

# NEW SOUTH AMERICAN SPERMATOPHYTES COLLECTED BY H. M. CURRAN.

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The following new species of flowering plants are described from collections made by Mr. H. M. Curran in the State of Bahia, Brazil, in 1915, and in the Department of Bolívar, Colombia, in the early part of 1916. The specimens collected are almost all shrubs or trees, and for the most part represent species of at least local economic value.

## *Dorstenia anthuriifolia* Blake, sp. nov.

Stem ascending from a creeping base, about 12.5 cm. long, 3 mm. thick, fuscous, finely pilosulous, sparsely clothed with the persistent stipules, not at all scabrous; leaves erect; stipules triangular-lanceolate, acuminate, persistent, erect, subcoriaceous, subglabrous, oblique, 5 to 7 mm. long; petioles channeled and striate, glabrous, naked, 8.5 to 18 cm. long; leaf blades 16 to 17 cm. long, 6.7 to 7.3 cm. wide, oval-oblong, short-attenuate, rounded or truncate-rounded at base, obscurely repand-denticulate especially at base and apex with blunt teeth, membranaceous, above dull green, apparently with a darker central area, obscurely papillate, beneath slightly paler green and glabrous, the veins about 10 pairs, whitish, flattened or slightly prominent, anastomosing toward the margin; peduncles few, solitary in the axils, glabrous, striate, 7.5 cm. long; receptacle orbicular, flattish, centrally peltate, 1.4 cm. wide, minutely puberulous beneath, with crenate-denticulate margin, subgriseous-hispidulous on the upper surface between the intermixed male and female flowers.

Type in the U. S. National Herbarium, no. 704,556, collected in forests of the Rio Grongogy Basin, State of Bahia, Brazil, at an altitude of 100 to 500 meters, October or November, 1915, by H. M. Curran (no. 130).

This species finds its nearest relative in *D. urceolata* Schott, which is described as having scabrous stem, peduncles, petioles, and under leaf surface.

## *Coussapoa curranii* Blake, sp. nov.

Woody liana, about 20 meters high; branches stout, finely hispidulous or glabrate, the bark grayish fuscous; leaves alternate, their blades 8 to 11.3 cm. long, 3 to 4.5 cm. wide, wedge-obovate, rounded or truncate-rounded, with usually emarginulate tip, narrowed from above the middle to the rounded base, thickish, pergamentaceous, entire, above light green, glabrous or nearly so, beneath paler, sparsely short-pilose with somewhat spreading hairs along the chief veins, glabrous or essentially so between them, the veins 7 to 11 pairs, straight, parallel (the lowest pair somewhat remote), impressed above, prominent beneath, the secondary and tertiary veins obscurely anastomosing, about equally inconspicuous above, the secondary beneath prominent, the tertiary rather obscure; petioles stout, shallowly channeled above, subterete beneath, puberulous with somewhat spreading hairs, 1 to 2 cm. long; peduncles clustered at tips of branches, simple or forked at apex, spreading-puberulous, 1.5 cm. long, bearing 1 to 4 heads; pistillate heads subglobose, many-flowered, 5 to 8 mm. in diameter; perigonium turbinate-subglobose, angled, densely hispidulous-puberulous on its exposed surface, 1.5 mm. long; drupes ellipsoid-subglobose, glabrous, foveolate, purplish brown above, pale below, 1.2 mm. long; style excentric.

Type in the U. S. National Herbarium, no. 704,837, collected in the forests of the Rio Grongogy Basin, State of Bahia, Brazil, at an altitude of 100 to 500 meters, October or November, 1915, by H. M. Curran (no. 8).

☞ Most nearly related to *C. latifolia obovata* Miquel, which is described as with peduncles 5 cm. long, leaves with only four or five pairs of lateral veins, and glabrous perigonium. Local name "cibuero" or "gummilera."

**Coccoloba cyclophylla** Blake, sp. nov.

Tree, 8 meters high, with a trunk 20 cm. in diameter; branches grayish, glabrous, sulcate in drying; upper internodes 1 to 3 cm. long; sheaths close, equaling the internodes, sparsely puberulous below, papillose above, mainly deciduous; petioles stout, subterete, slightly channeled above, hirtellous toward apex, 1 to 2 cm. long; leaf blades (5.5) 9.5 to 12 cm. long, 6 to 11.3 cm. wide, suborbicular, retuse at the broadly rounded apex, broadly rounded and slightly cordate at base, entire but somewhat wavy-margined, pergamentaceous, above dull green, glabrous, finely prominulous-reticulate, beneath brownish green, prominent-reticulate, glabrous except for the hirtellous costa, axils, and chief veins, the main veins 10 to 12 pairs, prominent; straightish and subparallel, united at their arcuate tips; spikes solitary, straightish, axillary and terminal, rather loosely flowered, 7 to 14 cm. long, 4 to 6 mm. thick; peduncles hirtellous, 1 cm. long or less; rachis hirtellous; nodes about 4-flowered; bracts suborbicular, rounded, hirtellous, 1 mm. long; ochreolae scarious, hirtellous below, 1.5 to 2.5 mm. long; pedicels 1.5 to 2 mm. long, hirtellous, jointed near apex; perigonium subglobose, hirtellous, 1.6 mm. long; filaments lance-subulate, 0.6 mm. long; ovary ellipsoid-trigonous; styles 3, two-thirds as long as ovary; segments of fruiting perigonium united for about one-third their length, suborbicular.

Type in the U. S. National Herbarium, no. 537,207, collected at San Martín de Loba and vicinity, Lands of Loba, Department of Bolívar, Colombia, April or May, 1916, by H. M. Curran (no. 47).

Nearest to *Coccoloba rotundifolia* Meisn. of Santo Domingo, which has smaller, more deeply cordate leaves mostly broader than long, with only 6 or 7 pairs of nerves, less prominently reticulate beneath, and with the costa puberulous on the upper surface of the leaf.

**Ruprechtia oxyphylla** Blake, sp. nov.

Shrub or more probably small tree, much branched; branches grayish, glabrous; sheaths slightly loose, truncate, subcoriaceous, sparsely hispid-strigose, persistent, 1.5 to 2.5 mm. long; petioles rounded beneath, flattish above, sparsely strigose and sometimes hirtellous on margin, 2.5 to 5 mm. long; leaf blades 4.5 to 9 cm. long, 1.5 to 4.2 cm. wide, ovate-lanceolate to elliptic-lanceolate or elliptic-ovate, acute or acuminate and usually slightly falcate, the extreme tip obtuse, rounded or cuneate at base, somewhat inequilateral, repand or subentire, chartaceous, above green, in age pale, somewhat papillose but subglabrous, beneath scarcely paler green or in age rufescent, usually sparsely hispid-pilose along the costa and chief nerves or subglabrous, but sometimes subdensely hispid-pilose over the whole under surface; chief veins 10 to 13 pairs, like the veinlets obscure above or in age prominulous, beneath prominulous, slightly curved, in age like the secondaries prominulous-reticulate, the tertiaries obscure or slightly prominulous in age; staminate spikes in clusters of 2 to 4 on the growth of the previous season, 1 to 1.5 cm. long, 5 to 7 mm. thick, densely flowered, the axis densely hirtellous with dull whitish hairs; flowers in clusters of 2 to 4; pedicels 2.5 to 3 mm. long, articulate well above the middle, sparsely hirtellous; perianth 2.8 mm. long, 6-parted nearly to base, the very short tube sparsely hirtous, the segments elliptic, subtruncate, short-ciliate, glabrous or sparsely hirtellous dorsally; stamens 8, the slenderly subulate filaments glabrous, 3.5 to 4 mm. long, the anthers 1 mm. long, the ovary rudiment hispid; pistillate spikes from the previous season's growth, solitary in the axils, the axis 2.8 cm. long or less,

hirtellous, rather densely flowered; flowers in clusters of 1 to 3 at the nodes; pedicels hirtous or hirtellous, 3 to 4 mm. long, articulate near the middle; fruiting perianth 1.7 to 2.3 cm. long, the turbinate-campanulate tube (3.5 to 4 mm. long) and the base of the lobes densely strigose-pilose; outer segments spatulate-linear, only slightly broadened toward the rounded or subtruncate tip, 3-nerved and reticulate, hispidulous above with ascending hairs, 1.8 to 2 mm. wide at base, 2.8 to 3.3 mm. wide near apex; inner segments linear or linear-subulate, acuminate, at tip acute or obtusish, hirtellous, 4 mm. long, attached to base of tube for about 0.5 mm.; achene conic-ovoid, trigonous, deeply 3-grooved, the faces slightly rounded, pilosulous from apex to below the middle, 8 mm. long, 2.6 to 3 mm. thick.

Type in the U. S. National Herbarium, no. 537,606, collected on hills above Santa Marta Bay, Santa Marta, Colombia, June, 1916, by H. M. Curran.

ADDITIONAL SPECIMENS EXAMINED:

COLOMBIA: Santa Marta, altitude 305 meters, December, 1898-1901, *Herbert H. Smith* 802. Santa Marta, altitude 45 meters, January, 1898-1901, *Herbert H. Smith* 1932.

The specimens collected by Smith have been distributed as *Ruprechtia tenuiflora* Benth., but that is described as with veinless perianth segments and setiform inner calyx lobes 1 line (2 mm.) long. The species belongs to the section *Pseudotriplaris* Benth. & Hook., as do the two species from Curaçao and Venezuela recently described by the writer<sup>1</sup> and inadvertently referred to the section *Euruprechtia* (of Meisn., not of Benth. & Hook.).

***Ruprechtia coriacea* (Karst.) Blake.**

*Triplaris coriacea* Karst. Fl. Columb. 2: 131. pl. 169. 1862-1869.

This species is rather closely related, according to Karsten's description and plate, to *R. oxyphylla*, but has a larger fruiting calyx with broader acutish outer lobes. It was described from the provinces of Barcelona and Caracas, Venezuela.

***Triplaris euryphylla* Blake, sp. nov.**

Diocious tree, 6 meters high, the trunk 10 cm. in diameter; branches dull fuscous or grayish, stout, striatulate, sparsely pilose with ascending stiffish hairs, in age glabrate; sheath bases persistent, very narrow; petioles broad, very strongly flattened, puberulous and strigose-pilose on margin, in age glabrate, 1.5 to 2 cm. long, up to 5 mm. wide; leaf blades 23 to 27 cm. long, 14 to 17 cm. wide, oval, abruptly short-pointed (the points 3 to 4 mm. long), very broadly rounded at base, entire, scarcely undulate, chartaceous, above dull green, in youth evenly but rather sparsely pilose with loose hairs, along the costa densely strigillose, in age glabrate or subglabrate except along costa, beneath not paler, similarly pubescent with stiffer, more spreading hairs, the lateral veins about 24 pairs, like the secondaries slightly prominulous above, strongly so beneath, straightish to near the margin, there arched and anastomosing; leaves near the inflorescence much smaller, the blades 13 cm. long, 6 to 6.5 cm. wide, acute at both ends; staminate inflorescences axillary and terminal, 3 to 5-branched from the base, 15 to 17 cm. long, the common peduncle about 1 cm. long, like the slender, rather loosely flowered branches densely sordid-pilose with loosely spreading or ascending hairs and densely puberulous beneath them; bracts scarious, orbicular, rounded at apex, hispid-pilose on back, 2.5 mm. long; flowers about 4 in the axils of the bracts, their pedicels about 1.3 mm. long; perianth 5-parted, 1.5 to 2 mm. long, the tube 0.5 mm. long, the segments elliptic, ciliolate; stamens apparently 8; pistillate inflorescences axillary and terminal, stiff, 3 or 4-branched from near the base, 16.5 to 18.5 cm. long, densely and rather softly pilose with ascending or spreading sordid hairs and densely puberulous beneath them; bracts ovate, acute or obtusish, densely dull-pilose and pilosulous outside with ascending or appressed hairs, glabrous inside, 5 to

<sup>1</sup> Blake, Contr. Gray Herb. n. ser. 53: 30-31. 1918.

7.5 mm. long, short-stipitate; pedicels about 2 mm. long; fruiting perianth 3.8 to 4.1 cm. long, the trigonous-urceolate tube 1.2 cm. long, densely pilose and pilosulous with sordid hairs, the long ones loosely ascending or spreading and with enlarged subglandular base, the short ones appressed; outer perianth segments spatulate, obtuse, broadest above the middle, appressed-pilose and spreading-ciliate, scarious, triplinerved and and reticulate, 2.6 to 2.9 cm. long, 6 to 7.5 mm. wide; inner segments lance-spatulate, obtusish, reticulate-veined, attached to the tube only at its base, clawed, 7 mm. long, 1.4 mm. wide; achene ovoid-trigonous, mucronate, glabrous, shining, olivaceous, 9 mm. long, 4.5 mm. wide; stigmas 3, 3 mm. long.

Type in the U. S. National Herbarium, no. 537,171, collected at San Martín de Loba and vicinity, Lands of Loba, Department of Bolívar, Colombia, April or May, 1916, by H. M. Curran (no. 5). Curran's no. 4, from the same locality, represents the staminate plant.

This species is said to bear the same local name, "palo santo," as the related *Triplaris laxa*, which comes from the same region. It is especially distinguished by its very broad leaves.

***Triplaris laxa* Blake, sp. nov.**

Dioecious tree, 8 meters high, the trunk 10 cm. in diameter; branches stoutish, dull fuscous, striatulate, pilose with sordid, erect or ascending, soft hairs, in age glabrate; sheath bases persistent, very narrow, glabrate or sparsely strigose; petioles strongly flattened, obscurely puberulous, strigose-pilose on margin and sparsely beneath with sordid hairs, 1 cm. long; leaf blades 20 to 23 cm. long, 5 to 9.5 cm. wide, elliptic, acute to acuminate at each end, blunt at tip, scarcely undulate, subchartaceous, brownish green when dry, above evenly but rather sparsely pilose with dull ascending hairs, more densely short-pilose along the costa and the scarcely prominulous veins, beneath scarcely paler, similarly but more densely pubescent with looser hairs, those of the costa more appressed; lateral veins about 22 pairs, beneath prominulous, straightish, parallel, toward margin arched and anastomosing, the secondaries oblique, obscurely prominulous; pistillate inflorescences axillary and terminal, loose, simple, or 3-branched from near the base, up to 38 cm. long (including the 3 to 4 cm. long peduncle), densely and softly pilose with loosely ascending or spreading dull hairs and beneath these densely puberulous, rather loosely flowered; bracts ovate, acuminate, somewhat convolute, densely and dully pilose outside, glabrous and green inside, 5 to 6 mm. long; pedicels densely pilosulous, about 3 mm. long, jointed near the middle; fruiting perianth 3.7 to 4 cm. long, scarious, the tube 1 cm. long, trigonous-urceolate, densely and dully pilose, the ascending hairs with slightly swollen bases; outer perianth segments spatulate-oblongate, obtuse, strigose-pilose on both sides, 3-nerved and reticulate, the two lateral veins evanescent above the middle, 2.7 to 3 cm. long, 6 to 7 mm. wide above the middle; inner perianth segments ovate-lanceolate, obtuse, with clawlike base, reticulate-veined, sparsely strigillose below, borne at the base of the perianth tube and united to it only at extreme base, 5 to 6 mm. long, 1.7 mm. wide; achene olivaceous, glabrous, shining, trigonous-ovoid, mucronate by the persistent style base, slightly grooved on the sides, 8 mm. long, 4 to 4.3 mm. wide; stigmas 3, 1.8 mm. long.

Type in the U. S. National Herbarium, no. 537,185, collected at San Martín de Loba and vicinity, Lands of Loba, Department of Bolívar, Colombia, April or May, 1916, by H. M. Curran (no. 20).

The local name of this tree is given by its collector as "palo santo," and the flowers are said to be white.

***Schizolobium parahybum* (Vell.) Blake.**

*Cassia parahyba* Vell. Fl. Flum. 168. 1825; Icon. 4: pl. 71. 1827.

*Schizolobium excelsum* Vog. Linnaea 11: 399. 1837.

"*Caesalpinia parahyba* Allem. Trab. Soc. Velloz. 56. 1852?"

This species was collected in flower and fruit in the Rio Grongogy Basin, Bahia, Brazil, in 1915, by Mr. Curran (no. 13). It is said to be a tree about 30 meters high, with a trunk 45 cm. in diameter, and to bear the vernacular name "pau de vintem."

Respecting the combination above made, it may be observed that the figure of Vellozo is unusually good for the work in which it appears, and thoroughly characteristic of the species. The specific name, obviously derived from the habitat of the species, "ad ripas fluvii Parahyba dicti," is written by Vellozo with a lower-case initial and is consequently to be treated as an adjective requiring modification in termination under the new combination here proposed.

**Guarea racemiformis** Blake, sp. nov.

Tree, 5 meters high, the trunk 10 cm. in diameter; older branches dull gray, glabrate, the younger fuscous, strigillose; petioles sulcate above, rounded beneath, rather densely dull-strigillose, 2 to 3.2 cm. long; rachis similar, 4 to 7.5 cm. long, terminated by a plumule; leaflets 4 pairs, opposite, the lowest pair 4 cm. long, 2.2 cm. wide, the middle and upper 8 to 10.3 cm. long, 3.2 to 4 cm. wide, on sparsely strigillose petiolules 2 to 4 mm. long, oblong-elliptic, short-pointed, blunt at the tip, cuneate or rounded-cuneate and subequal at base, entire, pergamentaceous, somewhat pellucid-punctate, above obscurely strigillose, at length glabrate, beneath obscurely and sparsely strigillose along the costa and chief veins, otherwise glabrous, the costa impressed above, prominulous beneath like the 6 to 9 ascending lateral veins and the reticulate secondaries; peduncles axillary and on the previous year's wood, strigillose, 5 to 7 mm. long; rachis 2.5 to 7 cm. long; panicles racemiform, slenderly cylindrical, 1.5 to 1.8 cm. thick, the branches very short, 2 or 3-flowered; pedicels 0.6 mm. long or less; calyx cup-shaped, 2.5 mm. long, very sparsely strigillose, somewhat spathaceous, splitting irregularly into 3 or 4 lobes, these deltoid, obtuse, tufted-ciliate at apex; petals 4 or 5, oblong-oval, obtuse, densely subsericeous-strigose without, glabrous within, 6 mm. long; staminal tube shorter than petals, glabrous on both sides except for the ciliate apex, entire; anthers 8 to 10, borne inside the tube below its apex, subsessile, oblong-obovate, truncate, glabrous, 1 mm. long; disk stipitiform, glabrous; ovary sparsely hispid-strigose with yellowish hairs above the middle, 4-celled, the cells 1-ovuled; style about twice as long as ovary, rather sparsely hispid-strigose nearly to apex; stigma flat, circular.

Type in the U. S. National Herbarium, no. 537,250, collected in the vicinity of San Martín de Loba, Lands of Loba, Department of Bolívar, Colombia, April or May, 1916, by H. M. Curran (no. 96).

A species noteworthy for the occurrence of both 4 and 5-merous flowers, and for the fact that the racemiform panicles on the same specimen occur both in the axils of leaves of the year and from axils on the branchlets of the preceding year.

**Trichilia alta** Blake, sp. nov.

Tree, 30 meters high, the trunk 50 cm. in diameter, the branches grayish brown, in youth densely strigillose, in age glabrescent; petioles stoutish, sulcate above like the rachis, rather densely strigose, 1 to 1.5 cm. long; rachis 4.5 cm. long, puberulous with spreading sordid hairs; leaflets 7 to 9, alternate, 8 to 9.5 cm. long, 2.7 to 4 cm. wide (the terminal leaflet largest), elliptic or obovate-elliptic, acuminate, rounded at base, entire, thinly coriaceous, puberulous along costa and veins above, otherwise glabrous, rather densely puberulous with spreading hairs along the costa beneath, strigose or strigillose along the veins and sparsely between them, dull green above, fuscous beneath when dry, the lateral veins about 15 pairs, like the costa impressed above, prominulous beneath, the venation otherwise obscure; petiolules densely strigillose, 1 to 2.8 mm. long; panicles axillary, solitary or in pairs, pyramidal or conic, branched from near the base, densely short-pubescent with short, dull, appressed or ascending hairs, 2.5 to 4 cm. long, 1.8 to 3.3 cm. wide; peduncles 3 to 20 mm. long; cymules 1 to 3-flowered; pedicels 1 mm. long, sordid-puberulous; calyx 5-lobed for

about half its length, flattish, 2.5 mm. wide, griseous-strigillose and ciliolate, the lobes broadly deltoid, obtuse or acutish, about 0.6 mm. long, 1.3 mm. wide; corolla valvate in aestivation; petals 5, ovate, acutish, griseous-strigillose outside, minutely papillose-puberulous within along margin and toward the acutish tip, 2.8 mm. long (in buds, not quite mature), 1.2 mm. wide; filaments united to apex, the staminal tube glabrous on both sides, the teeth lanceolate, 0.2 mm. long; anthers papillose, oval, 0.8 to 1 mm. long; longer stamens 2.4 mm. long, the alternate shorter, 1.8 mm. long; pistil about equaling the stamens; disk very short, crenate, glabrous; ovary conic, densely strigose, 3-celled; style columnar, glabrous, about half as long as ovary; stigma about as wide as style.

Type in the U. S. National Herbarium, no. 704,857, collected in forests of Rio Grougoy Basin, Bahia, Brazil, at an altitude of 100 to 500 meters, October or November, 1915, by H. M. Curran (no. 56).

This species belongs to the section *Moschorhylum*, and is perhaps most nearly related to *T. catigna* A. Juss. Its local name is "pau rosa branca," according to the collector.

***Trichilia curranii* Blake, sp. nov.**

Shrub or tree; branchlets pale brown, strigillose; petiole subterete, sulcate above, densely griseous-strigillose, 1.5 cm. long; rachis finely puberulous with spreading hairs and sparsely strigose, sulcate above, 6.7 to 12.5 cm. long; leaflets 11, opposite or subopposite below, alternate above, the lower 5.7 to 6.5 cm. long, 1.5 to 2.3 cm. wide, elliptic or oblong-elliptic, rather abruptly acuminate, at base rounded or rounded-cuneate and inequilateral, entire, subchartaceous, puberulous along costa above, otherwise glabrous, beneath strigose and strigillose along costa and veins and very sparsely over the surface, with 9 to 14 pairs of lateral veins, these like the costa impressed above, prominulous beneath; petiolules strigillose, 1.5 to 2.5 mm. long; upper and terminal leaflets obovate, somewhat abruptly acuminate, at base acute or acuminate, 9.7 to 15.5 cm. long, 2.8 to 4.5 cm. wide; peduncles axillary, solitary, strigose and finely puberulous, 3 to 5 cm. long; panicles pyramidal, 8.5 to 15 cm. long, 8 to 12 cm. wide, puberulous and strigose, the branches and branchlets spreading-hirtellous; cymules 3 to 5-flowered; pedicels 1 to 2 mm. long; calyx sparsely strigillose and ciliolate, 2 mm. wide, 5-lobed for about one-third its length, the lobes broadly deltoid, obtuse or acute, about 0.4 mm. long, 1.2 mm. wide; petals 5, ovate, acutish, quincuncial in aestivation, sparsely strigillose outside, 2.4 mm. long, 1.2 mm. wide; disk obscure; staminal tube with stamens 2 mm. long; filaments united to apex, the tube glabrous outside, short-pubescent within; anthers ovate, obtuse, papillose; pistil slightly shorter than stamens; ovary short-conic, densely short-strigose; style glabrous, one-fifth to one-fourth as long as ovary; stigma truncate.

Type in the U. S. National Herbarium, no. 537,584, collected at San Martín de Loba and vicinity, Lands of Loba, Department of Bolívar, Colombia, April or May, 1916, by H. M. Curran.

*Trichilia curranii* seems to be most nearly related to *T. verrucosa* (Karst.) C. DC., but differs in its more numerous leaflets and its pubescence, as well as in other characters.

***Trichilia microdonta* Blake, sp. nov.**

Tree; older branchlets gray or fuscous gray, glabrous; younger branchlets fuscous, angulate, sparsely sordid-strigose and strigillose; petioles flattened above, rounded beneath, densely sordid-strigose and strigillose, 2 to 5 mm. long; rachis similar, glabrescent above the base, 4.5 to 8.3 cm. long; leaflets 11, subopposite or the upper alternate; lowest 2 or 3 pairs strongly reduced, 3.5 to 16 mm. long, 1 to 9 mm. wide, subulate and stipuliform and without distinct blade or oval and petioluled, their petiolules 3.5 mm. long or obscure; upper leaflets 6.2 to 10 cm. long, 2.8 to 4.2 cm. wide, on petiolules 3 to 6 mm. long, oval or oval-obovate, short-pointed but obtuse or emarginulate at tip, cuneate or rounded-cuneate and oblique at base, entire, rather thinly coriaceous, above dull green, sparsely hispidulous along costa, in age glabrate, beneath

somewhat paler, sparsely hispidulous or subglabrate, the costa and the 10 to 13 pairs of nerves prominulous beneath, the secondaries obscure; terminal leaflet similar but somewhat larger; peduncles axillary and terminal, flattened, sparsely strigose or hispidulous, 5 to 7 cm. long; panicles subcylindric, 5.5 to 9 cm. long, 2.5 to 3.5 cm. wide, sparsely hispidulous, their branchlets erect or divergent; cymules about 3 to 5-flowered; pedicels 1.5 to 2.8 mm. long; calyx cup-shaped, very sparsely hispidulous, 1.7 mm. long, very shallowly 5-toothed, the teeth broadly deltoid, obtuse or acutish; corolla 5-parted (rarely and abnormally 6-parted), 3.2 mm. long, very sparsely strigose outside, the segments valvate in aestivation, connate below, ovate or lance-ovate, obtusish, puberulous along margin; stamens 10; anthers united to apex, the tube about 1 mm. long, glabrous outside, sparsely pilose inside toward apex, bearing 10 slender teeth between the anthers; anthers lance-oblong, obtuse, glabrous, about 1 mm. long, the alternate ones slightly smaller; ovary densely strigose, 3-celled, the ovules 2 in each cell, collateral; style very short, glabrous; stigma capitate.

Type in the U. S. National Herbarium, no. 704,513, collected in forests of the Rio Grongogy Basin, Bahia, Brazil, October or November, 1915, by H. M. Curran (no. 81).

This species is apparently most closely related to the Colombian *T. appendiculata* (Triana & Planch.) C. DC., of the section *Moschoxylum*, but differs in its much smaller, very sparsely strigose corolla and very short style, and in having the staminal tube sparsely pilose within toward the apex.

***Trichilia triphylla* Blake, sp. nov.**

Tree or shrub; older branchlets grayish fuscous, dotted with whitish lenticels, finely puberulous and sparsely strigose, the younger dull gray, more or less densely sordid-strigose and strigillose; petioles flattened and broadly channeled above, rounded beneath, sparsely pubescent above, densely sordid-strigose beneath, 1.5 to 2 cm. long; rachis subterete or obscurely flattened above, puberulous and strigose, 7 to 17 mm. long; leaflets 3 or rarely and abnormally 4, the two lower opposite or sub-opposite, 4 to 11 cm. long, 2.5 to 4.5 cm. wide, oval or oblong-elliptic, rarely ovate, usually acute or short-pointed, rounded and unequal at base, subpapyraceous, entire, puberulous along the impressed costa above, otherwise glabrous, beneath finely puberulous and sparsely strigose or hispid along the costa and chief veins, otherwise glabrous or subglabrous, the 9 to 13 pairs of primary veins obscure above, ascending, prominulous beneath, the secondaries reticulate and prominulous on both sides; petiolules 2.5 to 7 mm. long, finely puberulous and sparsely hispid or strigose; terminal leaflet similar but considerably larger, 7.5 to 15 cm. long, 4 to 7.2 cm. wide, on a petiolule 2 to 7 mm. long; peduncles axillary, strigillose and strigose, 3 to 7 mm. long, or almost none; panicles pyramidal, usually trifid, 1.2 to 3.5 cm. long, 1 to 3 cm. wide, hispid and strigose, rather few-flowered; pedicels 2 to 3.5 mm. long; calyx saucer-shaped, strigose, obscurely 4-denticulate, 1.2 mm. long; corolla 4-parted to the base, 4.5 to 5.5 mm. long, sparsely strigillose, the petals oblong-oval, imbricate in aestivation; androecium shorter than corolla, the filaments connate to middle in a glabrous tube, the free portions densely hispid-pilose inside and on margin; stamens 10; anthers short, pilose; disk prominent, fleshy, lobulate, pilose; ovary densely hispid-pilose; style densely hispid-pilose, twice as long as ovary; stigma subcapitate; fruit globose-ovoid, mucronulate, densely hispid-strigose with dull hairs, 5 to 6 mm. long, 3-valved, 1-seeded.

Type in the U. S. National Herbarium, no. 537,441, collected in the vicinity of Estrella, Caño Papayal, Lands of Loba, Department of Bolívar, Colombia, in April or May, 1916, by H. M. Curran (no. 299). Also collected in fruit by Mr. Curran in the same vicinity (no. 315).

*Trichilia triphylla* is a member of the section *Eutrichilia* and most nearly related to *T. goudotiana* Triana & Planch., also a Colombian species. From that species, as described, it differs in its pubescent petioles and sparsely pubescent leaves, its much larger flowers, and its densely pubescent style.

**Fischeria blepharopetala** Blake, sp. nov.

Presumably a scandent shrub; stem stoutish, terete, fuscous or greenish, hispid with spreading septate sordid hairs with scarcely enlarged bases, and finely stipitate-glandular and hispidulous; leaves opposite, their blades 8.5 to 22.5 cm. long, 3.8 to 11.5 cm. wide, elliptic, short-pointed (the narrow apex 4 to 6 mm. long), at base somewhat narrowed and cordate, with the sinus closed or sometimes open, thin, entire, above dull green, evenly and rather densely hispid and hispidulous with incurved or somewhat spreading hairs, hispid along the midrib and veins, beneath rather densely pilose with spreading hairs with enlarged bases, along the veins hispid and stipitate-glandular, reticulate-veined beneath (lateral veins 7 to 9 pairs, arched-anastomosing toward the margin); petioles densely hispid and stipitate-glandular, 1.2 to 3.5 cm. long; peduncles solitary in the axils, hispid and stipitate-glandular, 5.5 to 13 cm. long, bearing about 6 to 9 flowers in a racemosely arranged corymb, the pedicels 2 to 4 cm. long, pubescent like the peduncle; sepals 5, lance-subulate, acuminate almost from the base, ciliolate, sparsely hispid and glandular, 7.5 to 12 mm. long, 1 to 3.5 mm. wide; corolla 1.6 to 2.1 cm. wide, deeply 5-parted, the lobes elliptic-ovate, obtuse, slightly contracted at base, somewhat crisped, undulate-crested on one side below the apex, strongly veined, thinner toward the margins, long-ciliate, hispid-pilose outside, except on the membranous margin, and inside below the middle; outer corona thick, fleshy, adnate to gynostegium and about half as high, subentire; inner corona of 5 thick fleshy deltoid-oval rounded lobes equaling the gynostegium; anther appendages deltoid, broadly rounded, appressed.

Type in the U. S. National Herbarium, no. 537,379, collected at San Martín de Loba and vicinity, Lands of Loba, Department of Bolívar, Colombia, April or May, 1916, by H. M. Curran (no. 206).

## ADDITIONAL SPECIMEN EXAMINED.

COLOMBIA: Santa Marta, 1898-1901, *Herbert II. Smith* 2090.

Smith's specimens were distributed as *F. calycina* Decaisne. That species, however, is described as having lanceolate-attenuate petals, puberulous on both sides and sulcate-plicate in the middle.

**Macroscepis barbata** Blake, sp. nov.

Scandent; stem stout, 2.5 to 3.5 mm. thick, densely puberulous and hispid-pilose with spreading several-celled fulvous hairs; leaves opposite, the blades 11.5 to 13.5 cm. long, 7.5 to 9 cm. wide, broadly obovate-oval, abruptly short-pointed, narrowed from above the middle to a deeply cordate base, dark green above, pale green beneath, thin and membranaceous, with 6 to 10 pairs of ascending lateral veins, rather densely hispid-pilose on both sides with fulvous hairs, these longer along the veins, somewhat harsh above, soft beneath; petioles stout, 1.5 to 1.8 cm. long, densely pubescent like the stem, the short hairs glanduliform; umbels solitary in the axils, about 6-flowered; peduncles 1 to 2 cm. long, pubescent like the stem; pedicels 6 to 8 mm. long; bracts lance-subulate, acuminate, about 1 cm. long; calyx 5-parted almost to the base, the segments ovate, acute, fulvous-setulose and glandular-puberulous on back, hispid-pilose on margin, glabrous within, 14 mm. long, 7.5 mm. wide; glands none; corolla salverform, greenish, the urceolate tube glabrous outside except for the sparsely hirtellous apex, inside glabrous except for the densely hirtellous apex, 12 to 14 mm. long, 8 mm. in diameter; limb 5-lobed for about three-fifths the way to base, 2.8 to 3.5 cm. wide, with small orifice (about 2.5 mm. in diameter), sparsely hirtellous and glandular-puberulous outside, inside grading from densely papillose on margin to densely hirtellous at center, the lobes deltoid-ovate, emarginate at the broadly rounded apex, somewhat repand, dark green with narrow pale margin, 8 to 11 mm. long, 11 to 13 mm. wide; corona adnate to the corolla tube, produced below the apex of the latter into 5 rounded, emarginate, somewhat bilobed and fluted, fleshy appendages alternating with the corolla lobes; anthers with deltoid-ovate, broadly rounded,



inflexed, membranous appendages; stigma pentagonal, slightly concave; fruit not known.

Type in the U. S. National Herbarium, no. 537,342, collected at San Martín de Loba and vicinity, Lands of Loba, Department of Bolívar, Colombia, April or May, 1916, by H. M. Curran (no. 182).

*Macroscelis urceolata* Karst., the only other species of the genus with a similar corolla, is distinguished by having the limb of the latter fulvous-hispid inside instead of merely papillose or hirtellous as in this species.