

MORACEAE

by

C. C. BERG

(Instituut voor Systematische Plantkunde, Utrecht)

Trees or shrubs, in *Ficus* often epiphytic and strangling, in *Dorstenia* herbs, laticiferous except for *Cecropia*. Leaves alternate, lamina entire or lobed, venation pinnate, palmate or radiate, stipules often amplexicaul. Plants monoecious or dioecious, flowers unisexual, close together in bisexual or unisexual inflorescences, being unbranched and spicate, globose, discoid, cyathiform or urceolate, but in *Cecropia* a digitate cluster of spikes enclosed by a spathe; tepals 4—0, stamens 4—1, stigmas 2—1, ovule 1, apical, but in *Cecropia* basal. Fruit an achene enclosed by an enlarged perianth or in *Ficus* by the receptacle, a fruit forming a drupaceous whole with the perianth and/or the receptacle, or in *Dorstenia* a dehiscent drupelet. Seeds with endosperm and a small embryo or without endosperm and large embryo, in *Sorocea* one of the cotyledons strongly reduced.

900—1000 species in about 50 genera, mainly in tropical parts of the world. *Cecropia* is here treated under the Moraceae instead of the recently established family Cecropiaceae (see Taxon 27: 39. 1978).

Key to the genera:

1. Herbs *Dorstenia* (p. 114)
Trees or shrubs 2
2. Lamina peltate with radial incisions *Cecropia* (p. 119)
Lamina basally attached, entire or pinnatifid 3
3. Stipules fully amplexicaul, leaves in spirals 4
Stipules lateral, leaves distichous 5
4. Lamina with a (waxy) glandular spot at the base of the midrib beneath;
inflorescence urceolate *Ficus* (p. 115)
Lamina without glandular spots on the midrib; inflorescence globose to
cylindrical, unisexual *Artocarpus* (p. 114)

5. Stipules fused; plant often with spines; staminate inflorescence spicate; pistillate inflorescence capitate; stigma 1 . . . *Chlorophora* (p. 112)
 Stipules free; plant never with spines; staminate and pistillate inflorescence subcapitate; stigmas 2 *Sorocea* (p. 113)

Chlorophora Gaudichaud in Freycinet, Voy. Uran. Physic. 508. 1830

Dioecious trees, often with axillary spines, leaves distichous, leaf margin serrato-dentate; stipules semi-amplexicaul, fused. Inflorescences solitary in the leaf axils, pedunculate, bracteate, the bracts with 2 immersed yellow glands, staminate inflorescences spicate, flowers sessile, tepals 4, stamens 4, inflexed before anthesis, pistillode present; pistillate inflorescences globose-capitate, tepals 4, ovary free, stigma 1. Fruit an achene enclosed by the slightly fleshy, greenish to yellowish perianth.

Genus delimitation uncertain, probably monotypic.

Chlorophora tinctoria (L.) Gaud. ex Benth. & Hook.

GAUDICHAUD ex BENTHAM & HOOKER, Gen. Plant. 3: 363. 1880; BOLDINGH, Fl. Ned. W. Ind. Eil. 165. 1913; Fl. D.W. Ind. Isl. 2: 20. 1914; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 240. 1924; MOSCOSO, Cat. Fl. Domingensis 136. 1943; LEON & ALAIN, Fl. Cuba 2: 51. 1951; ARNOLDO, Zakflora 21, fig. 4. 1954; Zakflora 166, fig. 4. 1964; ARNOLDO, Gekw. en nutt. pl. Ned. Ant. 1954; Gekw. en nutt. pl. Ned. Ant. 195. 1971; URBAN, Symb. Ant. 4: 195. 1905 and 8: 166. 1920; FAWCETT & RENDLE, Fl. Jamaica 3(1): 43. 1914; GOODING *et al.*, Fl. Barbados 123. 1965; LITTLE *et al.*, Trees of Puerto Rico & Virgin Isl. 2: 108. 1974; FOURNET, Fl. Guadeloupe & Martinique 966. 1978; — *Morus tinctoria* LINNAEUS, Spec. Plant. 986. 1753; — *Maclura tinctoria* (L.) STEUDEL, Nomencl. ed. 2, 2: 87. 1841; GRISEBACH, Fl. Br. W. Ind. Isl. 153. 1859; Duss, Fl. phan. Ant. franç. 159. 1897; — *Maclura xanthoxylon* ENDLICHER, Gen. Plant. suppl. 4(2): 34. 1847; GRISEBACH, Fl. Br. W. Ind. Isl. 153. 1859; Duss, Fl. phan. Ant. franç. 159. 1897.

For a complete list of synonyms see Kaastra, Acta Bot. Neerl. 21: 659. 1972.

Shrubs or trees up to 10 m tall. Leafy twigs 1–7 mm thick, glabrous or puberulous, often with solitary (or sometimes paired), up to 3 cm long, straight spines. Lamina ovate to elliptic, 3–12 cm long, 1–6 cm broad, chartaceous, apex acuminate to caudate, base rounded to subcordate, margin serrato-dentate, sometimes almost entire, in juvenile specimens often more or less deeply lobed, both surfaces glabrous except for the veins beneath, 7–12 pairs of lateral veins; petiole 6–8 mm long, glabrous or minutely puberulous to pubescent; stipules 2–6 mm long, puberulous. Staminate inflorescences up to 10 cm long, c. 3 mm in diam., peduncle 2–5 mm long. Pistillate inflorescence globose to subglobose, 4–12 mm in diam., peduncle 2–6 mm long, style including the filiform stigma up to 10 mm long. Fruit up to 4 mm long.

Wide-spread in tropical America. Subspecies *tinctoria* is the common form of the species which is very variable and may show considerable difference between juvenile and adult specimens, especially in the shape of the leaves.

CURAÇAO: Pos Kajoeda (Stoffers 1320, fem. fl. Jan.); Malpais (Stoffers 295, male fl. Oct.); Barber (Stoffers 245, fem. fl. Oct.); Siberië (Went 1330, fem. fl. Dec.; Boldingh 4702, fem. fl. Dec.).

Sorocea St. Hilaire, Mém. Mus. Paris 7: 473. 1821

Dioecious shrubs or trees. Leaves distichous, entire or dentate; stipules free, lateral. Inflorescences spicate to subcapitate, with peltate bracts, pedunculate. Flowers sessile or pedicellate, the staminate ones with a (3—)4(—6)-parted perianth, stamens 4, usually short, not inflexed before anthesis, pistillode normally lacking; pistillate flowers with a tubular subentire to 4-lobed perianth, stigmas 2, short. Fruiting perianth more or less fleshy, blackish, adnate to the fruit. Seed rather large, with very unequal cotyledons.

The genus is neotropical and comprises about 15 species.

Sorocea sprucei (Baill.) Macbr.

MACBRIDE, Publ. Field. Mus. Bot. 11: 16. 1931; BURGER *et al.*, Acta Bot. Neerl. 11: 470. 1962; — *Pseudosorocea sprucei* BAILLON, Adansonia 11: 296. 1875. — *Maclura brasiliensis* (MART.) ENDLICHER var. *reticulata* CHODAT, Bull. Herb. Boiss. ser. 2, 3: 350. 1903; — *Sorocea saxicola* HASSLER, Bull. Herb. Boiss. ser. 2, 7: 11. 1907; BURGER *et al.*, Acta Bot. Neerl. 470. 1962; — *Olmedia virgata* PITTIER, Bol. Soc. Venez. Ci. Nat. 8: 305. 1942; BERG, Fl. Neotr. Monogr. 7: 145. 1972; — *Sorocea arnoldoi* LANJOUW & WESSELS BOER, in BURGER *et al.*, Acta Bot. Neerl. 11: 472. 1962.

Shrubs or trees up to 8 m tall. Leafy twigs 1—3 mm thick, puberulous to hirtellous. Lamina elliptic to oblong, (2—)6—14 cm long, (1—)2.5—7 cm broad, chartaceous to subcoriaceous, apex acuminate to subacute or obtuse, base acute to obtuse, margin usually entire, upper surface glabrous except for the impressed midrib, lower surface hirtellous to hispidulous, often more or less scabrous, 8—12 pairs of lateral veins; petiole 3—11 mm long; stipules 2—7 mm long. Staminate inflorescences 1—2.5 cm long, including the 2—5 mm long, densely puberulous peduncle, flowers crowded, sessile, c. 2—2.5 mm high, filaments very short, connective extending the thecae with a glandular-like protuberance. Pistillate inflorescences spicate to subcapitate, 0.5—1.5 cm long, including the 2—10 mm long, densely puberulous peduncle, flowers 4—12, sessile, c. 2 mm high; stigmas 1—2 mm long. When fruiting the peduncle up to 17 mm long, the perianth ovoid, ellipsoid or subglobose, 6—9 cm in diam., at maturity black-purple or black.

From northern Venezuela and Curaçao through eastern South America to Argentina. In rather dry vegetations.

CURAÇAO: Seroe Christoffel, 300 m (Arnoldo 6, fem. fl. Oct.); hills near Knip (Stoffers 5112, fem. fl. Oct.).

Artocarpus J. R. & G. Forster, Char. Gen. Plant. 101. 1776, nom. cons. no. 1946

Monoecious trees, leaves in spirals (or distichous), entire or pinnatifid (or pinnate), stipules free, amplexicaul (or lateral). Inflorescences unisexual, globose to cylindrical, bracteate, flowers close together, the staminate ones free, perianth tubular (or 2—4-parted), stamen 1; pistillate flowers fused, perianth tubular, stigma 1 (or 2—3). Fruits more or less drupaceous to achene-like, embedded in the more or less soft middle-layer of the infructescence.

An Asiatic genus with over 50 species. *A. altilis* introduced and cultivated in the Netherlands Antilles.

Artocarpus altilis (Parkinson) Fosberg

FOSBERG, Jour. Wash. Acad. Sci. 31: 95. 1941; — *Sitodium altile* S. PARKINSON, Jour. Voy. South Seas 45. 1773; — *Artocarpus communis* J. R. & G. FORSTER, Char. Gen. Plant. 100. 1776; — *Artocarpus incisus* LINNAEUS FIL., Suppl. Plant. 411. 1781; ARNOLDO, Gekw. en nutt. pl. Ned. Ant. 23, fig. 28. 1954; Gekw. en nutt. pl. Ned. Ant. 194, fig. 28. 1971.

Trees up to 25(—35) m tall. Lamina pinnatifid, to 50(—100) cm long, to 20(—65) cm broad; stipules 10—25 cm long. Inflorescences solitary in the leaf axils, the staminate ones cylindrical to clavate, including the peduncle 10—35 cm long; pistillate inflorescences globose to ellipsoid, pedunculate; infructescence 15—30 cm in diam., covered with conical processes (except in the seedless form).

Both a seeded and a seedless form are cultivated.

SABA: The Bottom (Boldingh 2259 B, st. Aug.; 2261 B, st. Aug.).

ST. EUSTATIUS: without loc. (v. Groll-Meyer 110, st.).

Dorstenia Linnaeus, Spec. Plant. 121. 1753

Herbs with rhizomatous to tuberose stems, leaves rosetted, lamina entire or lobed. Inflorescences bisexual, longly pedunculate, receptacle discoid to saucer-shaped, entire or lobed, with marginal bracts; staminate flowers with a 2—3-parted perianth and 1—2 stamens; pistillate flowers immersed in the receptacle, ovary free, stigmas 2, short; fruit a free dehiscent drupelet, the white fleshy exocarp ejecting the tuberculate endocarp body.

Dorstenia contrajeriva L.

LINNAEUS, Spec. Plant. 121. 1753; GRISEBACH, Fl. Br. W. Ind. Isl. 154. 1859; Duss, Fl. phan. Ant. franç. 159. 1897; URBAN, Symb. Ant. 4: 196. 1905; BOLDINGH, Fl. Ned. W. Ind. Eil. 165. 1913; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 242. 1924; GOODING *et al.*, Fl. Barbados 123. 1965; FOURNET, Fl. Guadeloupe & Martinique 958. 1978.

Lamina 4—23 cm long, 3.5—22 cm broad, pinnately to subpalmately or to subpedately, variously 3—8-lobed to -parted, chartaceous, apex acute to faintly acuminate, base acute to cordate, margin crenato-dentate, upper surface with patent to appressed rigid hairs, scabrous to smooth, lower surface puberulous on the veins, 3—7 pairs of lateral veins; petiole 3—20 cm long, puberulous; stipules triangular to ovate, up to 5 mm long, persistent. Inflorescences solitary in the leaf axils, peduncle 7—22 cm long, densely to sparse puberulous, broadened into a flat, more or less distinctly rectangular to irregularly lobed receptacle, 1.5—3 cm in diam.

Wide-spread in tropical America, in humid places.

The species is very variable in the shape of the leaves and the inflorescences.

ST. MARTIN: Mount Paradise, 300—400 m (Boldingh 3344B, st.).

Ficus Linnaeus, Spec. Plant. 1059. 1753

Trees, often with aerial roots, terrestrial or epiphytic (and strangling). Leaves spirally arranged, glandular spot at the base of the midrib beneath, stipules fully amplexicaul. Inflorescences bisexual; receptacle urceolate with 2(—3) basal bracts and interlocking ostiolar bracts; staminate flowers with 1 stamen and a membranaceous perianth; pistillate flowers more or less distinctly differentiated in sessile or short-pedicellate seed-flowers (of which the ovary produces a seed) with a relatively long style and in (long-)pedicellate gall-flowers (in which larvae of the pollinating wasps are incubated in the ovary) with a relatively short style. Fruit an achene.

A mainly tropical genus; represented in the Neotropics by about 100—150 species.

Cultivated, not indigenous species: *F. benjamina* L., *F. carica* L., *F. elastica* ROXB., and *F. microcarpa* L.f. (all introduced from Asia); see for a more complete list: ARNOLDO, Gekw. en nutt. pl. Ned. Antillen 195. 1971.

Key to the species:

1. Figs 1.5—2 cm in diam.; apex of the lamina rounded; petiole 2—8 cm long *F. nymphaeifolia*
 Figs to 1 cm in diam.; apex of the lamina acuminate or subacute, if rounded, then the petiole to 0.5 cm long 2
2. Lamina coriaceous, petiole to 0.5 cm long *F. americana*
 Lamina subcoriaceous, petiole at least 0.5 cm long 3
3. Lamina mostly ovate to subovate; petiole normally up to 5.5 cm long; figs 8—10 mm in diam. *F. citrifolia*
 Lamina mostly oblong; petiole normally up to 2 or 2.5 cm long; figs mostly 4—7 or c. 4 mm in diam. 4

4. Figs 4—7(—9) mm in diam., without spots; ostiole plane to slightly prominent *F. brittonii*
 Figs c. 4 mm in diam., with spots; ostiole plane to slightly impressed
 *F. pallida*

***Ficus citrifolia* P. Miller**

P. MILLER, Gard. Dict. ed. 8. 1768; GOODING *et al.*, Fl. Barbados 124. 1965; — *Ficus pedunculata* AITON, Hort. Kew, ed. 1, 3: 450. 1789; WILLDENOW, Spec. Plant. 4(2): 1138. 1806; GRISEBACH, Fl. Br. W. Ind. Isl. 151. 1859; — *Ficus laevigata* VAHL, Enum. Plant. 2: 183. 1805; GRISEBACH, Fl. Br. W. Ind. Isl. 151. 1859; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 237. 1924; — *Ficus populnea* WILLDENOW var. *laevigata* (VAHL) WARBURG, in URBAN, Symb. Ant. 3: 474. 1903; — *Ficus lentiginosa* VAHL, Enum. 2: 183. 1805; GRISEBACH, Fl. Br. W. Ind. Isl. 151. 1859; DUSS, Fl. phan. Ant. franç. 154. 1897; — *Ficus populnea* WILLDENOW var. *lentiginosa* (VAHL) WARBURG, in URBAN, Symb. Ant. 3: 476. 1903; — *Ficus populnea* WILLDENOW, Spec. Plant. 4(2): 1141. 1806; GRISEBACH, Fl. Br. W. Ind. Isl. 151. 1859; WARBURG, in URBAN, Symb. Ant. 3: 471. 1903 + varieties and subvarieties distinguished, among which var. *laevigata* (VAHL) WARBURG subvar. *santi-eustachii* WARBURG (p. 475); BOLDINGH, Fl. Ned. W. Ind. Eil. 167. 1913; MOSCOSO, Cat. Fl. Domingensis 139. 1943; — *Ficus populnea* WILLDENOW var. *brevifolia* (NUTTALL) WARBURG, in URBAN, Symb. Ant. 3: 473. 1903; — *Ficus portoricensis* WARBURG, in URBAN, Symb. Ant. 1: 472. 1900; — *Ficus populoides* WARBURG, in URBAN, Symb. Ant. 3: 479. 1903; MOSCOSO, Cat. Pl. Domingensis 139. 1943.

Trees, up to 15 m tall. Leafy twigs 2—5 mm thick, glabrous or minutely puberulous, when dry usually (yellowish-) gray. Lamina usually drying greenish, ovate to elliptic or to oblong, 3.5—12(—26) cm long, (1.5—)2.5—7(—14) cm broad, subcoriaceous, apex acuminate (to subacute), base truncate to rounded or to subcordate, both surfaces glabrous, (6—)8—12 pairs of lateral veins; petiole (0.5—)1—5.5(—10) cm long, glabrous; stipules 0.5—2.5 cm long, sparsely puberulous or glabrous. Figs in the leaf axils, 3—8 mm long pedunculate, (sub)globose to turbinate, when dry 8—10 mm in diameter, minutely puberulous, at maturity greenish, basal bracts c. 1.5 mm long, ostiole plane.

The species is wide-spread and common in the West Indies, from where it extends to Central America and to Florida. It does not occur in Trinidad and Tobago.

The species concept for the present treatment is much narrower than that adopted by DeWolf (cf. Fl. Suriname 5(1): 241. 1975). In that broad concept *F. citrifolia* is a complex of very closely related taxa, being possible rather subspecies than good species. *F. citrifolia* in the Lesser Antilles is quite distinct from *F. brittonii* in Curaçao, which belongs to the same complex.

BOINAIRE: Playa (Arnoldo 2001, st. March. Cult.).

ST. MARTIN: Sentry Hill (Suringar s.n., st. May [L]); Low Lands (Boldingh 3284, st. Sept.); Mount Paradise, 100—200 m (Boldingh 3297, fig. Sept.); id. 300—400 m (Boldingh 3324, fig. Sept.); from Philipsburg to Belvedere (Boldingh 2577, st. Aug.); Philipsburg (Boldingh 2552, st. Aug.); Marigot road near Marigot (Boldingh 2820, fig. Aug.); Experiment (Arnoldo 1250, st. March); loc. uncertain (Suringar s.n., st. May [L]).

SABA: The Bottom (Boldingh 2233, st. July); Booby Hill (Stoffers 4339, st. Aug.).
ST. EUSTATIUS: top of The Quill, 400—450 m (Boldingh 207, 371, 378, st. June; Stoffers 3559, fig. June; Stoffers 3940, 3953, st. June); bottom of The Quill, 300 m (Boldingh 907, st. May); near Concordia (Boldingh 1091, fig. June); Lower part of Signal Hill (Boldingh 103, st. May); near Mary's Glory (Boldingh 1247, st. June); near Boven (Suringar s.n., st. Ap. [L]); Klip (Suringar s.n., fig. May [L]); De Kant (Suringar s.n., st. May [L]); Oranjestad (Boldingh 422, fig. June; Stoffers 3893, st. June).

Ficus brittonii Bold.

BOLDINGH, Fl. Ned. W. Ind. Eil. 166. 1913, descr. bat.; Fl. D.W. Ind. Isl. 2: 20. 1914, descr. lat.; ARNOLDO, Zakflora 36. 1954; Zakflora 166. 1964.

Trees, up to 10 m tall. Leafy twigs 1—2.5 mm thick, minutely puberulous to glabrous. Lamina usually drying brown(ish), oblong to lanceolate or to elliptic, 3—10(—12) cm long, 1—3.5(—4.5) cm broad, subcoriaceous to chartaceous, apex acuminate to subacute, base acute to obtuse or to rounded, both surfaces (almost) glabrous, midrib prominent beneath, almost plane above, other veins (almost) plane, (4—)6—8(—10) pairs of lateral veins; petiole 0.5—2(—3) cm long, glabrous or minutely puberulous; stipules 0.5—1.5 cm long, glabrous, caducous. Figs in pairs in the leaf axils, 2—6 mm long pedunculate, (sub)-globose, when dry 4—7(—9) mm in diam., minutely puberulous, at maturity (sometimes?) red, without distinct spots, basal bracts c. 1 mm long, ostiole plane to slightly raised.

This species is known from Curaçao and northern Venezuela. It is very closely related to *F. amazonica* (Miq.) Miq. from which it differs in the smaller leaves with less lateral veins, the smaller figs, and apparently also by its occurrence in drier types of vegetation. This taxon has been reduced to the synonymy of *F. citrifolia* P. Miller by DeWolf (cf. Fl. Suriname 5(1): 241. 1975).

BONAIRE: calcareous plateau of Montagne (Boldingh 7423, fig. Feb.); Fontein (Suringar s.n., st. Feb. [L]); Soebi Rincón (Arnoldo 989, fig. Aug.).

CURAÇAO: Seroe Christoffel (Arnoldo 1963, fig. Feb.; Boldingh 5023, fig. Nov.); from Anthony Berg to northern seacoast (Boldingh 5116, st. Nov.); calcareous hills near Siberië (Boldingh 5269, st. Dec.); calcareous hills near St. Jan (Boldingh 5642, st. Dec.); hills near Knip (Stoffers 1134, st. Dec.); Knip Plantation (Arnoldo 2147, fig. Feb.); saltpans near St. Willebrordus (Stoffers 377, st. Oct.); Noordkant Plantation (Stoffers 171, st. Oct.); Hato (Boldingh 5342, fig. Nov.; Britton & Shafer 3106, fig. March).

Ficus pallida Vahl

VAHL, Enum. Plant. 2: 194. 1805; — *Urostigma pallidum* (VAHL) MIQUEL, London Jour. Bot. 6: 530. 1847; — *Ficus prinoides* WILLDENOW, Spec. Plant. 4(2): 1149. 1806.

Trees, up to 15 m tall. Leafy twigs 1—2.5 mm thick, minutely puberulous to glabrous. Lamina usually drying greyish-green, oblong to lanceolate to sub-

obovate, sometimes elliptic, 3—10 cm long, 1—4 cm broad, chartaceous to subcoriaceous, apex acute to faintly acuminate, base acute to obtuse, both surfaces glabrous, midrib prominent beneath, less prominent above, the other veins almost plane, (4—)7—10 pairs of lateral veins; petiole (0.5—)1—2.5(—3) cm long, sparsely minutely puberulous to glabrous; stipules 0.5—1 cm long, usually glabrous. Figs in pairs in leaf axils, 2—6 mm long pedunculate, subglobose, c. 4 mm in diam., usually glabrous, at maturity greenish with distinct spots, basal bracts 0.5—1 mm long, ostiole plane to slightly impressed.

This species ranges from northern Colombia through northern Venezuela to Trinidad.

In spite of the morphological similarities to *F. brittonii* the species is probably not closely related to the latter but appears to belong to the complex of species around *F. pertusa* L.f.

CURAÇAO: Hofje of Klein Piscadera (Boldingh 4832, fig. Oct.); Willemstad, Pietermaai, cult. (Arnoldo 964, fig. Sept.).

***Ficus nymphaeifolia* P. Miller**

P. MILLER, Gard. Dict. ed. 8. 1768; — *Ficus urbaniana* WARBURG, in URBAN, Symb. Ant. 3: 459. 1903; BOLDINGH, Fl. Ned. W. Ind. Eil. 167. 1913; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 238. 1924; LITTLE *et al.*, Trees of Puerto Rico & Virgin Isl. 2: 118. 1974.

Trees, up to 12 m tall. Leafy twigs 4—10 mm thick, glabrous, when dry mostly reddish-brown. Lamina broadly elliptic to oblong, 8—25 cm long, 6—15 cm broad, coriaceous, apex rounded, base rounded to subcordate, both surfaces glabrous, (5—)7—9 pairs of lateral veins; petiole 2—8 cm long, glabrous; stipules 0.5—5 cm long, ciliolate. Figs in the leaf axils, sessile or to 3 mm long pedunculate, (sub)globose, when dry 1.5—2 cm in diam., densely minutely puberulous, at maturity greenish, basal bracts c. 1 cm long, ostiolar bracts raised or plane.

The species is wide-spread through Central and tropical South America, in the West Indies through Trinidad and Tobago northwards to St. Croix.

Especially the material of the Lesser Antilles is somewhat different from the continental form by narrower leaves, by which it is often confused with *F. obtusifolia* H.B.K., a species close to *F. nymphaeifolia*.

ST. MARTIN: John Edny Hill (Suringar s.n., st. May [L]); Pointe Blanche (Boldingh 2495, st. Aug.); Mount Paradise (Boldingh 3200, st. Sept.); gut from Bethlehem to Cul de Sac (Boldingh 3423, st. Sept.); hills along eastern side of Cul de Sac (Stoffers 2647, st. Ap.).

SABA: gut between Hellsgate and Mastic Gut, 300—400 m (Boldingh 2026, st. July); Spring Bay Gut (Boldingh 2080, st. July).

ST. EUSTATIUS: Boven (Suringar s.n., fig. Ap. [L]); The Quill (Suringar s.n., st. May [L]); bottom of The Quill (Boldingh 897, fig. July; Stoffers 3640, st. July).

Ficus americana Aubl.

AUBLET, Pl. Guian. 2: 952. 1775; WILLDENOW, Spec. Plant. 4(2): 1145. 1806; URBAN, Repert. Spec. Nov. 15: 157. 1919; — *Ficus perforata* LINNAEUS, Pl. Surin. 17. 1775; FOURNET, Fl. Guadeloupe & Martinique 960. 1978; — *Ficus jacquiniifolia* A. RICHARD, Fl. Cub. Fanerog. 2: 221, t. 72. 1850; WARBURG, in URBAN, Symb. Ant. 3: 465. 1903; BRITTON & MILLSPAUGH, Bahama Fl. 105. 1920; — *Ficus omphalophora* WARBURG, in URBAN, Symb. Ant. 3: 466. 1903; BOLDINGH, Fl. Ned. W. Ind. Eil. 167. 1913; — *Ficus sintenisii* WARBURG, in URBAN, Symb. Ant. 3: 464. 1903; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 237. 1924; — *Ficus wilsonii* WARBURG, in URBAN, Symb. Ant. 3: 467. 1903.

Trees, up to 20 m tall. Leafy twigs 1.5—3 mm thick, minutely puberulous. Lamina elliptic to oblong, 2.5—9 cm long, 1—4 cm broad, coriaceous, apex shortly acuminate to subacute to rounded, base acute to rounded, both surfaces glabrous, 9—13 pairs of (rather inconspicuous primary) lateral veins; petiole 2—5 mm long, glabrous; stipules 5—10 mm long, glabrous. Figs in the leaf axils, 2—3 mm long pedunculate, (sub)globose, when dry c. 4 mm in diam., minutely puberulous, at maturity pink or red, basal bracts c. 1.5 mm long, ostiole plane.

The species is common in the West Indies, in the Lesser Antilles southwards probably to St. Vincent. In Grenada it is replaced by its close relative *F. guianensis* Desvaux ex Hamilton, a common species East of the Andes. *F. americana* extends through Central America and probably through Western Colombia to Ecuador. *F. americana* is also known from some table mountains in Venezuela (Bolívar). *F. americana* is very polymorphic.

The material from St. Eustatius and Saba belongs to a form with relatively short petioles and peduncles.

SABA: The Mountain, 800 m (Boldingh 1827a, st. July).

ST. EUSTATIUS: The Kam (Suringar s.n., st. Ap. [L]).

Cecropia Loefling, Iter. Hisp. 272. 1758, nom. cons. no. 1971

Trees, often with stilt roots, internodes (usually) hollow, often inhabited by ants. Leaves peltate, radially incised, normally at the base of the long petiole a trichilium, formed by dense hairs and producing food bodies for ants; stipules large, fused and fully amplexicaul. Inflorescences pedunculate digitate clusters of few spikes in pistillate and many spikes in staminate inflorescences, initially fully enclosed by a caducous spathe, flowers sessile, perianth tubular, formed by 2 tepals, stamens 2, stigma peltate or comose. Fruit an achene, often tuberculate.

A neotropical genus, comprising about 100 species.

Cecropia schreberiana Miq.

MIQUEL, Fl. Bras. 4(1): 150. 1853; — *Cecropia peltata* auct. non LINNAEUS; BOLDINGH, Fl. D.W. Ind. Isl. 1: 50. 1909; Fl. Ned. W. Ind. Eil. 167. 1914.

Trees, up to 15 m tall. Leafy twigs (stems) 1.5—3 cm thick, glabrous or with hairs on the scars of the stipules (in juvenile specimens scabrous with short rigid hairs). Lamina c. 25—50 cm in diam., with (8—)9 lobes, incisions down to $\frac{1}{2}$ — $\frac{2}{3}$, lobes obtuse to subacute (in juvenile specimens acuminate), mid-segment with 20—30 pairs of lateral veins, of which 10—15 in the free part, lateral veins furcate or often not furcate, running (almost) straight into a marginal vein, upper surface smooth and (almost) glabrous (in juvenile specimens more or less scabrous with minute rigid hairs), lower surface with a dense arachnoid indument except on the primary and secondary veins, which are glabrous or covered with brown pluricellular hairs; petiole to 45 cm long, glabrous or with a few long hairs at the base; stipules 10—20 cm long, sparsely to rather densely hirsute with long white hairs, inside glabrous. Inflorescences (always?) solitary in the leaf axils; staminate inflorescence: peduncle 4—5 cm long, glabrous, spathe glabrous, spikes c. 15, to 5.5 cm long (including an up to 1.2 cm long stipe), 2—3 mm in diam., rachis hirtellous, perianth tubular, glabrous, apex convex, anthers c. 1 mm long; pistillate inflorescence: peduncle 2.5—4 cm long, glabrous, spathe glabrous, spikes 4(—5), 2—(in fruit) 11 cm long, 0.5—(in fruit) 1.3 cm in diam., sessile, perianth tubular, apex more or less convex with minute conical to subglobose hairs, the arachnoid indument lower down, stigma ligulate to subpeltate.

The species ranges from St. Lucia to Puerto Rico.

In rainforest, Montane forest, and Elfin Woodland.

SABA: The Mountain near Windwardside (Boldingh 215, st. July); top of The Mountain, 800—850 m (Stoffers 4230, st.); without loc. (Lionarons 192, st.-juv.).

ST. EUSTATIUS: Innerside of The Quill, 300—350 m (Boldingh 254, 904, 955, st. June); without loc. (van Groll-Meyer 105, st.).