 35–40 cm. in diameter.

PITHECOLOBIUM GENTLEI Lundell, *Contrib. Univ. Mich. Herb.*, 6: 28. 1941.—Chiapas: Javalinero, in the Chacamax River, July 6–9, *Matuda* 3620, a shrub, 2 m. high, flowers white; ruins of Palenque, riverside, in forest, July 10–12, *Matuda* 3693, a shrub.

PITHECOLOBIUM LEUCOCALYX (B. & R.) Standl., *Field Mus. Bot.*, 4: 308. 1929. *Samanea leucocalyx* B. & R., *N. Amer. Fl.*, 23: 34. 1928.—Tabasco: Estapilla, riverside, June 18, *Matuda* 3486, a tree, 15 m. high, 60 cm. in diameter.

PITHECOLOBIUM PACHYPUS Pittier.—Campeche: Palizada, swampside, July 25–29, *Matuda* 3837, 3845, a shrub or tree, up to 10 m. high, 60 cm. in diameter, vernacular name, *tokin*.

II. CAESALPINIEAE

BAUHINIA DIVARICATA L.—Tabasco: Tenosique, in second growth, June 14–16, *Matuda* 3397, flowers white.

BAUHINIA PALENQUENSIS Lundell, *Contrib. Univ. Mich. Herb.*, 6: 24. 1941.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3666 (type collection), a small tree, 3 m. high, flowers red.

CASSIA BACILLARIS L.—Tabasco: Boca del Cerro, in second growth, July 1–5, *Matuda* 3593.

CASSIA DIPHYLLA L.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3051, flowers yellow; Ojo de Agua, southeast of Balancán, in savanna, May 9–14, *Matuda* 3122. Chiapas: Aguacate, July 16–18, *Matuda* 3793.

CASSIA FLEXUOSA L.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3063.

CASSIA GRANDIS L.—Tabasco: Boca del Cerro, swampside, July 1–5, *Matuda* 3536, a tree, 15 m. high, 50 cm. in diameter.

CASSIA HISPIDULA Vahl.—Tabasco: Achotal, east of Balancán,

in savanna, May 9-14, *Matuda* 3045; Estapilla, June 27, *Matuda* 3521.

CASSIA KILLIPII Rose.—Chiapas: Aguacate, July 16-18, *Matuda* 3788.

CASSIA TAGERA L.—Chiapas: Palenque, in savanna, July 9-14, *Matuda* 3740, 3751.

CASSIA UNDULATA Benth.—Tabasco: Achotal, east of Balancán, in second growth, May 9-14, *Matuda* 3035.

CYNOMETRA COLIMENSIS Britt. & Rose.—Chiapas: Aguacate, swampside, July 16-18, *Matuda* 3796 (det. Morton), a tree, 15 m. high, 35 cm. in diameter.

DIALIUM GUIANENSE (Aubl.) Sandwith.—Tabasco: La Palma, in advanced forest, June 1-6, *Matuda* 3243, a tree, 15 m. high, 45 cm. in diameter.

SWARTZIA LUNDELLII Standl., *Carnegie Inst. Wash. Publ.*, 461: 61. 1935.—Tabasco: Boca del Cerro, on limestone, July 1-5, *Matuda* 3586, a tree, 12 m. high, 35 cm. in diameter.

III. PAPILIONATAE

ANDIRA GALEOTTIANA Standl., *Contrib. U. S. Nat. Herb.*, 20: 217. 1919.—Tabasco: Ojo de Agua, southeast of Balancán, in advanced forest, May 9-14, *Matuda* 3125, a tree, 10 m. high, 55-60 cm. in diameter.

ANDIRA INERMIS (Sw.) H. B. K.—Tabasco: Boca del Cerro, July 1-5, *Matuda* 3569, a tree, 15 m. high, 39 cm. in diameter.

CENTROSEMA UNIFOLIATUM (Rose) Lundell, *Bull. Torrey Bot. Club*, 69: 391. 1942.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3498, a vine, corolla blue.

CLITORIA RUBIGINOSA Juss.—Chiapas: Aguacate, July 16-18, *Matuda* 3786, a perennial herb, corolla white.

CROTALARIA RETUSA L.—Campeche: Palizada, July 25-28, *Matuda* 3834.

CROTALARIA SAGITTALIS L. (?).—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3527, a perennial herb, corolla yellow.

DALBERGIA BROWNEI (Jacq.) Urban.—Campeche: Palizada, swampside, July 25-28, *Matuda* 3870, a woody vine, vernacular name, *balbasco*.

DALBERGIA GLABRA (Mill.) Standl.—Tabasco: Reforma, May 22–26, *Matuda* 3195, a woody vine, corolla white; Retiro, riverside on limestone, June 19–25, *Matuda* 3444. Campeche: Palizada, July 25–28, *Matuda* 3865, a shrub, corolla white.

DALBERGIA PAUCIFOLIOLATA Lundell, *Contrib. Univ. Mich. Herb.*, 4: 8. 1940.—Tabasco: Reforma, riverside, May 22–26, *Matuda* 3167 (type collection), a small tree, corolla white.

DESMODIUM BARBATUM (L.) Benth. & Oerst.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3091. Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3746.

DESMODIUM FRUTESCENS (Jacq.) Schindl. (?).—Tabasco: Reforma, May 22–26, *Matuda* 3221, a perennial herb. Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3754.

DREPANOCARPUS LUNATUS (L.f.) Meyer.—Tabasco: Boca del Cerro, swampside, July 1–5, *Matuda* 3545, 3546, a woody vine, 20 cm. in diameter.

ERIOSEMA DIFFUSUM (H. B. K.) Don.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3043; Estapilla, in savanna, June 27, *Matuda* 3526, corolla yellow. Chiapas: Aguacate, July 16–18, *Matuda* 3768, 3817, a perennial herb.

GALACTIA STRIATA (Jacq.) Urb.—Chiapas: Aguacate, July 16–18, *Matuda* 3783, a vine.

INDIGOFERA LESPEDEZIOIDES H. B. K.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3499, corolla salmon.

INDIGOFERA SUFFRUTICOSA Mill.—Tabasco: Estapilla, riverside, June 18, *Matuda* 3488. Campeche: Palizada, July 25–28, *Matuda* 3862.

LONCHOCARPUS CASTILLOI Standl., *Trop. Woods*, 32: 15. 1932.—Tabasco: Reforma, May 22–26, *Matuda* 3217, a tree, 15 m. high, 35 cm. in diameter.

LONCHOCARPUS HONDURENSIS Benth.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3249, a tree, 15 m. high, 45 cm. in diameter.

LONCHOCARPUS LATIFOLIUS (Willd.) H. B. K.—Tabasco: Reforma, May 22–26, *Matuda* 3186, a tree, 13 m. high, 40 cm. in diameter; Estapilla, riverside, June 18, *Matuda* 3482, a tree, 15 m. high, 40 cm. in diameter. Campeche: Palizada, July 25–28,

Matuda 3836, a tree, 7–10 m. high, 30–50 cm. in diameter.

MACHAERIUM SETULOSUM Pittier (?).—Campeche: Palizada, in swamp, July 25–28, *Matuda 3841*, a woody vine.

PHASEOLUS GRACILIS Poepp. (?).—Tabasco: Estapilla, in savanna, June 25, *Matuda 3516*. Chiapas: Palenque, in savanna, July 9–14, *Matuda 3761*, a vine, corolla salmon; Aguacate, July 16–18, *Matuda 3775*, corolla salmon.

PISCIDIA PISCIPULA (L.) Sarg.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda 3012*, a tree, 8–10 m. high, 35 cm. in diameter.

RHYNCHOSIA MINIMA (L.) DC.—Campeche: Palizada, July 25–28, *Matuda 3838*, a vine.

STYLOSANTHES GUYANENSIS (Aubl.) Swartz.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda 3041*, *3047*, corolla yellow. Chiapas: Palenque, in savanna, July 9–14, *Matuda 3735*. More than one species may be represented.

TEPHROSIA LITTORALIS (L.) Pers. (?).—Tabasco: Estapilla, in savanna, June 27, *Matuda 3517*.

TEPHROSIA NITENS Benth.—Chiapas: Palenque, in savanna, July 9–14, *Matuda 3758*.

VIGNA REPENS (L.) Kuntze.—Tabasco: La Palma, June 1–6, *Matuda 3261*, a vine.

VIGNA VEXILLATA (L.) A. Rich. (?).—Tabasco: Boca del Cerro, swampside, July 1–5, *Matuda 3594*.

ZORNIA DIPHYLLA (L.) Pers.—Chiapas: Aguacate, July 16–18, *Matuda 3821*.

OXALIDACEAE

OXALIS NEAEI DC.—Chiapas: Aguacate, July 16–18, *Matuda 3819*.

OXALIS YUCATANENSIS (Rose) R. Knuth, *Notizbl. Bot. Gart. Berlin*, 7: 291. 1919. *Lotoxalis yucatanensis* Rose, *Contrib. U. S. Nat. Herb.*, 10: 116. 1906. *Oxalis yucatanensis* (Rose) Standl., *Contrib. U. S. Nat. Herb.*, 23: 518. 1923.—Chiapas: Aguacate, July 16–18, *Matuda 3820*.

ERYTHROXYLACEAE

ERYTHROXYLON spp.—Tabasco: San Isidro, swampside, June 7–11, *Matuda 3383*, a small tree, 3 m. high; Boca del Cerro.

swampside, July 1-5, *Matuda 3549*, a small tree, 4 m. high. Chiapas: ruins of Palenque, in advanced forest along river, July 10-12, *Matuda 3706*, a small tree, 5 m. high. Campeche: Vapor, swampside, July 25-28, *Matuda 3894*, a shrub, 4 m. high. At least two species belonging to the complex of *E. areolatum* L. are represented.

RUTACEAE

ZANTHOXYLUM CARIBAEUM Lam. (?).—Tabasco: Mercedes, in second growth, May 9-14, *Matuda 3007*, a small tree.

ZANTHOXYLUM NIGRIPUNCTATUM Lundell, *Bull. Torrey Bot. Club*, 64: 551. 1937.—Chiapas: ruins of Palenque, in advanced forest, July 10-12, *Matuda 3708*, a tree, 8 m. high, 30 cm. in diameter.

SIMARUBACEAE

PICRAMNIA ANTIDESMA Sw.—Tabasco: Boca del Cerro, in advanced forest, July 1-5, *Matuda 3573*, a small tree, 7-8 m. high.

SIMARUBA GLAUCA DC.—Tabasco: Ojo de Agua, southeast of Balancán, May 9-14, *Matuda 3116*.

BURSERACEAE

BURSERA SIMARUBA (L.) Sarg.—Tabasco: Reforma, May 22-26, *Matuda 3204*, vernacular name, *palo retinto*.

PROTIUM COPAL (Schl. & Cham.) Engler.—Tabasco: Retiro, in advanced forest, June 19-25, *Matuda 3414*, a tree, 20 m. high, 40 cm. in diameter. Chiapas: ruins of Palenque, in advanced forest, July 10-12, *Matuda 3698*, a tree, 8 m. high, 35 cm. in diameter.

MELIACEAE

CEDRELA MEXICANA M. Roem.—Tabasco: Estapilla, riverside, June 18, *Matuda 3492*, a tree, 20 m. high, 70 cm. in diameter, vernacular name, *cedro*.

GUAREA EXCELSA H. B. K.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9-14, *Matuda 3085*, a tree, 4 m. high, fruits red; La Palma, in advanced forest, June 1-6, *Matuda 3269*, a tree, 15 m. high, 45 cm. in diameter, fruits red.

GUAREA sp.—Tabasco: Retiro, in advanced forest, June 19-25, *Matuda 3458*, a tree, 15 m. high, 60 cm. in diameter. The speci-

mens, in fruit, are not barbate in the leaf axils beneath; the leaves are scarcely to be distinguished otherwise from those of *G. excelsa* H. B. K.

TRICHILIA CUNEATA Radlk.—Tabasco: Reforma, May 22–26, *Matuda* 3155, a tree, 3 m. high; Provincia, May 29, *Matuda* 3225.

TRICHILIA HAVANENSIS Jacq.—Tabasco: Reforma, in second growth, May 22–26, *Matuda* 3229, a tree, 3 m. high.

TRICHILIA HIRTA L.—Tabasco: Estapilla, riverside, June 18, *Matuda* 3485, a tree, 12 m. high, 27–30 cm. in diameter.

TRICHILIA MONTANA H. B. K.—Tabasco: Boca del Cerro, in advanced forest, July 1–5, *Matuda* 3570, a tree, 3–4 m. high.

TRICHILIA YUCATANENSIS Lundell, *Bull. Torrey Bot. Club*, 69: 392. 1942. Tabasco: Reforma, May 22–26, *Matuda* 3154, a tree, 3 m. high; Provincia, May 27, *Matuda* 3219; La Palma, in advanced forest, June 1–6, *Matuda* 3263, a tree.

MALPIGHIACEAE

BANISTERIA LAURIFOLIA L.—Tabasco: Achotal, east of Balancán, in second growth, May 9–14, *Matuda* 3029, 3030, a woody vine, corolla yellow; Retiro, in second growth, June 19–25, *Matuda* 3460, a woody vine; Estapilla, at edge of savanna, June 27, *Matuda* 3507, a woody vine.

BUNCHOSIA LANCEOLATA Turcz. (?).—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3617, a small tree.

BUNCHOSIA SWARTZIANA Griseb.—Tabasco: Reforma, May 22–26, *Matuda* 3157, a small tree, 3 m. high, 15 cm. in diameter.

MALPIGHIA LUNDELLII Morton, *Carnegie Inst. Wash. Publ.*, 461: 138. 1936.—Tabasco: Reforma, May 22–26, *Matuda* 3181, a small tree, 6–7 m. high, 15 cm. in diameter, corolla reddish.

MASCAGNIA DIPHOLIPHYLLA (Small) Bullock, *Kew Bull.*, p. 300. 1937. *Hiraea dipholiphylla* Small, *N. Amer. Fl.*, 25: 122. 1910. *Mascagnia polycarpa* Brandeg., *Univ. Calif. Publ. Bot.*, 10: 409. 1924.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3635, a woody vine.

STIGMAPHYLLON LINDENIANUM A. Juss.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda* 3022, corolla yellow.

TETRAPTERIS SELERIANA Ndzu.—Tabasco: Achotal, east of

Balancán, in advanced forest, May 9-14, *Matuda* 3099, a woody vine.

VOCHYSIACEAE

VOCHYSIA HONDURENSIS Sprague.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9-14, *Matuda* 3077, a tree, 15 m. high, 40 cm. in diameter.

POLYGALACEAE

POLYGALA CONSOBRINA Blake.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3513, corolla blue.

POLYGALA HYGROPHILA H. B. K.—Chiapas: Palenque, in savanna, July 9-14, *Matuda* 3756.

POLYGALA LONGICAULIS H. B. K.—Chiapas: Palenque, in savanna, July 9-14, *Matuda* 3748.

POLYGALA PANICULATA L.—Tabasco: Retiro, riverside, June 19-25, *Matuda* 3427.

SECURIDACA DIVERSIFOLIA (L.) Blake.—Tabasco: Achotal, east of Balancán, in second growth, May 9-14, *Matuda* 3060.

EUPHORBIACEAE

ACALYPHA SETOSA A. Rich.—Tabasco: Retiro, in second growth, June 19-25, *Matuda* 3459.

ACALYPHA TABASCENSIS Lundell, *Lloydia*, 4: 51. 1941.—Tabasco: Retiro, June 19-25, *Matuda* 3417 (type collection).

ACALYPHA VILLOSA Jacq.—Tabasco: Retiro, in second growth, June 19-25, *Matuda* 3424.

CAPERONIA PALUSTRIS (L.) St. Hil.—Tabasco: San Isidro, lakeside, June 7-11, *Matuda* 3348, flowers white; Boca del Cerro, swampside, July 1-5, *Matuda* 3542.

CROTON FLAVOGLANDULOSUS Lundell, *Phytologia*, 1: 403. 1940.—Tabasco: Achotal, east of Balancán, in savanna, May 9-14, *Matuda* 3042 (type collection), flowers white.

CROTON GLABELLUS L.—Tabasco: Retiro, in advanced forest, June 19-25, *Matuda* 3420, a tree, 5 m. high, 25 cm. in diameter.

CROTON PEROBTUSUS Lundell, *Phytologia*, 1: 405. 1940.—Tabasco: Reforma, May 22-26, *Matuda* 3160, a small tree, 2.5 m. high, 15 cm. in diameter; La Palma, in advanced forest, June

1-6, *Matuda* 3327 (type collection), a tree, 18 m. high, 40 cm. in diameter.

CROTON REPENS Schlecht.—Chiapas: Palenque, in savanna, July 9-14, *Matuda* 3747, a perennial herb.

CROTON TABASCENSIS Lundell, *Phytologia*, 1: 408. 1940.—Tabasco: Reforma, May 22-26, *Matuda* 3145 (type collection), a tree, 7 m. high, 25 cm. in diameter.

DALECHAMPIA SCANDENS L.—Tabasco: Achotal, east of Balancán, in second growth, May 9-14, *Matuda* 3064, a vine.

EUPHORBIA HETEROPHYLLA L.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3500.

EUPHORBIA MARGINATA Pursh.—Campeche: Palizada, swampside, July 25-28, *Matuda* 3860 (det. Wheeler).

GARCIA NUTANS Rohr.—Tabasco: Boca del Cerro, riverside, July 1-5, *Matuda* 3568, a tree, 10 m. high, 35 cm. in diameter.

HURA POLYANDRA Baill.—Tabasco: Estapilla, riverside, June 18, *Matuda* 3480, a tree, 3 m. high, 15 cm. in diameter, flowers white.

JULOCROTON ARGENTEUS Didr.—Tabasco: Boca del Cerro, swampside, July 1-5, *Matuda* 3543. Campeche: Palizada, swampside, July 25-28, *Matuda* 3846.

MABEA OCCIDENTALIS Benth.—Tabasco: Achotal, east of Balancán, May 9-14, *Matuda* 3103, a tree, 4-5 m. high, 15-20 cm. in diameter.

PERA BARBELLATA Standl.—Tabasco: Ojo de Agua, southeast of Balancán, in advanced forest, May 9-14, *Matuda* 3134, a tree, 7 m. high, 35 cm. in diameter.

PHYLLANTHUS ANTILLANUS var. *HYPOMALACUS* (Standl.) Lundell, *Phytologia*, 1: 337. 1940. *Phyllanthus nobilis* var. *hypomala-cus* Standl., *Carnegie Inst. Wash. Publ.*, 461: 68. 1935.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9-14, *Matuda* 3096. Campeche: Vapor, swampside, July 25-28, *Matuda* 3887, a tree, 6 m. high, 35 cm. in diameter.

PHYLLANTHUS COMPRESSUS H. B. K.—Tabasco: Retiro, riverside, June 19-25, *Matuda* 3471 (det. Wheeler).

PHYLLANTHUS DIFFUSUS Klotzsch.—Tabasco: Achotal, east of Balancán, in savanna, May 9-14, *Matuda* 3086 (det. Wheeler).



FIG. 1. *Sebastiania confusa* Lundell. Matuda 3172, half natural size.

PHYLLANTHUS LATHYROIDES H. B. K.—Tabasco: Retiro, riverside, June 19–25, *Matuda* 3471A (det. Wheeler).

PLUKENETIA ANGUSTIFOLIA Standl.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3288, a woody vine.

SEBASTIANIA CONFUSA Lundell, *Lloydia*, 2: 99. 1939 (Fig. 1).—Tabasco: Reforma, in advanced forest, May 22–26, *Matuda* 3149, a tree, 7 m. high, 15–20 cm. in diameter, vernacular name, *chitzen*; Reforma, *Matuda* 3172, a small tree, 3 m. high.

SEBASTIANIA STANDLEYANA Lundell, *Lloydia*, 2: 97. 1939. *Sebastiania longicuspis* Standl., *Field Mus. Bot.*, 11: 134. 1932, *nomen confusum*.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3476, a tree, 15 m. high, 25 cm. in diameter.

AQUIFOLIACEAE

ILEX PANAMENSIS Standl.—Tabasco: Ojo de Agua, southeast of Balancán, in advanced forest, May 9–14, *Matuda* 3126, a tree, 5–6 m. high, 30 cm. in diameter.

CELASTRACEAE

MAYTENUS PURPUSII Lundell, *Amer. Midl. Nat.*, 20: 238. 1938.—Tabasco: Reforma, at edge of forest, May 22–26, *Matuda* 3147, a shrub. The collection has staminate flowers, and it appears to be referable here.

MAYTENUS SCHIPPII Lundell, *Phytologia*, 1: 305. 1939.—Tabasco: Ojo de Agua, southeast of Balancán, in advanced forest, May 9–14, *Matuda* 3140, a tree, 7–10 m. high, 35 cm. in diameter; Estapilla, in second growth, June 18, *Matuda* 3490, a small tree, 3 m. high. Chiapas: Aguacate, in savanna forest, July 16–18, *Matuda* 3766, a small tree, 2.5 m. high.

MYGINDA FILIPES (Sprague) Loes., *Notizbl. Bot. Gart.*, 13: 226. 1936. *Microtropis filipes* Sprague, *Kew Bull.*, p. 363. 1909.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda* 3013, a shrub, 30–50 cm. high; San Isidro, in advanced forest, June 7–11, *Matuda* 3375, a small tree, 2 m. high.

MYGINDA PUBERULA (Lundell) Lundell, *Bull. Torrey Bot. Club*, 64: 553. 1937. *Rhacoma riparia* var. *puberula* Lundell, *Carnegie Inst. Wash. Publ.*, 478: 213. 1937.—Tabasco: Retiro, riverside on

limestone, June 19–25, *Matuda* 3429. The species is very close to *M. filipes*, and additional collections may show that it is conspecific.

RHACOMA MACROCARPA (Brandeg.) Standl., *Contrib. U. S. Nat. Herb.*, 23: 681. 1923. *Myginda macrocarpa* Brandeg., *Univ. Calif. Publ. Bot.*, 6: 56. 1914.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3689, a tree, 10 m. high, 30 cm. in diameter.

WIMMERIA BARTLETTII Lundell, *Bull. Torrey Bot. Club*, 65: 467. 1938.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3287, a tree, 20 m. high, 50 cm. in diameter.

HIPPOCRATEACEAE

CUERVEA MITCHELLAE (Johnston) A. C. Smith, *Brittonia*, 3: 401. 1940. *Hippocratea Mitchellae* Johnston, *Contrib. Gray Herb.*, 81: 93. 1928.—Tabasco: Boca del Cerro, July 1–5, *Matuda* 3571. This fruiting collection was distributed by the writer as a new species, but flowering material is needed to determine definitely whether or not it is distinct.

PRISTIMERA CELASTROIDES (H. B. K.) A. C. Smith, *Brittonia*, 3: 371. 1940. *Hippocratea tabascensis* Lundell, *Contrib. Univ. Mich. Herb.*, 4: 16. 1940.—Tabasco: Estapilla, June 18, *Matuda* 3484 (type collection of *H. tabascensis*), a woody vine. The recent treatment of the American species of Hippocrateaceae by A. C. Smith (*Brittonia*, 3: 341–555. 1940) is conservative, and various species which he reduces to synonymy doubtless will be revived when additional material becomes available.

HIPPOCRATEA VOLUBILIS L.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3079, a woody vine.

SAPINDACEAE

CUPANIA AURICULATA Standl., *Field Mus. Bot.*, 8: 20. 1930.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3656, a tree, 5 m. high.

MATAYBA RETUSA Lundell, *Lloydia*, 4: 52. 1941.—Tabasco: Tenosique, in second growth, June 14–16, *Matuda* 3403 (type collection), a small tree.

SERJANIA PTERARTHRA Standl., *Carnegie Inst. Wash. Publ.*, 461: 70. 1935.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda 3017*, a woody vine.

TALISIA FLORESII Standl., *Trop. Woods*, 26: 14. 1931.—Tabasco: Reforma, May 22–26, *Matuda 3193*, a tree, 15 m. high, 30 cm. in diameter.

THOUINIDIUM MATUDAI Lundell, *Lloydia*, 4: 53. 1941.—Tabasco: Boca del Cerro, on limestone, July 1–5, *Matuda 3590* (type collection), a tree, 7 m. high, 20 cm. in diameter.

RHAMNACEAE

SAGERETIA ELEGANS (H. B. K.) Brongn.—Tabasco: Estapilla, in second growth, June 18, *Matuda 3491*, a woody vine.

VITACEAE

AMPELOCISSUS ERDWENDBERGII Planch.—Tabasco: Reforma, May 22–26, *Matuda 3201*, a woody vine.

CISSUS GOSSYPIFOLIA Standl., *Field Mus. Bot.*, 8: 23. 1930.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda 3314*, flowers red.

CISSUS RHOMBIFOLIA Vahl (?).—Chiapas: Javalinero, in advanced forest, June 6–9, *Matuda 3614*, flowers red.

VITIS CARIBAEA DC.—Tabasco: La Palma, in second growth, June 1–6, *Matuda 3306*.

TILIACEAE

CARPODIPTERA AMELIAE Lundell, *Field and Lab.*, 6: 13. 1937.—Tabasco: Boca del Cerro, on limestone, July 5, *Matuda 3626*, a tree, 15 m. high, 35 cm. in diameter, leaves purplish, flowers violet.

MUNTINGIA CALABURA L.—Tabasco: Provincia, May 27, *Matuda 3223*, a tree.

MALVACEAE

ABUTILON HIRTUM (Lam.) Sweet.—Tabasco: La Palma, river-side, June 1–6, *Matuda 3280*, flowers yellow, vernacular name, *malva*.

HIBISCUS COSTATUS A. Rich.—Chiapas: Palenque, in savanna, July 9–14, *Matuda 3753*.

HIBISCUS FURCELLATUS Lam.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3048, corolla reddish.

HIBISCUS SORORIUS L.f.—Tabasco: San Isidro, in swamp, June 7–11, *Matuda* 3367.

HIBISCUS sp.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3753A.

HIBISCUS sp.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3753B.

MALACHRA CAPITATA L.—Tabasco: Mercedes, lakeside, May 9–14, *Matuda* 3010 (det. Wiggins), corolla yellow.

SIDA LINIFOLIA Juss.—Chiapas: Aguacate, July 16–18, *Matuda* 3777.

STERCULIACEAE

HELICTERES GUAZUMAEFOLIA H. B. K.—Chiapas: Palenque, edge of savanna, July 9–14, *Matuda* 3752.

MELOCHIA PYRAMIDATA L.—Tabasco: Reforma, May 22–26, *Matuda* 3189.

DILLENIACEAE

CURATELLA AMERICANA L.—Tabasco: Ojo de Agua, southeast of Balancán, in savanna, May 9–14, *Matuda* 3123, a tree, 7 m. high, 30–35 cm. in diameter, vernacular name, *caticon*. Chiapas: Aguacate, July 16–18, *Matuda* 3808, a tree.

DAVILLA MATUDAI Lundell, *Phytologia*, 1: 371. 1940.—Chiapas: Javalinero, in forest, July 6–9, *Matuda* 3647A (type collection), a woody vine.

TETRACERA MOLLIS Standl., *Field Mus. Bot.*, 8: 25. 1930.—Chiapas: Javalinero, in forest, July 6–9, *Matuda* 3647, a woody vine.

ACTINIDIACEAE

SAURAUIA LEUCOCARPA Schlecht.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3453, a tree, 17 m. high, 35 cm. in diameter; Boca del Cerro, in advanced forest, July 1–5, *Matuda* 3555, a tree, 8 m. high, 30 cm. in diameter. Chiapas: ruins of Palenque, in advanced forest, riverside, July 10–12, *Matuda* 3700, a tree, 10 m. high. The species has been widely confused with *S. pauciserrata* Hemsl.

OCHNACEAE

OURATEA NITIDA (Sw.) Engler.—Chiapas: Aguacate, in savanna forest, July 16–18, *Matuda* 3804, a small tree, corolla yellow.

OURATEA PECKII Riley, *Kew Bull.*, p. 109. 1924.—Tabasco: Reforma, in advanced forest, May 22–26, *Matuda* 3151, a small tree, 3 m. high; San Isidro, lakeside, June 7–11, *Matuda* 3355, a shrub, 3 m. high, corolla yellow; San Isidro, in swamp, *Matuda* 3371, a small tree.

SAUVAGESIA ERECTA L.—Tabasco: Ojo de Agua, southeast of Balancán, in savanna, May 9–14, *Matuda* 3138, corolla white.

MARCGRAVIACEAE

SOUROUBEA TRIANDRA Lundell, *Phytologia*, 1: 244. 1937.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3679.

THEACEAE

TERNSTROEMIA TEPEZAPOTE Cham. & Schlecht.—Tabasco: Achotal, east of Balancán, in savanna forest, May 9–14, *Matuda* 3104, a tree, 7–9 m. high, 20–25 cm. in diameter.

GUTTIFERAE

CLUSIA LUNDELLII Standl., *Carnegie Inst. Wash. Publ.*, 461: 72. 1935.—Tabasco: Ojo de Agua, southeast of Balancán, in advanced forest, May 9–14, *Matuda* 3139, a tree, 10 m. high, 25–35 cm. in diameter.

HYPERICACEAE

VISMIA FERRUGINEA H. B. K.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3599, a tree, 10 m. high, 30 cm. in diameter.

VIOLACEAE

CORYNOSTYLIS ARBOREA (L.) Blake.—Tabasco: San Isidro, swampside, June 7–11, *Matuda* 3356, a woody vine, corolla white. Campeche: Vapor, swampside, July 25–28, *Matuda* 3890, a woody vine.

HYBANTHUS CALCEOLARIA (L.) G. K. Schulze.—Tabasco: Ojo de Agua, southeast of Balancán, in savanna, May 9–14, *Matuda*

3119. Chiapas: Aguacate, July 16-18, *Matuda* 3787, corolla white.

RINOREA HUMMELII Sprague, *Kew Bull.*, p. 307. 1921.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9-14, *Matuda* 3101, a tree, 3 m. high, 10 cm. in diameter; San Isidro, in advanced forest, June 7-11, *Matuda* 3353, 3354.

FLACOURTIACEAE

CASEARIA ACULEATA Jacq.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3518, a small tree. Campeche: Palizada, July 25-28, *Matuda* 3853; Vapor, in forest, July 25-28, *Matuda* 3914, a tree, 5 m. high, flowers white.

CASEARIA BARTLETTII Lundell, *Lloydia*, 2: 104. 1939.—Tabasco: Retiro, in advanced forest, June 19-25, *Matuda* 3470.

CASEARIA JAVITENSIS H. B. K.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9-14, *Matuda* 3100, a small tree. Chiapas: ruins of Palenque, in advanced forest, July 10-12, *Matuda* 3696, a tree, 3-4 m. high, fruits red.

CASEARIA NITIDA (L.) Jacq.—Tabasco: Mercedes, riverside, May 9-14, *Matuda* 3011, a tree, 3 m. high, 10 cm. in diameter; Achotal, east of Balancán, in second growth, May 9-14, *Matuda* 3033, a shrub, 3-4 m. high, 10-15 cm. in diameter; Reforma, in second growth, May 22-26, *Matuda* 3178, a shrub; San Isidro, in advanced forest, June 7-11, *Matuda* 3341, a tree, 3 m. high, 15 cm. in diameter; Retiro, in second growth, June 19-25, *Matuda* 3433, 3461, a tree.

HASSELLTIA DIOICA (Benth.) Sleumer (?).—Tabasco: Mercedes, in second growth, May 9-14, *Matuda* 3003, a tree, 7 m. high; Reforma, May 22-26, *Matuda* 3156, a small tree, 3 m. high. Chiapas: Javalinero, in advanced forest, July 6-9, *Matuda* 3597, a tree, 8 m. high, 25 cm. in diameter.

LAETIA THAMNIA L.—Tabasco: San Isidro, June 7-11, *Matuda* 3345. Chiapas: Sierra de Palenque, in advanced forest, July 14, *Matuda* 3715, a tree, 10 m. high, 40 cm. in diameter.

ZUELANIA GUIDONIA (Sw.) Britt. & Millsp.—Tabasco: Ojo de Agua, southeast of Balancán, in second growth, May 9-14, *Matuda* 3118, a tree, 3-4 m. high, 15-20 cm. in diameter; Reforma, May 22-26, *Matuda* 3233, a tree, 8 m. high, 20 cm. in diameter.



FIG. 2. *Erblichia Standleyi* Steyermark. Matuda 3319, half natural size.

TURNERACEAE

ERBLICHIA STANDLEYI Steyermark, *Field Mus. Bot.*, 22: 356. 1940 (Fig. 2).—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3319, a tree, 25 m. high, 70 cm. in diameter, vernacular name, *San Pedro*.

PASSIFLORACEAE

PASSIFLORA FOETIDA var. CILIATA (Dryand.) Mast.—Tabasco: La Palma, June 1–6, *Matuda* 3247 (det. Killip).

PASSIFLORA ROVIROSAE Killip.—Tabasco: La Palma, in second growth, June 1–6, *Matuda* 3283 (det. Killip).

PASSIFLORA SERRATIFOLIA L.—Tabasco: Reforma, May 22–26, *Matuda* 3207; Retiro, in second growth, riverside, June 19–25, *Matuda* 3434; Boca del Cerro, in second growth, July 1–5, *Matuda* 3583.

CACTACEAE

DEAMIA TESTUDO (Karw.) B. & R.—Campeche: Vapor, July 25–28, *Matuda* 3897 (det. Clover), flowers white.

EPIPHYLLUM CRENATUM (Lindl.) G. Don.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3310, flowers white.

RHIPSALIS CASSUTHA Gaertn.—Tabasco: San Isidro, lakeside epiphyte, June 7–11, *Matuda* 3384.

RHIPSALIS CORIACEA Polak.—Tabasco: San Isidro, on tree, June 7–11, *Matuda* 3369.

LYTHRACEAE

(Determined by Robert C. Foster, Cambridge)

CUPHEA CARTHAGENENSIS (Jacq.) Macbr.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3749, corolla blue.

CUPHEA DECANDRA var. PURPUSII (Brandeg.) Bacig.—Tabasco: Retiro, riverside, June 19–25, *Matuda* 3426, corolla blue.

LYTHRUM GRACILE Benth.—Tabasco: Reforma, riverside, May 22–26, *Matuda* 3170, corolla purple.

RHIZOPHORACEAE

RHIZOPHORA MANGLE L.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3329.

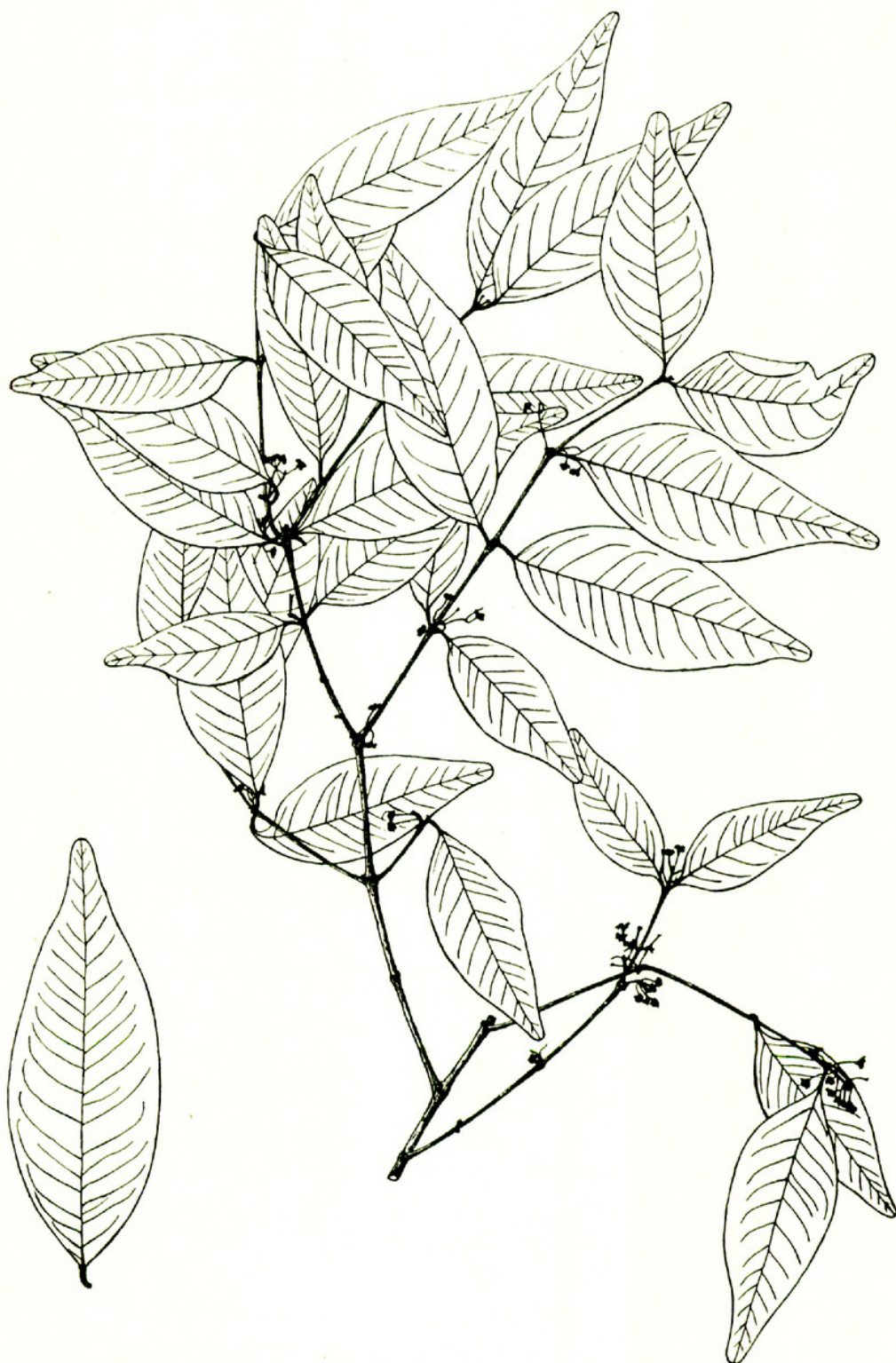


FIG. 3. *Eugenia balcanensis* Lundell. Matuda 3361 (type collection), half natural size.

COMBRETACEAE

BUCIDA BUCERAS L.—Tabasco: Ojo de Agua, southeast of Balancán, in advanced forest, May 9–14, *Matuda 3121*, a tree, 12 m. high, 45 cm. in diameter; Reforma, May 22–26, *Matuda 3166*, a tree, 15 m. high, 60 cm. in diameter.

COMBRETUM MEXICANUM Humb. & Bonpl.—Tabasco: Mercedes, riverside, May 9–14, *Matuda 3024*, a tree, 7–10 m. high; Achotal, east of Balancán, in savanna, May 9–14, *Matuda 3082*, a woody vine; Boca del Cerro, edge of swamp, July 1–5, *Matuda 3532*, a woody vine, 25 cm. in diameter; Boca del Cerro, riverside, *Matuda 3537*, a woody vine. As currently interpreted, it is obvious that this species is a catch-all for various related forms of the complex.

MYRTACEAE

CALYPTRANTHES KARLINGII Standl., *Field Mus. Bot.*, 8: 29. 1930.—Tabasco: Boca del Cerro, on limestone at riverside, July 1–5, *Matuda 3564*, a small tree. Chiapas: Sierra de Palenque, in advanced forest, riverside, July 14, *Matuda 3717*, a tree, 5 m. high, 20 cm. in diameter.

EUGENIA BALANCANENSIS Lundell, *Phytologia*, 1: 481. 1941 (Fig. 3).—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda 3361* (type collection), a tree, 4 m. high, 15 cm. in diameter.

EUGENIA BRACTEOLOSA Lundell, *Contrib. Univ. Mich. Herb.*, 7: 31. 1942.—Tabasco: Reforma, May 22–26, *Matuda 3194*, a tree, 13 m. high, 20 cm. in diameter.

EUGENIA BUMELIOIDES Standl., *Carnegie Inst. Wash. Publ.*, 461: 75. 1935.—Tabasco: Boca del Cerro, on limestone at riverside, July 1–5, *Matuda 3563*, a small tree, 6–7 m. high.

EUGENIA CAMPECHIANA Lundell, *Contrib. Univ. Mich. Herb.*, 7: 32. 1942.—Campeche: Palizada, lakeside, July 25–28, *Matuda 3832* (type collection), a small tree, 3–4 m. high, corolla white; Palizada, *Matuda 3847*, fruits edible, vernacular name, *boroconte*.

EUGENIA CAPULI (Schl. & Cham.) Berg.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda 3018*, a shrub.

EUGENIA LINDENIANA Berg.—Tabasco: Boca del Cerro, on limestone, July 1–5, *Matuda 3592*, a shrub, 2 m. high.



FIG. 4. *Eugenia tabascensis* Lundell. *Matuda 3561* (type collection), half natural size.

EUGENIA TABASCENSIS Lundell, *Phytologia*, 1: 482. 1941. (Fig. 4).—Tabasco: Boca del Cerro, on limestone, July 1–5, *Matuda* 3561 (type collection), a small tree.

EUGENIA sp.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3621, a tree, 10 m. high, 35 cm. in diameter.

EUGENIA sp.—Tabasco: San Isidro, in forest, June 7–11, *Matuda* 3342, a tree, 4 m. high, 13 cm. in diameter.

EUGENIA sp.—Tabasco: La Palma, in second growth, June 1–6, *Matuda* 3241, a shrub.

MYRCIA RUFIDULA Schlecht.—Tabasco: Boca del Cerro, on limestone, July 1–5, *Matuda* 3557, a tree, 4 m. high, 15 cm. in diameter. Chiapas: Palenque, riverside, July 10–12, *Matuda* 3672, a tree, 4 m. high; Aguacate, in savanna forest, July 16–18, *Matuda* 3811, a small tree.

PIMENTA OFFICINALIS Lindl.—Tabasco: Estapilla, June 27, *Matuda* 3496, a tree, 15 m. high, 35 cm. in diameter, vernacular name, *pimiento de tierra*.

MELASTOMACEAE

(Determined by H. A. Gleason, New York)

ACIOTIS ROSTELLATA (Naud.) Triana.—Chiapas: Javalinero, edge of forest, July 6–9, *Matuda* 3609, corolla white.

ACISANTHERA QUADRATA Pers.—Tabasco: Ojo de Agua, south-east of Balancán, in savanna, May 9–14, *Matuda* 3133, 30 cm. high, corolla reddish.

BELLUCIA GROSSULARIOIDES (L.) Triana.—Chiapas: ruins of Palenque, July 10–12, *Matuda* 3712.

CLIDEMIA DENTATA D. Don.—Tabasco: Boca del Cerro, in advanced forest, July 1–5, *Matuda* 3567, a shrub, corolla reddish. Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3654, a shrub, 1–1.5 m. high, corolla reddish; ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3692, a shrub, corolla reddish.

CLIDEMIA DEPENDENS D. Don.—Tabasco: Ojo de Agua, south-east of Balancán, in advanced forest, May 9–14, *Matuda* 3130, a shrub, 2 m. high. Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3663, a shrub, corolla white.

CLIDEMIA DEPPEANA Steud.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda 3296*, a small shrub, 50–90 cm. high, corolla reddish; Boca del Cerro, July 1–5, *Matuda 3531*, a small tree, corolla reddish.

CLIDEMIA RUBRA (Aubl.) Mart.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda 3049*, a shrub, 2 m. high. Chiapas: Palenque, in savanna forest, July 9–14, *Matuda 3725*, a shrub, 1 m. high.

CONOSTEGIA XALAPENSIS (Bonpl.) D. Don.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda 3062*, a shrub, 1.5 m. high.

CONOSTEGIA sp.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda 3068*, a small tree, 1.5 m. high, corolla white. Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3601*, a shrub, corolla white.

HENRIETTEA SUCCOSA (Aubl.) DC.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3657*, a tree, 10–12 m. high, 30 cm. in diameter.

HETEROTRICHUM OCTONUM (Bonpl.) DC.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3655*, a shrub, 2 m. high, corolla white.

LEANDRA MEXICANA (Naud.) Cogn.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3600*, a shrub, corolla reddish.

MICONIA ALBICANS (Sw.) Triana.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda 3083*, a shrub, 1.5 m. high. Chiapas: Aguacate, in savanna, July 16–18, *Matuda 3782*, a shrub.

MICONIA ARGENTEA (Sw.) DC.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda 3080*, a tree, 8 m. high, 25 cm. in diameter.

MICONIA DODECANDRA (Desr.) Cogn.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3613*, a tree, 6 m. high, 18 cm. in diameter.

MICONIA IBAGUENSIS (Bonpl.) Triana.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3602*, a shrub; ruins of Palenque, in advanced forest, July 10–12, *Matuda 3687*, a shrub, corolla white.

MICONIA LACERA (Bonpl.) Naud.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3624, a shrub, 2 m. high, corolla reddish.

MICONIA PTEROPODA Benth.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3618, a tree, 8 m. high, 19 cm. in diameter.

MICONIA PUNCTATA (Desr.) D. Don.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3605, a small tree, 6–7 m. high, 15 cm. in diameter.

MICONIA SCHLECHTENDALII Cogn.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda* 3376, a small tree, corolla white. Campeche: Vapor, July 25–28, *Matuda* 3907, a shrub.

MICONIA SCORPIOIDES (Schl. & Cham.) Naud.—Tabasco: Ojo de Agua, southeast of Balancán, lakeside, May 9–14, *Matuda* 3141, a shrub, 2 m. high. Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3598, a small tree, 8 m. high, 15–25 cm. in diameter; Javalinero, *Matuda* 3638, a tree, 10 m. high, 15–20 cm. in diameter.

MOURIRIA GLEASONIANA Standl., *Field Mus. Bot.*, 22: 361. 1940.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3093 (type collection), a tree, 4–5 m. high, 10–15 cm. in diameter; San Isidro, June 7–11, *Matuda* 3339. The two collections were referred to *M. Muelleri* Cogn. by the writer, and distributed under that name. *M. Muelleri* is very closely related if not conspecific.

MOURIRIA PARVIFOLIA Benth.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3046, a shrub, 3 m. high, 10–15 cm. in diameter, corolla yellowish; Reforma, May 22–26, *Matuda* 3208. Campeche: Vapor, July 25–28, *Matuda* 3891, a shrub, corolla white.

ONAGRACEAE

JUSSIAEA NATANS H. B. K.—Tabasco: Boca del Cerro, in swamp, July 1–5, *Matuda* 3538, corolla white.

JUSSIAEA SUFFRUTICOSA L.—Tabasco: Mercedes, lakeside, May 9–14, *Matuda* 3008.

ARALIACEAE

GILIBERTIA ARBOREA (L.) March.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3474, a tree, 15 m. high, 45 cm. in diameter; La Palma, in advanced forest, June 1–6, *Matuda* 3239, a shrub. Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3636, a small tree; Sierra de Palenque, in advanced forest, July 14, *Matuda* 3719, a small tree.

GILIBERTIA MATUDAI Lundell, *Phytologia*, 1: 372. 1940.—Tabasco: Reforma, in advanced forest, May 22–26, *Matuda* 3152 (type collection), a small tree, 3 m. high.

OREOPANAX GUATEMALENSE (Lem.) Dec. & Pl.—Tabasco: Boca del Cerro, July 1–5, *Matuda* 3551.

UMBELLIFERAE

ERYNGIUM NASTURTHIFOLIUM Juss.—Tabasco: Mercedes, lake-side, May 9–14, *Matuda* 3014 (det. Constance).

HYDROCOTYLE UMBELLATA L.—Campeche: Palizada, swamp-side, July 25–28, *Matuda* 3854.

MYRSINACEAE

ARDISIA MATUDAI Lundell, *Lloydia*, 4: 55. 1941.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3295 (type collection), a small tree, flowers white; San Isidro, in advanced forest, June 7–11, *Matuda* 3364, a small tree, flowers white. Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3648, a small tree, 4 m. high, flowers white.

PARATHESIS AERUGINOSA Standl.—Tabasco: Juarez, near Tenosique, June 14–16, *Matuda* 3391, a treelet, 3 m. high, flowers red.

PARATHESIS CUBANA (A. DC.) Molinet & Maza. *Parathesis obovata* Standl., *Field Mus. Bot.*, 4: 250. 1929.—Tabasco: La Palma, June 1–6, *Matuda* 3265, a shrub.

STYLOGYNE LAEVIS (Oerst.) Mez.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3622, a tree, 3 m. high, 30 cm. in diameter.

THEOPHRASTACEAE

JACQUINIA AURANTIACA Ait.—Tabasco: San Isidro, swampside, June 7–11, *Matuda* 3377, a tree, 15 m. high, 40 cm. in diameter. Campeche: Vapor, swampside, July 25–28, *Matuda* 3913, a tree, 7–10 m. high, 20–30 cm. in diameter.

SAPOTACEAE

ACHRAS ZAPOTA L.—Tabasco: La Palma, June 1–6, *Matuda* 3254, a tree.

BUMELIA MAYANA Standl., *Trop. Woods*, 31: 41. 1932.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3034, a shrub, 2 m. high.

BUMELIA TABASCENSIS Lundell, *Contrib. Univ. Mich. Herb.*, 4: 22. 1940.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3455 (type collection), a tree, 18 m. high, 35 cm. in diameter.

LUCUMA CAMPECHIANA H. B. K.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3071, a tree, 10 m. high, 30 cm. in diameter.

LUCUMA DURLANDII Standl.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3297, a small tree.

LUCUMA LAETEVIRIDIS Pittier.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda* 3351, a tree, 7–10 m. high, 45 cm. in diameter. Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3713, a tree, 10 m. high, 45 cm. in diameter.

MAMMEA AMERICANA L.—Tabasco: Boca del Cerro, July 1–5, *Matuda* 3580, a tree, 15–20 m. high, 55–70 cm. in diameter, vernacular name, *mamey*.

SIDEROXYLON LUNDELLII Standl., *Carnegie Inst. Wash. Publ.*, 461: 79. 1935.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3073, a tree, 8–10 m. high, 30–40 cm. in diameter.

EBENACEAE

DIOSPYROS BUMELIOIDES Standl., *Trop. Woods*, 18: 31. 1929.—Campeche: Vapor, swampside, July 25–28, *Matuda* 3889, a shrub.



FIG. 5. *Diospyros campechiana* Lundell. Matuda 3843 (type collection), half natural size.

DIOSPYROS CAMPECHIANA Lundell, *Contrib. Univ. Mich. Herb.*, 4: 23. 1940 (Fig. 5).—Campeche: Palizada, swampside, July 25–28, *Matuda 3843* (type collection), a tree, 7–10 m. high, 40–45 cm. in diameter.

DIOSPYROS EBENASTER Retz.—Tabasco: Boca del Cerro, river-side, July 1–5, *Matuda 3540*, a tree, 15 m. high, 45 cm. in diameter, vernacular name, *tauchi*.

DIOSPYROS YUCATANENSIS Lundell, *Carnegie Inst. Wash. Publ.*, 478: 217. 1937.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda 3378*, a tree, 15 m. high, 35 cm. in diameter; Tenosique, in advanced forest, June 14–16, *Matuda 3401*, a tree, 5 m. high.

OLEACEAE

LINOCIERA OBLANCEOLATA Rob.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda 3284*, a small tree, 4 m. high, 15 cm. in diameter.

LOGANIACEAE

POLYPREMUM PROCUMBENS L.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda 3059, 3108*.

SPIGELIA HUMBOLDTIANA Cham. & Schlecht.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda 3438*.

STRYCHNOS BRACHISTANTHA Standl., *Field Mus. Bot.*, 12: 412. 1936.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda 3374*, a woody vine, 30 m. high.

STRYCHNOS TABASCANA Sprague & Sandw., *Kew Bull.*, p. 128. 1927. *Strychnos panamensis* var. *hirtiflora* Standl., *Field Mus. Bot.*, 11: 138. 1932. *Strychnos hirtiflora* (Standl.) Lundell, *Bull. Torrey Bot. Club.* 64: 556. 1937.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda 3285*, a woody vine, corolla yellowish.

GENTIANACEAE

COUTOUBEA SPICATA Aubl.—Chiapas: Palenque, in savanna, July 9–14, *Matuda 3745*.

EUSTOMA EXALTATUM (L.) Griseb.—Tabasco: Reforma, river-side, May 22–26, *Matuda 3171*, an annual, corolla blue.

MENYANTHACEAE

LIMNANTHEMUM HUMBOLDTIANUM (H. B. K.) Griseb.—Campeche: Palizada, in lake, July 25–28, *Matuda* 3827.

APOCYNACEAE

MANDEVILLA SUBSAGITTATA (R. & P.) Woodson.—Tabasco: Achotal, east of Balancán, in second growth, May 9–14, *Matuda* 3055, a vine, corolla yellow. Chiapas: Javalinero, July 6–9, *Matuda* 3651, a vine.

PLUMERIOPSIS AHOUI (L.) Rusby & Woodson, *Ann. Missouri Bot. Gard.*, 24: 11. 1937. *Thevetia Ahouai* (L.) A. DC., *DC. Prodr.*, 8: 344. 1844. *Thevetia nitida* (H. B. K.) A. DC., *DC. Prodr.*, 8: 345. 1844.—Tabasco: Achotal, east of Balancán, in second growth, May 9–14, *Matuda* 3078, a shrub. Although the plant may be native to the Yucatán Peninsula, it has been observed and collected only in clearings and second growth.

PRESTONIA GUATEMALENSIS Woods., *Ann. Missouri Bot. Gard.*, 23: 339. 1936.—Tabasco: Tenosique, in second growth, June 14–16, *Matuda* 3405.

PRESTONIA MEXICANA A. DC.—Tabasco: Boca del Cerro, in second growth, July 1–5, *Matuda* 3582 (det. Woodson). Chiapas: Aguacate, July 16–18, *Matuda* 3803, a vine.

TABERNAEMONTANA CHRYSOCARPA Blake.—Tabasco: Ojo de Agua, southeast of Balancán, in second growth, May 9–14, *Matuda* 3124, a tree, 3 m. high; Estapilla, edge of savanna, June 27, *Matuda* 3522, a small tree, corolla yellow.

URECHITES ANDRIEUXII Muell. Arg.—Chiapas: ruins of Palenque, edge of advanced forest, July 10–12, *Matuda* 3677, a vine.

ASCLEPIADACEAE

ASCLEPIAS LONGICORNU Benth.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3510 (det. Woodson).

ASCLEPIAS SETOSA Benth.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3510A (det. Woodson).

FISCHERIA BRIQUETIANA Standl., *Field Mus. Bot.*, 11: 139. 1932.—Tabasco: Retiro, in second growth, June 19–25, *Matuda* 3432.

GONOLOBUS CTENIOPHORUS (Blake) Woodson, *Ann. Miss. Bot. Gard.*, 28: 243. 1941. *Vincetoxicum cteniophorum* Blake, *Contrib. Gray Herb.*, 52: 84. 1917. *Vincetoxicum Lundellii* Standl., *Field Mus. Bot.*, 8: 148. 1930.—Campeche: Vapor, July 25–28, *Matuda* 3903 (det. Woodson), a vine.

METASTELMA BARBIGERUM Scheele.—Chiapas: Aguacate, July 16–18, *Matuda* 3765 (det. Woodson).

CONVOLVULACEAE

ANISEIA MARTINICENSIS (Jacq.) Choisy.—Campeche: Palizada, July 25–28, *Matuda* 3857 (det. Martin), flowers white.

EVOLVULUS FILIPES Mart.—Chiapas: Aguacate, July 16–18, *Matuda* 3790 (det. Martin).

EVOLVULUS SERICEUS Swartz.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3504, corolla white.

IPOMOEA APHYLLA Standl., *Field Mus. Bot.*, 11: 139. 1933.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3739, corolla white.

IPOMOEA CALLIDA House (?).—Campeche: Palizada, July 25–28, *Matuda* 3831 (det. Martin), a vine.

IPOMOEA CISSOIDES (Lam.) Griseb.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3061 (det. Martin), corolla white.

IPOMOEA CRASSICAULIS (Benth.) Robinson.—Campeche: Palizada, edge of swamp, July 25–28, *Matuda* 3835.

IPOMOEA RUBRA (Vahl) Millsp.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3252 (det. Martin), a vine, corolla red.

IPOMOEA SAGITTATA Cav.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3253 (det. Martin), a vine, corolla red.

IPOMOEA SQUAMOSA Choisy.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3733A (det. Martin).

JACQUEMONTIA AZUREA (Desr.) Choisy.—Chiapas: Aguacate, July 16–18, *Matuda* 3763, a vine, corolla blue.

JACQUEMONTIA TAMNIFOLIA (L.) Griseb.—Chiapas: Aguacate, swampside, July 16–18, *Matuda* 3813, corolla blue.

OPERCULINA ORNITHOPODA (Rob.) House.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3508, a vine, corolla white.

BORAGINACEAE

BOURRERIA OXYPHYLLA Standl., *Trop. Woods*, 16: 40. 1928.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3682, a tree, 8 m. high, corolla white.

CORDIA ALBA (Jacq.) R. & S.—Tabasco: Mercedes, riverside, May 9–14, *Matuda* 3020, a tree, 8–10 m. high, 30 cm. in diameter, corolla yellow.

CORDIA DIVERSIFOLIA Pavon.—Tabasco: Boca del Cerro, July 1–5, *Matuda* 3584.

CORDIA GLABRA L.—Tabasco: Reforma, May 22–26, *Matuda* 3215.

CORDIA STENOCLADA Johnston, *Journ. Arn. Arb.*, 21: 353. 1940.—Chiapas: Javalinero, in second growth, July 6–9, *Matuda* 3658, a tree, 7–8 m. high, 35 cm. in diameter; ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3695, a tree, 10 m. high, 40 cm. in diameter, corolla white. The two collections agree closely with the description of this recently proposed species.

HELIOTROPIMUM ANGIOSPERMUM Murr.—Tabasco: Reforma, May 22–26, *Matuda* 3226.

HELIOTROPIMUM FILIFORME Lehm.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3050, corolla white.

TOURNEFORTIA GLABRA L.—Tabasco: Retiro, in second growth, June 19–25, *Matuda* 3412, corolla white.

TOURNEFORTIA HIRSUTISSIMA L.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda* 3016.

VERBENACEAE

AEGIPHILA ELATA Sw.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3031, a woody vine; Achotal, in savanna, *Matuda* 3081, a woody vine; Tenosique, in second growth, June 14–16, *Matuda* 3406, a woody vine.

CALLICARPA ACUMINATA H. B. K.—Chiapas: Javalinero, in second growth, July 6–9, *Matuda* 3641, a shrub, 2.5 m. high.

CITHAREXYLUM CAUDATUM L.—Tabasco: Achotal, east of Balancán, in advanced forest, May 9–14, *Matuda* 3066, a tree, 4–5 m. high. Chiapas: Aguacate, in savanna forest, July 16–18, *Matuda* 3771, 3776, a treelet, 2.5 m. high.

CITHAREXYLUM HEXANGULARE Greenm.—Tabasco: Boca del Cerro, on limestone, riverside, July 1–5, *Matuda* 3562, a shrub. Campeche: Palizada, July 25–28, *Matuda* 3861, a shrub, corolla white.

CLERODENDRUM FRAGRANS var. PLENIFLORUM Schau.—Tabasco: La Palma, in second growth, June 1–6, *Matuda* 3282.

CLERODENDRUM LIGUSTRINUM (Jacq.) R. Br.—Tabasco: Reforma, riverside, May 22–26, *Matuda* 3168, 3169, a woody vine, corolla white.

CORNUTIA LATIFOLIA (H. B. K.) Moldenke.—Tabasco: Tenosique, in second growth, June 14–16, *Matuda* 3398, a shrub, corolla purplish. Chiapas: Aguacate, in second growth, July 16–18, *Matuda* 3807, a shrub, corolla purplish.

DURANTA REPENS L.—Tabasco: Tenosique, in second growth, June 14–16, *Matuda* 3395.

LIPPIA HYPOLEIA Briq.—Chiapas: Javalinero, in second growth, July 6–9, *Matuda* 3630 (det. Moldenke).

LIPPIA MYRIOCEPHALA Schl. & Cham.—Chiapas: Javalinero, in second growth, July 6–9, *Matuda* 3642 (det. Moldenke).

PHYLA SCABERRIMA (A. L. Juss.) Moldenke.—Tabasco: Provincia, May 29, *Matuda* 3224 (det. Moldenke).

PHYLA STOECHADIFOLIA (L.) Small.—Tabasco: La Palma, June 1–6, *Matuda* 3273 (det. Moldenke).

STACHYTARPHETA TABASCANA Moldenke, *Phytologia*, 1: 437. 1940 (Fig. 6).—Tabasco: Reforma, May 22–26, *Matuda* 3218 (type collection).

VITEX GAUMERI Greenm.—Tabasco: Ojo de Agua, southeast of Balancán, in forest, May 9–14, *Matuda* 3115, a tree, 7–10 m. high, 45 cm. in diameter; Reforma, in advanced forest, May 22–26, *Matuda* 3231, a tree, 14 m. high, 55 cm. in diameter, corolla blue. Campeche: Vapor, in forest, July 25–28, *Matuda* 3905, a tree, 10–15 m. high, 40 cm. in diameter, corolla blue.

LABIATAE

HYPTIS VERTICILLATA Jacq.—Tabasco: Reforma, May 22–26, *Matuda* 3227.

SALVIA COCCINEA L.—Tabasco: La Palma, in second growth, June 1–6, *Matuda* 3272, corolla red.



FIG. 6. *Stachytarpheta tabascana* Moldenke. *Matuda 3218* (type collection), half natural size.

SCUTELLARIA ORICHALCEA Donn. Sm.—Chiapas: ruins of Palenque, in advanced forest, riverside, July 10–12, *Matuda 3681*.

TEUCRIUM VESICARIUM Mill.—Tabasco: Mercedes, lakeside, May 9–14, *Matuda 3006*, corolla blue; La Palma, in second growth, June 1–6, *Matuda 3257*; Estapilla, in savanna, June 27, *Matuda 3512*, corolla blue.

SOLANACEAE

ATHENAEA NELSONI Fernald.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda 3447* (det. Morton), a shrub.

JUANULLOA MEXICANA (Schlecht.) Miers.—Chiapas: Aguacate, in savanna forest, July 16–18, *Matuda 3822*, on tree.

PHYSALIS ANGULATA L.—Campeche: Palizada, swampside, July 25–28, *Matuda 3867* (det. Morton).

PHYSALIS sp.—Tabasco: La Palma, in second growth, June 1–6, *Matuda 3312*.

SOLANUM GUANICENSE Urban.—Campeche: Palizada, July 25–28, *Matuda 3848* (det. Morton).

SOLANUM HETEROCLITUM Sendtn.—Tabasco: Tenosique, in advanced forest, June 14–16, *Matuda 3449* (det. Morton).

SOLANUM HOUSTONII Dunal.—Campeche: Vapor, swampside, July 25–28, *Matuda 3883* (det. Morton), corolla yellow.

SOLANUM JAMAICENSE Mill.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3633* (det. Morton), corolla white.

SOLANUM NUDUM H. B. K.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda 3005*; Tenosique, in second growth, June 14–16, *Matuda 3396*; Retiro, in advanced forest, June 19–25; *Matuda 3435*; Boca del Cerro, in second growth, July 1–5, *Matuda 3579*.

SOLANUM PURPUSII Brandeg.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3649*, (det. Morton), a vine, corolla yellow.

SOLANUM ROVIROSANUM Donn. Sm.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda 3359* (det. Morton), a shrub, corolla white.

SCROPHULARIACEAE

ANGELONIA CILIARIS Robinson.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda 3039*, corolla blue.

BACOPA SALZMANNII (Benth.) Chod. & Hassl.—Chiapas: Aguacate, in savanna, July 16–18, *Matuda* 3764 (det. Morton), flowers yellow.

BUCHNERA LITHOSPERMIFOLIA H. B. K.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3514, corolla violet.

BUCHNERA PUSILLA H. B. K.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3143A, corolla white.

CAPRARIA BIFLORA L.—Tabasco: La Palma, June 1–6, *Matuda* 3271.

ESCOBEDIA LAEVIS Cham. & Schlecht.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3044, corolla white.

GERARDIA HARPERI (Penn.) Penn.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3040.

RUSSELIA TABASCENSIS Lundell, *Contrib. Univ. Mich. Herb.*, 6: 59. 1941.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3524 (type collection), corolla red.

SCOPARIA DULCIS L.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3053.

STEMODIA DURANTIFOLIA (L.) Sw.—Tabasco: Estapilla, in savanna, June 27, *Matuda* 3523 (det. Morton).

UROSKINNERA FLAVIDA Lundell, *Harvard Bot. Mus. Leaflets*, 9: 68. 1941.—Tabasco: Retiro, on limestone, June 19–25, *Matuda* 3425 (type collection), corolla yellowish.

BIGNONIACEAE

ARRABIDAEA INAEQUALIS (DC. ex Splitg.) K. Schum.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3668 (det. Seibert), a woody vine, corolla reddish.

CLYTOSTOMA OCOSITENSE (Donn. Sm.) Seibert, *Carnegie Inst. Wash. Publ.*, 522: 413. 1940. *Adenocalymna* (?) *ocositense* Donn. Sm., *Bot. Gaz.*, 18: 209. 1893. *Clytostoma elegans* Standl., *Carnegie Inst. Wash. Publ.*, 461: 86. 1935.—Tabasco: Retiro, in second growth, riverside, June 19–25, *Matuda* 3421 (det. Seibert). Campeche: Vapor, July 25–28, *Matuda* 3881 (det. Seibert), a woody vine.

CYDISTA POTOSINA (K. Schum. & Loes.) Loes. *Clytostoma mayanum* Standl., *Carnegie Inst. Wash. Publ.*, 461: 86. 1935.—

Tabasco: La Palma, June 1-6, *Matuda* 3278 (det. Seibert), a woody vine; Estapilla, edge of savanna, June 27, *Matuda* 3528 (det. Seibert), a woody vine, corolla red.

ENALLAGMA LATIFOLIA (Mill.) Small.—Tabasco: San Isidro, in advanced forest, June 7-11, *Matuda* 3388 (det. Seibert), a small tree, 4 m. high, 20 cm. in diameter.

PARMENTIERA PARVIFLORA Lundell, *Lloydia*, 3: 211. 1940.—Tabasco: Reforma, riverside, May 22-26, *Matuda* 3209, 3210 (type collection), a shrub.

TYNANTHUS GUATEMALENSIS Donn. Sm.—Tabasco: La Palma, June 1-6, *Matuda* 3277 (det. Seibert), a woody vine, 20 m. high, corolla yellowish.

GESNERIACEAE

(Determined by C. V. Morton, Washington)

CODONANTHE CRASSIFOLIA (Focke) Morton.—Tabasco: San Isidro, on tree, July 7-11, *Matuda* 3381, corolla reddish.

COLUMNEA SULPHUREA Donn. Sm.—Chiapas: Sierra de Palenque, in advanced forest, on tree, July 14, *Matuda* 3714, corolla yellow.

DRYMONIA CHIAPENSIS Brandeg. (?).—Tabasco: Retiro, in advanced forest, June 19-25, *Matuda* 3440, a vine, corolla reddish.

LENTIBULARIACEAE

UTRICULARIA FOLIOSA L.—Campeche: Vapor, in lake, July 25-28, *Matuda* 3873, flowers yellow.

UTRICULARIA OBTUSA Sw.—Tabasco: La Palma, in lagoon, June 1-6, *Matuda* 3235, flowers yellow. Campeche: Vapor, in lake, July 25-28, *Matuda* 3875, flowers yellow.

UTRICULARIA PUSILLA Vahl.—Chiapas: Agacuate, in savanna, July 16-18, *Matuda* 3779, flowers yellow.

ACANTHACEAE

DIANTHERA ANAGALLIS Hemsl.—Campeche: Vapor, swamp-side, July 25-28, *Matuda* 3888 (det. Leonard), corolla reddish.

JUSTICIA PECTORALIS Jacq.—Tabasco: San Isidro, in advanced forest, June 7-11, *Matuda* 3334.

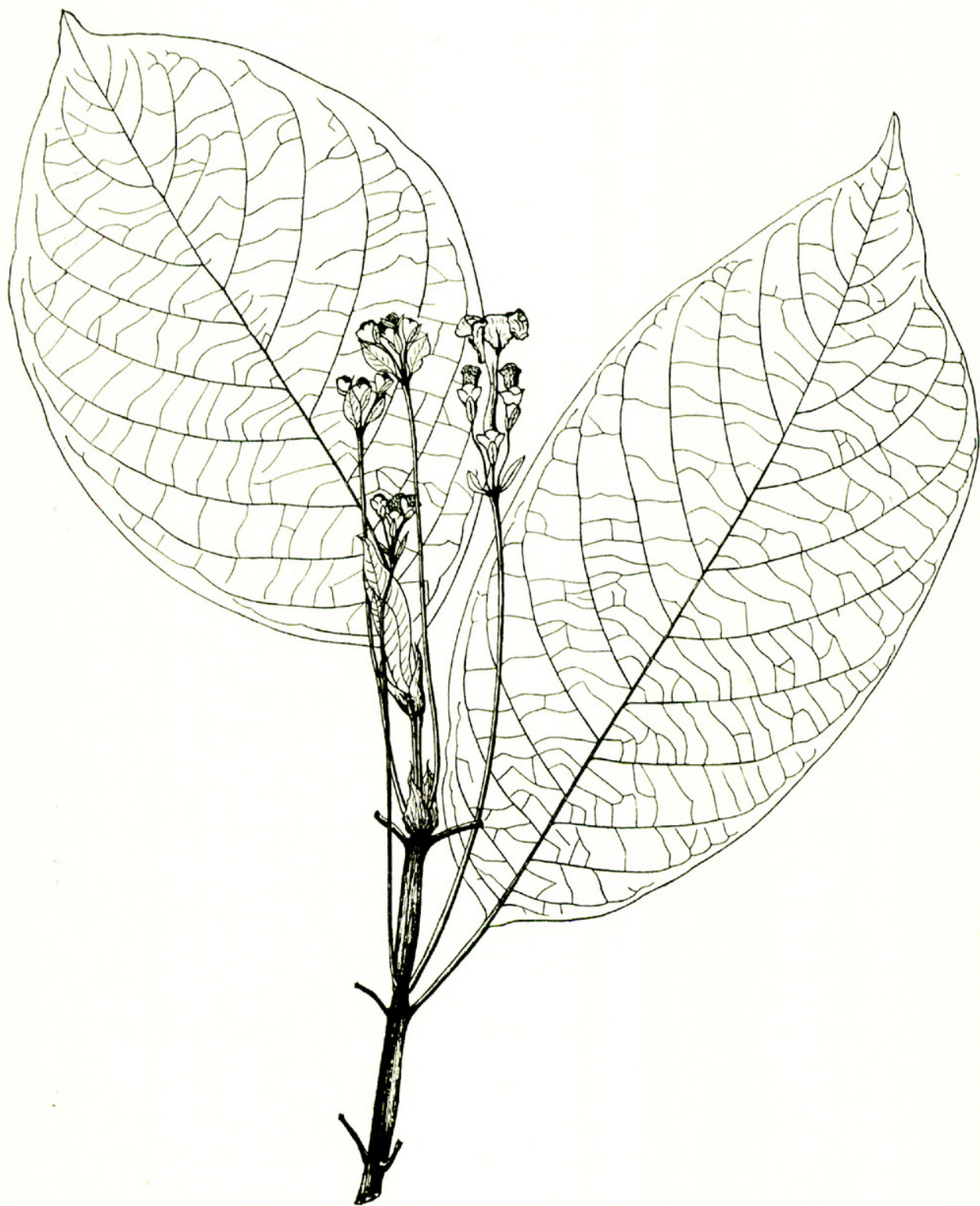


FIG. 7. *Blepharidium mexicanum* Standl. Matuda 3670 (type collection), half natural size.

ODONTONEMA CALLISTACHYUM (Schl. & Cham.) Kuntze.—Tabasco: Boca del Cerro, in advanced forest, July 1–5, *Matuda* 3566. Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3694.

RUELLIA NUDIFLORA var. YUCATANA Leonard.—Tabasco: Retiro, riverside, June 19–25, *Matuda* 3469.

RUELLIA STEMONACANTHOIDES (Oerst.) Hemsl.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3472.

PLANTAGINACEAE

PLANTAGO MAJOR L.—Tabasco: La Palma, riverside, June 1–6, *Matuda* 3320.

RUBIACEAE

ALIBERTIA EDULIS (L. Rich.) A. Rich.—Tabasco: La Palma, June 1–6, *Matuda* 3298, a treelet; San Isidro, in advanced forest, June 7–11, *Matuda* 3362, a small tree, 3 m. high, corolla white. Campeche: Vapor, July 25–28, *Matuda* 3904, a shrub.

ALSEIS YUCATANENSIS Standl., *Field Mus. Bot.*, 8: 50. 1930.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda* 3293, 3333, a tree, 20 m. high, 40 cm. in diameter, vernacular name, *papelillo*.

AMAIUUA CORYMBOSA H. B. K.—Tabasco: Ojo de Agua, south-east of Balancán, May 9–14, *Matuda* 3131, a tree, 3 m. high, 7–10 cm. in diameter, vernacular name, *tarro de venado*. Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3596, a tree, 10 m. high, 30 cm. in diameter.

ANISOMERIS PROTRACTA (Bartl.) Standl.—Chiapas: Palenque, in savanna, July 9–14, *Matuda* 3730, a shrub; Aguacate, in savanna forest, July 16–18, *Matuda* 3789, a tree, 5 m. high, 20 cm. in diameter.

APPUNIA GUATEMALENSIS Donn. Sm.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3611, a shrub.

BERTIERA GUIANENSIS Aubl.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3653, a shrub, corolla white.

BLEPHARIDIUM MEXICANUM Standl., *Field Mus. Bot.*, 22: 108. 1940 (Fig. 7).—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3670 (type collection), a tree, 5–6 m. high, corolla white.



FIG. 8. *Chione chiapensis* Standl. Matuda 3675 (type collection), half natural size.

BORRERIA SUAVEOLENS Mey.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3056 (det. Standl.); Retiro, on limestone, riverside, June 19–25, *Matuda* 3467 (det. Standl.).

CEPHAELIS TOMENTOSA (Aubl.) Vahl.—Tabasco: Achotal, east of Balancán, edge of forest, May 9–14, *Matuda* 3084, vernacular name, *cresta de gallo*.

CEPHALANTHUS OCCIDENTALIS L.—Tabasco: Mercedes, lake-side, May 9–14, *Matuda* 3028, a shrub.

CHIOCOCCA ALBA (L.) Hitchc.—Tabasco: Retiro, riverside, on limestone, June 19–25, *Matuda* 3428, corolla yellow. Campeche: Vapor, July 25–28, *Matuda* 3906, corolla white.

CHIONE CHIAPENSIS Standl., *Field Mus. Bot.*, 22: 110. 1940 (Fig. 8).—Chiapas: ruins of Palenque, in advanced forest, riverside, July 10–12, *Matuda* 3675 (type collection), a tree, 8 m. high, 35 cm. in diameter.

COCCOCYPSELUM HIRSUTUM Bartl.—Tabasco: Ojo de Agua, southeast of Balancán, May 9–14, *Matuda* 3113, corolla purplish, fruits blue. Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3667.

DIODIA RIGIDA (Willd.) Cham. & Schlecht.—Tabasco: Achotal, east of Balancán, in savanna, May 9–14, *Matuda* 3107.

FARAMEA OCCIDENTALIS (L.) Rich.—Tabasco: Reforma, May 22–26, *Matuda* 3184, a shrub; San Isidro, in advanced forest, June 7–11, *Matuda* 3344, a tree, 4 m. high, 25 cm. in diameter, corolla white.

GONZALAGUNIA PANAMENSIS (Cav.) Schum.—Tabasco: Retiro, in second growth, June 19–25, *Matuda* 3456, a shrub.

GUETTARDA COMBSII Urban.—Tabasco: Reforma, May 22–26, *Matuda* 3187, a small tree, corolla white; Boca del Cerro, on limestone, July 1–5, *Matuda* 3591, a tree, 4–5 m. high. Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3703, a tree, 8 m. high.

GUETTARDA ELLIPTICA Swartz.—Tabasco: Reforma, May 22–26, *Matuda* 3148, a small tree, 4 m. high, 12 cm. in diameter; Provincia, May 27, *Matuda* 3216, a small tree; Boca del Cerro, on limestone, July 1–5, *Matuda* 3530, a small tree, 4 m. high; Boca del Cerro, in advanced forest, July 1–5, *Matuda* 3560, a

tree, 10 m. high, 25 cm. in diameter. The continental collections, now referred to this species, may represent a distinct form.

HAMELIA AXILLARIS Swartz.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda* 3439, a shrub, corolla yellow.

HAMELIA PATENS Jacq.—Tabasco: La Palma, in second growth, June 1–6, *Matuda* 3245, a shrub.

HOFFMANNIA REFULGENS (Hook.) Hemsl.—Tabasco: Tenosique, in advanced forest, June 14–16, *Matuda* 3448 (det. Standl.).

LINDENIA RIVALIS Benth.—Tabasco: Tenosique, riverside, June 27, *Matuda* 3493. Chiapas: Javalinero, in the Chacamax River, July 6–9, *Matuda* 3615.

MACHAONIA ACUMINATA H. B. K.—Tabasco: Estapilla, edge of savanna, June 27, *Matuda* 3525, a tree, 3 m. high, 20 cm. in diameter. Chiapas: Aguacate, swampside, July 16–18, *Matuda* 3814 (?), a tree, 7 m. high, 15 cm. in diameter, flowers fragrant, corolla white. Campeche: Vapor, July 25–28, *Matuda* 3909, a tree, 5 m. high, 25 cm. in diameter, corolla white.

MORINDA PANAMENSIS Seem.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3673, a tree, 8 m. high, 35 cm. in diameter.

MORINDA YUCATANENSIS Greenm.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda* 3026; Reforma, May 22–26, *Matuda* 3174, a shrub, corolla white. Two species may be represented.

PALICOUREA CROCEA (Sw.) R. & S.—Tabasco: Achotal, east of Balancán, lakeside, May 9–14, *Matuda* 3036, a shrub. Campeche: Vapor, July 25–28, *Matuda* 3902, a shrub, corolla yellow.

POSOQUERIA LATIFOLIA (Rudge) R. & S.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda* 3619, a tree, 10 m. high, 25 cm. in diameter; ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3707, a tree, 10 m. high, 30 cm. in diameter, corolla white.

PSYCHOTRIA BRACHIATA Sw.—Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda* 3664 (det. Standl.), a shrub.

PSYCHOTRIA CARTHAGINENSIS Jacq.—Tabasco: Mercedes, in second growth, May 9–14, *Matuda* 3025 (det. Standl.), a shrub.

PSYCHOTRIA CHIAPENSIS Standl.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda 3423* (det. Standl.), a tree, 5 m. high, corolla white. Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda 3711* (det. Standl.), a small tree, 5 m. high, corolla white.

PSYCHOTRIA CUSPIDATA Bredem.—Tabasco: Achotal, east of Balancán, lakeside, May 9–14, *Matuda 3037*, a shrub, 2 m. high. Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3608*, a shrub. Two species may be represented.

PSYCHOTRIA FLAVA Oerst.—Tabasco: La Palma, June 1–6, *Matuda 3264* (det. Standl.), a shrub; La Palma, in advanced forest, *Matuda 3286*, a shrub, 2.5 m. high, corolla white; San Isidro, in advanced forest, June 7–11, *Matuda 3373*, a small tree. Chiapas: ruins of Palenque, in advanced forest, July 10–12, *Matuda 3710* (det. Standl.), a small tree, 5 m. high.

PSYCHOTRIA FRUTICETORUM Standl.—Tabasco: La Palma, June 1–6, *Matuda 3266*, a shrub. The species is either very variable or else several distinct forms are being confused with it.

PSYCHOTRIA INVOLUCRATA Swartz.—Chiapas: Javalinero, in advanced forest, July 6–9, *Matuda 3623*, a shrub.

PSYCHOTRIA LIMONENSIS Krause.—Tabasco: Retiro, in advanced forest, June 19–25, *Matuda 3437*, a shrub.

PSYCHOTRIA MICRODON (DC.) Urban.—Tabasco: Estapilla, riverside, June 18, *Matuda 3481*, a shrub, corolla white.

PSYCHOTRIA MOMBACHENSIS Standl.—Tabasco: La Palma, in advanced forest, June 1–6, *Matuda 3236*, a shrub, corolla white.

PSYCHOTRIA OERSTEDIANA Standl.—Tabasco: Reforma, in forest, May 22–26, *Matuda 3146*, a shrub, 2.5 m. high, 4–6 cm. in diameter.

PSYCHOTRIA PUBESCENS Swartz.—Tabasco: Tenosique, in advanced forest, June 14–16, *Matuda 3393*, a shrub, corolla yellowish.

PSYCHOTRIA SESSILIFOLIA Mart. & Gal.—Tabasco: San Isidro, June 7–11, *Matuda 3390*, a shrub.

PSYCHOTRIA UNDATA Jacq.—Tabasco: San Isidro, in advanced forest, June 7–11, *Matuda 3366*, corolla white.

RANDIA ACULEATA L.—Tabasco: Mercedes, lakeside, May 9–



Lundell, Cyrus Longworth. 1942. "Flora of eastern Tabasco and adjacent Mexican areas." *Contributions from the University of Michigan Herbarium* 8, 5-74.

View This Item Online: <https://www.biodiversitylibrary.org/item/46238>

Permalink: <https://www.biodiversitylibrary.org/partpdf/186241>

Holding Institution

Missouri Botanical Garden, Peter H. Raven Library

Sponsored by

Missouri Botanical Garden

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.