# POLYGONACEAE

by

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Herbs, shrubs or trees, sometimes completely scandent or only the branches so. Leaves alternate, variable in size and shape on adventitious growth, normal growth and short shoots; nodes swollen or not, with sheathing ocreae, these ciliate in some genera; petioles arising from base of the ocreae or well above the base. Inflorescence terminal or axillary (in Antigonon terminating in a branched tendril), spicate, racemose, or paniculate, flowers solitary or clustered, perfect, functionally or completely unisexual (if the latter, plant usually completely dioecious), bracteate, borne on short or long pedicels which may be articulated at the middle or below the flower, these with ocreolae. Perianth usually with a hypanthium, the perianth lobes 4-9, imbricate, in 1 or 2 series, equal or the inner or outer series strikingly unequal. Stamens 5-9, filaments free or variously united. Ovary superior, usually trigonous or compressed; styles 2 or 3; stigmas capitate or elongate; ovary 1-celled, ovule 1. Fruit an achene, trigonous or compressed, surrounded by the persistent perianth which may be fleshy or dry, enlarged or not, the perianth lobes in fruit coronate or imbricate, or elongated into wing-like structures, often brightly coloured. Seed 1, embryo with plane cotyledons, these often convolute in a farinous, ruminate or uniform endosperm.

Over 800 species in about 32 genera; mostly of temperate distribution primarily in the northern hemisphere.

# Key to the genera:

- 2. Perianth 5-parted, the lobes subequal becoming fleshy in fruit Coccoloba Perianth 6-parted in two series, the inner smaller; outer perianth lobes modified in fruit into conspicuous elongate wings . . . . Ruprechtia

### Antigonon Endlicher, Gen. Pl. 310. 1836-40

Herbaceous vines scandent by tendrils which terminate the inflorescence axis; stems glabrous or pubescent, often sulcate, ocreae membranaceous, deciduous or shriveling and persistent. Leaves alternate; petioles alate or terete, lamina cordate to deltoid, membranaceous. Inflorescence of axillary and terminal racemes or panicles. Flowers perfect, in ochreolate clusters, pedicellate, the pedicels articulated; perianth of 5 distinct but unequal tepals, the outer three broader than the inner two, all accrescent in fruit. Stamens 8, at first exceeding the pistil, filaments united below into a tube; anthers versatile, introrse. Ovary trigonous, 1-celled, 1-ovuled; styles 3; stigmata capitate-peltate. Achene trigonous, brown, lustrous, included in the enlarged membranaceous tepals. Endosperm abundant, deeply ruminated. Embryo centrally located; cotyledons flat.

A few species in Mexico and Central America; often cultivated in tropical and subtropical countries.

# Antigonon leptopus Hook. & Arn.

HOOKER & ARNOTT, Bot. Beech. Voy. 308. 1840; BOLDINGH, Fl. D. W. Ind. Isl. 1: 55. 1909; Fl. D. W. Ind. Isl. 2: 22. 1914; Fl. Ned. W. Ind. Eil. 172. 1913; ARNOLDO, Zakflora 127, fig. 33. 1954; Zakflora 177, fig. 33. 1964; — Antigonon platypus Hooker & Arnott, Bot. Beech. Voy. 309. 1840; — Antigonon cinerascens Martius & Gal., Bull. Acad. Brux. 10: 354. 1843; Boldingh, Fl. D. W. Ind. Isl. 1: 55, 1909.

Rampant herbaceous vines; stems mostly reddish-pubescent, occasionally glabrous; petioles 1—2.5 cm long, frequently with a membranaceous wing near the base of the blade; lamina broadly cordate to deltoid,  $5 \times 4$  to  $14 \times 10$  cm long and broad, rugose when fresh, glabrous or slightly pubescent below, apex acute to acuminate and usually with a tenuous mucro. Inflorescence axillary, often clustered near the apex of the stem, terminating in a racemosely branched tendril, increasing noticeably in size after fruiting. Flowers clustered, pedicellate, each with a minute membranaceous ocreola; pedicels to 1 cm long, glabrous or pubescent, articulate below the middle. Tepals pink to purple, occasionally clear white, cordate, expanding with age becoming  $8 \times 4$  to  $20 \times 15$  mm long and broad in fruit, glabrous or pubescent. Stamens 8; the filaments connate about half their length. Ovary trigonous; styles 3; stigmata peltate. Achenes bluntly trigonous, to 1.2 cm long.

Generally cultivated and escaped in the Caribbean area.

ARUBA: Playa (Arnoldo 175, fl. Dec.); Savaneta (Stoffers 1905, fl. & fr. Jan.). SABA: The Bottom (Arnoldo 715, fl. & fr. Aug.; Boldingh 2242, fl. July; Stoffers 3296, fl. & fr. May); Fort Gut (Stoffers 2885, fl. & fr. Ap.); Ladder Gut (Stoffers 2763, fl. & fr. Ap.; 3176, fl. & fr. May); Windwardside (Boldingh 1931, fl. July); without loc. (Boldingh 299, st.).

St. Eustatius: Oranjestad (Boldingh 1071, fl. June; Stoffers 3902, fl. & fr. July); without loc. (v. Groll-Meyer 21, fl. & fr. 248, fl. & fr.).

St. Martin: Bethlehem (Boldingh 2670 B, fl. & fr. Aug.); Cul de Sac (Stoffers 2447, fl. & fr. March).

Coccoloba P. Brown ex Linnaeus, Syst. Nat. ed. 10, 1007, 1367. 1759; nom. conserv.

Shrubs or trees, often with scandent branches; branches terete, often geniculate, short shoots commonly developed; nodes commonly tumid; ocreae membranaceous or coriaceous, deciduous or persistent, or so in part glabrous or puberulent. Leaves membranaceous, chartaceous or coriaceous, margin entire, venation pinnate, arcuate, anastomosing; petioles terete to stout, canaliculate, attached at the base of the ocrea or above. Plants dioecious, rarely monoecious. Inflorescence racemose, spicate or paniculate. Flowers unisexual or functionally so, staminate flowers generally in clusters of 2-5 at each nodule, pistillate flowers regularly solitary at each nodule, bracts subtending each nodule, flowers developing in a membranaceous sheath which ruptures irregularly or regularly to become an ocreola below each flower, pedicels shorter than the ocreolae to many times as long, flowers articulated at the apex of the pedicel, hypanthium well developed. Perianth lobes 5, similar, imbricate. Stamens 7 or 8 borne on the hypanthium; filaments slightly united at the base; stamens in pistillate flowers similar but minute. Pistil trigonous; styles 3; pistil rudimentary in staminate flowers; perianth expanding in fruit; the achene surrounded by the enlarged fleshy hypanthium, the perianth lobes smaller and imbricate or coronate, or the perianth lobes alone expanding and surrounding the achene. Achene trigonous, outer layer hard and shiny, inner papery. Endosperm abundant, ruminated. Embryo centrally located, cotyledons flat, radicle small, terete.

A large New World genus ranging from Bermuda and Florida through the West Indies, Mexico and Central America into South America with many species in the Amazonan basin and a few species as far south as Argentine.

# Key to the species:

- Perianth lobes coronate in fruit; fruit ovoid, rounded at the base; leaves thin coriaceous, not fleshy, normally longer than broad. . C. swartzii
   Perianth lobes imbricate in fruit, the fruit conspicuously obpyriform, tapering to the base; leaves thick and fleshy, commonly broader than long
   C. uvitera

#### Coccoloba swartzii Meisner

MEISNER in DECANDOLLE, Prodr. 14: 159. 1856; LINDAU, Bot. Jahrb. 13: 157. 1890; Howard, Journ. Arnold Arb. 30: 420. 1949; Journ. Arnold Arb. 37: 317. 1956; — Coccoloba barbadensis Lindau, Bot. Jahrb. 13: 148. 1899; Duss, Ann. Inst. Col. Marseille 3: 166. 1897; not Jacquin; — Coccoloba diversifolia Lindau, Symb. Ant. 1: 223. 1899; Grisebach, Fl. Br. W. Ind. Isl. 163. 1859; Boldingh, Fl. D. W. Ind. Isl. 1: 53: 1909; Fl. Ned. W. Ind. Eil. 172. 1913, not Jacquin; Fl. D. W. Ind. Isl. 2: 22. 1914; Arnoldo, Zakflora 37, fig. 16. 1954; Zakflora 178, fig. 16. 1964; — Coccoloba microstachya Boldingh, Fl. D. W. Ind. Isl. 1: 54. 1909, not Willd.

Tree 8 to 20 m tall; branches terete, the youngest puberulent, becoming glabrate, the nodes slightly tumid; ocreae 10—12 mm long, the basal portion 3—5 mm long, coriaceous, persistent, the upper portion membranaceous and deciduous, puberulent to glabrate. Leaves of normal shoots with petioles 10-18 mm long, puberulent to glabrate, the blades ovate to elliptic,  $2.2 \times 1.3$ ,  $7 \times 5$ ,  $15 \times 7.5$ cm long and broad, coriaceous, usually turning black on drying, glabrous, having pit-like depressions on the upper surface and small glands on the lower surface, the apex acute, often rounded, the base narrowed, rounded or slightly cordate and usually oblique; midrib and veins inconspicuous or flat above, prominent below, primary veins 6 or 7 pairs, arcuate, anastomosing, secondary venation conspicuous, reticulate. Leaves of adventitious shoots with petioles 1.5—2.5 cm long, the blades generally ovate to lanceolate,  $23 \times 8.5$ ,  $45 \times 18.5$ to  $70 \times 25$  cm long and broad, the apex acute to acuminate, the base rounded. Inflorescence 10-15 cm long, the rhachis glabrous or with glandular exudate, rarely papillose. Staminate flowers in clusters of 3-5 flowers at each nodule, tightly surrounded by membranaceous ocreolae which form a truncate cylinder after the flowers have fallen. Pistillate flowers borne singly at the nodes, bracts ovate 0.5 mm long, ocreolae 1-1.5 mm long, membranaceous, pedicels shorter than the ocreolae. Hypanthium 0.5 mm long. Perianth lobes 1-1.5 mm long; fertile stamens 1-1.5 mm long, the sterile stamens rudimentary. Fruit ovoid 8-10 mm long, 6 mm diameter; perianth lobes 1-1.5 mm long and coronate in fruit. Achene dark brown.

Jamaica, Hispaniola, Bahamas, Puerto Rico, Virgin Islands, Leeward Islands, Windward Islands south to St. Lucia and Barbados, British Honduras and Honduras.

Vernacular names: bessji die kalakoena, dreifi sjimarón, kamaalia, kamaari, manggel die sabaana, paaloe die lamán (Leeward Group).

red manggel, redwood (Windward Group).

ARUBA: calcareous top of Canashito (Boldingh 6384, fl. Dec.); Coemaria (Curran & Haman 417); Jamanota (Boldingh 6306, defl. Dec.), Rooi Taki (Arnoldo 249, fl. Dec.),

Bonaire: Hobau (Stoffers 1045, fl. Dec.); Lac, south of Lima (Stoffers 480, fl. Nov.); Karpata, near Goto (Stoffers 1079, fl. Dec.); slope of Macutucao (Boldingh 7122, flb. Jan.); calcareous hills near Rincón (Boldingh 7051, st. Jan.); Soebi Rincón (Boldingh 7274, fl. Jan.); West of Lima (Stoffers 714, fl. Nov.); calcareous plateau of Klein Bonaire (Boldingh 7489, flb. Feb.).

Curação: Fuik (Curran & Haman 234); calcareous hills near Mahoema (Boldingh 4827, fl. Oct.); Mangle (Curran & Haman 41); Ronde Klip (Boldingh 5330, fl.

Nov.; Stoffers 1237, fl. Dec.); St. Peter (Britton & Shafer 3082, st. March); Tafelberg (Curran & Haman 150).

Saba: Booby Hill (Boldingh 1569, fl.; 1571, st. July; Stoffers 4322, st. Aug.); Bottom Mountain, 250 m (Boldingh 1418, st. July); between Hellsgate and Windwardside (Stoffers 4137, fl. Aug.; Boldingh 1665, st. July); Rendez-Vous (Stoffers 4261, fl. Aug.); St. Giles (Boldingh 1860, fl. July); slope of the Mountain near Windwardside (Boldingh 2175, st. July).

St. Eustatius: between Glass Bottle and White Wall (Stoffers 4049, st. Aug.; 4063, st. Aug.; 4097, st. Aug.; 4102, st. Aug.); top of The Quill above Glass Bottle (Stoffers 3584, st. July; 3678, st. July; 3684, st. July; 3921, st. July); slope of The Quill above White Wall (Boldingh 1172, fl.); top of The Quill (Boldingh 179, st. June; 210, st. June; 312, st. June).

Coccoloba swartzii forma pubescens Howard (Journ. Arnold Arb. 30: 420. 1949) was recognized to accommodate an extremely pubescent group of plants otherwise clearly assigned to this species. Such plants are very common on Antigua and a fewer number have been seen on Barbuda and Guadeloupe. The following specimens must also be assigned to this forma.

Curação: Hofje Abau (Curran & Haman 90); Hills near Klein Santa Marta (Boldingh 4881, fl. Dec.); calcareous hills near Malpais (Boldingh 4882, st. Oct.); calcareous hills near Siberië (Boldingh 5240, fl. Dec.); Seroe Christoffel (Hummelinck s.n., fl. & fr. March); St. Hieronymus Berg (Boldingh 5070, fl. Oct.); without loc. (Aschenberg s.n., fl.).

St. Eustatius: Gilboa Hill (Stoffers 4031, st. July); Wash Gut (Stoffers 4034, st. July).

# Coccoloba uvifera (L.) L.

LINNAEUS, Syst. Nat. ed. 10. 1007. 1759; BOLDINGH, Fl. D. W. Ind. Isl. 1: 54. 1909; Fl. D. W. Ind. Isl. 2: 22. 1914; Fl. Ned. W. Ind. Eil. 173. 1913; Arnoldo, Gekw. en nutt. pl. Ned. Ant. 47, fig. 86. 1954; Zakflora 35, fig. 71. 1954; Zakflora 178, fig. 71. 1964; — Polygonum uvifera LINNAEUS, Spec. Plant. 365. 1753; — Guaiabara uvifera House, Amer. Midl. Nat. 8: 64. 1922.

Tree of strand areas, 2—15 m tall; branches stout, papillose to pilose; ocreae rigid, coriaceous at the base, membranaceous at the apex, 3—8 mm long, papillose to pilose. Leaves of normal shoots with stout petioles, 7—10 mm long, puberulent to pilose, the blades orbicular to reniform,  $10 \times 10$ ,  $11 \times 14$ ,  $13 \times 18$ ,  $20 \times 27$  cm long and broad, thick and fleshy when fresh, coriaceous when dry, glabrous and minutely punctate on both surfaces, the apex rounded, truncate or emarginate, the base rounded to broadly cordate, one lobe extending around the petiole, the primary veins 3—5 pairs, usually straight, bifurcate and weakly anastomosing near the margin, commonly barbate in the axils of the basal veins, the secondary venation minutely reticulate or obscure; terminal leaves on seedlings or on adventitious shoots often obovate, cuneate or narrowed at the base otherwise similar, stem leaves of well developed adventitious shoots often larger but similar in shape to leaves of normal shoots.

Inflorescence stout, 15—30 cm long, racemose, occasionally branched at the base, rhachis puberulent. Staminate flowers in clusters of 1—7; pistillate flowers solitary at each nodule; bracts ovate, 1—1.5 mm long, 2 mm broad, puberulent, ocreolae membranaceous, 1 mm long, puberulent, flowering pedicels 1—2 mm long, the hypanthium 2—3 mm long, perianth lobes 4 mm long, 3—4 mm broad, fertile stamens to 4 mm long; fruiting pedicels 3—4 mm long. Fruit obpyriform, 1.2—2 cm long, 8—10 mm diameter above the middle, narrowed at the base, rounded truncate at the apex; the perianth rose-purple when mature, the achene black, mostly surrounded by the enlarged hypanthium, perianth lobes imbricate, fleshy in fruit; sterile but fully expanded fruits occasionally produced on staminate plants.

Florida, Bahamas, West Indies, Mexico, Central America, North South America.

Vernacular names: dreifi die laman, zeedreifi (Leeward Group). sea grape (Windward Group).

ARUBA: Kudarebe (Stoffers 1329, fl. Jan.); Manchebo (Boldingh 6290, st. Dec.); Fontein (Stoffers 1732, fl. Jan.); San Nicolas (Arnoldo 291, fl. Dec.).

Bonaire: Karpata (Stoffers 1076, fl. Dec.).

Curação: Choloma (Stoffers 27, fl. Sept.); Willemstad (Britton & Shafer 2951, fl. March).

Saba: The Bottom (Boldingh 1988, fl. July); Ladder Gut (Stoffers 3189, fl. May); Parish (Boldingh 1370, fl.); Windwardside (Arnoldo 827, fl. Aug.).

St. Eustatius: slope of The Quill near Bengalen (Boldingh 717, fr. June); between Glass Bottle and White Wall (Stoffers 4108, st. Aug.); The Quill (Boldingh 263, fl. June); Oranjestad (Boldingh 17, fl. May; 1057, fl. June); White Wall (Boldingh 1257, fl. & fr. July); without loc. (v. Groll-Meyer 198, st.).

St. Martin: Guana Bay (Boldingh 2432, st. Aug.); Simson Bay Village (Boldingh 3032, fl. Aug.).

The hybrid of Coccoloba krugii × C. uvifera previously reported from Hispaniola, Virgin Gorda and St. Croix appears on St. Eustatius as represented by Stoffers 4031 collected near Gilboa Hill, 80 m, st. July.

#### Coccoloba krugii Lind.

LINDAU, Bot. Jahrb. 13: 145. 1891; in Urban, Symb. Ant. 1: 222. 1899; Boldingh, Fl. D. W. Ind. Isl. 1: 53. 1909; Fl. Ned. W. Ind. Eil. 173. 1913.

Shrub or small tree to 6 m tall; branches terete, glabrous, slightly nodose; ocreae membranaceous, persistent, 3—5 mm long; petiole attached at the base of the ocreae, 5—6 mm long; blades ovate, orbicular to ovate,  $2 \times 1.8$ ,  $2.5 \times 2.5$ ,  $4 \times 3.5$  cm long and broad, apex obtuse or rounded, base cordate or rounded, thin coriaceous, entire, flat or recurved at the margin, glabrous or rarely with a few hairs near the attachment of the petiole, the midrib flat above, slightly prominent below, the secondary venation minutely reticulate below, smooth above; adventitious shoots with ocreae to 1 cm long, leaves with petioles 1 cm long, the blades usually elliptic,  $6 \times 4$ ,  $7 \times 6$  cm long and broad. Inflorescence terminal, 5—8 cm long, rhachis glabrous, bracts broadly

ovate, membranaceous, less than 1 mm long, ocreolae membranaceous, less than 1 mm long, pedicels shorter than the ocreolae. Pistillate flowers solitary; staminate flowers 1 or 2 at a locus; hypanthium 1 mm long, perianth lobes ovate, 2 mm long, fertile stamens 1—1.5 mm long. Fruit ovoid or fusiform, generally sharply 3-angled, 4—5 mm long, 3—3.5 mm in diameter, perianth lobes appressed about half the length of the achene. Achene dark brown.

Bahamas, Hispaniola, Jamaica, Puerto Rico, Virgin Islands, and Antigua.

St. Martin: Low Lands (Le Gallo 850, fl. July; 908, fl. July; Stoffers 2683, fr. Ap.); Mullet Pond (Boldingh 2756, fl. Aug.).

#### Coccoloba venosa L.

LINNAEUS, Syst. Nat. ed. 10. 1007. 1759; FAWCETT & RENDLE, Journ. Bot. 51: 123. 1913; — Coccoloba punctata LINNAEUS, Spec. Plant. ed. 2. 523. 1762; — Coccoloba nivea JACQUIN, Enum. Pl. Carib. 19. 1762; Hist. Stirp. Amer. 115, pl. 78. 1763; BOLDINGH, Fl. D. W. Ind. Isl. 1: 52. 1909; Fl. Ned. W. Ind. Eil. 173. 1913; — Guaiabara venosa House, Amer. Midl. Nat. 8: 64. 1922, as Guaibara.

Trees to 15 m tall; branches terete, glabrous, nodes not tumid, ocreae membranaceous, deeply cleft, acuminate on one side or truncate, to 2 cm long, glabrous or with flattened glands; leaves of normal shoots with petioles 5-10 mm long, glabrous, blades oblong-lanceolate to elliptic  $8 \times 4$ ,  $10 \times 4.5$ ,  $16.5 \times 6.5$ ,  $21 \times 9$ ,  $27 \times 10.5$  cm long and broad, membranaceous, glabrous except for clusters of hairs in the axils of the veins, sparsely glandular below, apex short-acuminate, base narrowed and slightly cordate or cuneate or obtuse, midrib and primary veins slightly prominent on both surfaces, the primary veins 8-13 pairs, straight or arcuate, bifurcate and anastomosing at the margins; leaves of adventitious shoots about the same size but the internodes much elongate and ocreae to 4 cm long. Inflorescence terminal or terminal on short lateral branches, rhachis puberulent, angular. Staminate flowers in clusters of 2-5; pistillate flowers solitary; bracts lanceolate-ovate to 1.5 mm long, black, puberulent to pilose or commonly fringed or ciliate near the apex: ocreolae membranaceous, enlarging with the expanding bud, to 2 mm long, flowering pedicels 1-2 mm long, glabrous. Hypanthium less than 0.5 mm long. Perianth lobes broadly ovate, 1.5-2 mm long and broad, slightly unequal, fertile stamens to 1 mm long. Fruiting pedicels 1.5-2.5 mm long, the perianth lobes fleshy, white or pink, enclosing the black achene, the hypanthium scarcely evident in the fruit. Achene 3-4 mm long and broad.

Hispaniola, Puerto Rico, Virgin Islands, Lesser Antilles, Trinidad, Tobago, Colombia, Venezuela, Costa Rica, Nicaragua, Honduras, El Salvador, Guatemala, and Mexico. Vernacular names: hoag apple, sugary grape (Windward Group).

Saba: Booby Hill (Boldingh 1582, st. July; Stoffers 4298, st. Aug.); Hellsgate (Boldingh 1688, st. July); Spring Bay Gut (Boldingh 2087, fl. July); Windwardside (Arnoldo 637, fl. Aug.; Boldingh 2316, fl. July).

St. Eustatius: Bottom of The Quill (Stoffers 3655, st. July); from Signall Hill to Venus Bay (Boldingh 964, st.).

St. Martin: between Bethlehem and Cul de Sac (Boldingh 3420, fl. Sept.); above Cul de Sac (Boldingh 2993, st. Aug.); between Philipsburg and Belvedere (Boldingh 2579, fl. Aug.); between Mont Chambord and Mont Vernon (Boldingh 2961 A, fl. Aug.); Mount Paradise (Boldingh 3228, st. Sept.; 3319, fl. Sept.).

Ruprechtia C. A. Meyer, Mem. Acad. S. Petersb. ser. 6, 2nd part, Sc. Nat. 148-150, pl. 4. 1840

Trees or shrubs, stems solid, pith present. Leaves alternate, pinnately nerved, ocreae deciduous. Plants dioecious, flowers fasciculate, pedicellate, each ocreolate, racemose, the racemes simple or paniculate. Staminate perianth 6-parted, the segments subequal or the 3 inner ones somewhat smaller. Stamens 9, inserted on the central disc, filaments filiform; pistillate perianth 6-parted, the 3 outer segments oblong or lanceolate, noticeably accrescent after anthesis, the inner segments linear and much smaller. Ovary trigonous; styles 3, short. Achene obtusely trigonous, pyramidal, 3—6-sulcate, mostly enclosed in the expanded hypanthium, the outer perianth lobes conspicuously elongated into distinct wings. Endosperm lobate and ruminate.

Seventeen species, mainly in the tropical regions of Central and South America.

### Ruprechtia coriacea (Karst.) Blake

BLAKE, Contr. U.S. Nat. Herb. 20: 239. 1919; Cocucci, Kurtziana 1: 260. 1961; — Triplaris coriacea Karsten, Fl. Columb. 2: 131, pl. 169. 1862; Boldingh, Fl. D. W. Ind. Isl. 2: 22. 1914; Fl. Ned. W. Ind. Eil. 173. 1913; Arnoldo, Zakflora 37, fig. 32. 1954; Zakflora 178, fig. 32. 1964; — Ruprechtia curranii Blake, Contr. Gray Herb. 53: 30. 1918.

Shrub or small tree; branchlets striate, appressed strigose, ocreae flaring. membranaceous, to 1.5 mm long, strigose. Leaves of normal growth shoots with petioles 2-4 mm long, pubescent to glabrate, the blades narrowly oblong, oblong, elliptic or subobovate,  $5 \times 2$  to  $6 \times 3$  cm long and broad, base rounded to cuneate, apex rounded, acute or short acuminate, strigose and ciliate on the margins, glabrate when mature; leaves of shoots with vigorous growth on petioles 5 mm long, the blades broadly elliptic or oblong, to  $10 \times 6$ cm long and wide, rounded at the base, short apiculate or acute or rounded at the apex. Two inflorescences solitary or clustered. Flowers several at each nodule, bracts ovate, pubescent, 1-1.5 mm long, ocreolae 1.5 mm long, pedicels 1-5 mm long, articulate below the middle. Perianth of staminate flowers pubescent or glabrous; perianth of pistillate flowers with sepals at first ovate and acute, pubescent on both surfaces, red, becoming wing-like in fruit, petals oblong, white, much smaller than the sepals but elongating and becoming linear in fruit 5 mm long, glabrous staminate rudiments 9-12. Styles to 1.5 mm long. Fruiting calyx attenuate at the base, strigose, the wings narrowly

oblong,  $15 \times 4$  to  $25 \times 5$  mm long and wide, rounded at the apex. Achene dull chestnut brown, glabrous at the base, strigose in lines above, strongly 3-lobed each lobe slightly sulcate.

Curação, Venezuela.

Vernacular names: kafeeta, manggel die sabana (Leeward Group).

Curaçao: Behoenda (Boldingh 5509, st. Oct.); Brakkeput ariba (Boldingh 5506, st. Oct.); Seroe Christoffel (Boldingh 4993, fl. & fr. Dec.; 5003, st. Dec.; 5024, fr. Dec.; Stoffers 237, fr. Oct.; 1133, fr. Dec.); Hills near Knip (Arnoldo 1094, male fl. Sept.); Hofje Abau (Curran & Haman 189 — type of C. curranii); Hofje of Siberië (Boldingh 5298, fl. & fr. Dec.); Noordkant (Curran & Haman 220); Pannekoek (Arnoldo 1095, fl. Sept.); Plantage Noordkant (Stoffers 172, fr. Oct.); Siberië (Arnoldo 1067, fem. fl. June); Wacao (Boldingh 5298).