

## MYRTACEAE

by

**A. L. STOFFERS**

(Instituut voor Systematische Plantkunde, Utrecht)

Trees or shrubs. Leaves opposite or rarely alternate, simple and mostly entire, glandular punctate. Stipules wanting or rarely present and very small. Flowers mostly actinomorphic, hermaphrodite or polygamous by abortion. Hypanthium more or less adnate to the ovary. Sepals 3 or more, imbricate or valvate or irregularly split. Petals 4—5, rarely 6—0, inserted on the margin of the hypanthium, imbricate or connivent in a mass. Stamens numerous or rarely few, inserted on the rim of the hypanthium, 1- to more-seriate; filaments free or connate at the base into a short tube or in bundles opposite the petals, twice folded or straight in the bud; anthers small, 2-celled, with longitudinal dehiscence or rarely opening by apical pores, connective often with an apical gland. Ovary syncarpous, inferior, 1- to many-locular; style short or elongate, often curved; stigma capitate to pointed. Ovules few to many or rarely solitary on an axile or rarely parietal placenta. Fruit various, often crowned by the persistent sepals or apical part of the hypanthium, indehiscent or with locular dehiscence. Seeds without or with only very few endosperm. Embryo various.

A very large family of about 3000 species in perhaps 60 genera in the tropics and subtropics.

*Note:* According to R. McVaugh the generalized flower seems to have been solitary in a leafy-axil, representing an axillary branch terminated at the first node by the flower. The so-called “Stenocalyx type of flowering” in which solitary flowers stand in the axils of small scarious bracts at the lowest nodes of otherwise leafy branchlets, is interpreted as a derivative state, the foliage leaves originally subtending flowers having been greatly reduced and transformed to non-photosynthetic organs.

The “racemose” inflorescence appears to present an axillary branch in which all the leaves have become bract-like, and the internodes have been much shortened. The “dichasium” may be interpreted as having developed from the axillary flower by proliferation of peduncles from the axils of the primary brac-

teoles. The “myrcioid panicle” as found in America mostly in *Myrcia* and related genera, and in almost indistinguishable form in *Syzygium* and its Old World relatives seems to have resulted from the reduction of leaves to bracts in whole branch-systems. A further specialisation of the panicle may be seen in e.g. *Calyptranthes*, in which the terminal axis of the panicle may abort at the lowest node.

With regard to the embryo in *Myrtaceae* McVaugh (1968) distinguishes: the “Myrcioid embryo”: cotyledons broad and thin, foliaceous, crumpled and folded about the elongation, curved, terete radicle.

the “Eugenioid embryo”: thick and fleshy, sometimes apparently homogeneous, but often showing the line of separation between the cotyledons. The Eugenioid embryo *sensu stricto* is massive, without evident division into cotyledons. The embryo having separate or partly separate plano-convex cotyledons and a short radicle has been called “bean-like”.

the “Pimentoid embryo”: more or less elongate, curved (uncinate, cyclic, horse-shoe-shaped, or spiral), consisting of a long terete radicle with two very small cotyledons at the inner end.

Key to the genera:

1. Leeward Group . . . . . 2  
    Windward Group . . . . . 6
2. Sepals united in the bud and bursting irregularly at flowering . . . . .  
    . . . . . *Psidium*  
    Sepals 4—5 in the bud . . . . . 3
3. Leaves nearly orbicular to roundish-oval, margin somewhat crenate . .  
    . . . . . *Myrtus orbiculare*  
    Leaves not orbicular, margin entire . . . . . 4
4. Flowers several, in sessile, axillary umbels, 4-merous; pedicels 4—10 mm  
    long . . . . . *Eugenia procera*  
    Flowers in 1—3-flowered, glabrous inflorescences or in few- to many-  
    flowered, rusty woolly, subumbellate inflorescences . . . . . 5
5. Leafblades lanceolate to oblong-elliptic, attenuate, acutish or obtuse at the  
    apex; hypanthium glabrous; fruit a globose berry, 7—10 mm in diam.  
    . . . . . *Myrcia curassavica*  
    Leafblades elliptic, rounded and emarginate at the apex, hypanthium  
    rusty-tomentose; fruit leathery, oblong-ellipsoidal, 5.5 × 3.5 cm . . .  
    . . . . . *Pseudanannomis*
6. Calyx closed in the bud, circumscissile, opening by an operculum that  
    remains attached at one side at anthesis; leaves sessile, orbicular or  
    obovate-orbicular . . . . . *Calyptranthes*  
    Calyx not opening by an operculum . . . . . 7

7. Sepals united in the bud and bursting irregularly at flowering . . . . . *Psidium*  
 . . . . . 8  
 Sepals 4—5 in the bud and often persistent . . . . . 8
8. Inflorescence a many-flowered myrcioid panicle; hypanthium tubular to  
 turbinate . . . . . *Pimenta*  
 Inflorescence 1- or few-flowered, if compound then racemose, or deter-  
 minate at the lower node and regularly dichotomous with sessile flowers  
 in the forks . . . . . 9
9. Inflorescence prevailing racemose, the flowers all in racemes or flowering  
 partly of the *Stenocalyx* type . . . . . 10  
 Inflorescence consisting of 3—7-flowered dichasia at the end of a 2.5—4 cm  
 long, axillary peduncle; sepals in 2 unequal pairs . . . . . *Myrcianthes*
10. Leaves up to 20 cm long and 6 cm wide, lanceolate . . . . . *Syzygium*  
 Leaves much smaller . . . . . 11
11. Hypanthium prolonged above the ovary, circumscissile at the base; deci-  
 duous with the perianth and androecium at about the time of anthesis,  
 leaving a scar on ovary and fruit; ovules 2 in each locule; flowers  
 glomerate, 2—5 together . . . . . *Myrciaria*  
 Hypanthium not circumscissile and not prolonged above the ovary; ovules  
 usually several in each locule; flowers predominantly in bracteated,  
 axillary racemes or rarely panicles or in the *Stenocalyx* type of flowering  
 . . . . . *Eugenia*

**Psidium** Linnaeus, Spec. Plant. 470. 1753

Trees or shrubs, commonly pubescent and often densely so; branchlets some-  
times acutely 4-angled. Leaves opposite or subalternate; lateral veins mostly  
arcuate-anastomosing without forming a distinct marginal vein. Flowers axil-  
lary, usually solitary or in fascicles (abbreviated racemes) or flowers axillary at  
bracteated nodes on young leafy branches. Bracteoles mostly deciduous. Hypan-  
thium prolonged above the ovary. Calyx of 4—5 sepals, undivided in the bud in  
the local species and irregularly dividing at flowering. Petals 4—5, often large  
and showy. Stamens numerous; filaments filiform; anthers oblong to linear,  
with longitudinal dehiscence. Ovary 3—7- or by abortion 1-locular; style sub-  
ulate; stigma capitate, peltate or rarely minute. Ovules numerous, longitudinally  
biseriate in each locule, or in 2-locular ovaries clustered. Fruit often fleshy,  
many-seeded, sometimes large. Seeds horseshoe-shaped or reniform, with bony  
testa. Embryo pimentoid, uncinatate or curved.

About 100 species in tropical and subtropical America.

Key to the species:

1. Leaves 2.5—5 cm long; petals 4 mm long; fruit subglobose, 1.5—2 cm in diam. . . . . *P. sartorianum*  
Leaves 5—13 cm long; petals 1.5—2 cm long; fruit globose to pear-shaped, 5—10 cm long . . . . . *P. guajava*

**Psidium guajava L.**

LINNAEUS, Spec. Plant. 470. 1753; GRISEBACH, Fl. Br. W. Ind. Isl. 241. 1860 [1864] (as '*P. guava*'); DUSS, Fl. phan. Ant. franç. 261. 1897; BOLDINGH, Fl. D.W. Ind. Isl. 1: 144. 1909; JOHNSTON, Proc. Bost. Soc. Nat. Hist. 34(7): 243. 1909; URBAN, Symb. Ant. 4: 441. 1910; BOLDINGH, Fl. Ned. W. Ind. Eil. 305. 1913; BRITTON & MILLSAUGH, Bahama Fl. 307. 1920; URBAN, Symb. Ant. 8. 478. 1921; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 25. 1925; FAWCETT & RENDLE, Fl. Jamaica 5(3): 315, fig. 124. 1926; WILLIAMS, Fl. Trinidad & Tobago 1: 334. 1934; QUESTEL, Fl. Isl. St. Bartholomew 161. 1941; LEON & ALAIN, Fl. Cuba 3: 412, fig. 191. 1953; ARNOLDO, Gekw. en nutt. planten Ned. Antillen 114. 1954; Gekw. en nutt. planten Ned. Antillen 202. 1971; GOODING *et al.*, Fl. Barbados 314. 1965; ADAMS, Flowering plants of Jamaica 519. 1972; FOURNET, Fl. Guadeloupe & Martinique 900. 1978.

Evergreen shrub or low tree up to 5 m high; bark smooth, thin, reddish-brown, scaling off in thin sheets; young twigs 4-angular and somewhat winged, hairy, green but becoming brown. Leaves opposite, petiolate; petioles 3—4 mm long; blades elliptic to oblong, rounded, obtuse or apiculate at the apex, rounded or obtuse at the base, 5—13 × 2.5—6 cm, slightly thickened and leathery or chartaceous, with minute glandular dots, pubescent, glabrescent, at last glabrate above, the margin a little curved downwards, upper surface green or yellow-green, slightly shiny, paler beneath; midrib impressed above, prominent beneath, lateral veins about 12—15 at each side, impressed above and prominent beneath, arcuate-anastomosing near the margin. Flowers about 3 cm across; 1—3 together on an axillary, 2—2.5 cm long peduncle. Hypanthium tubular, constricted at the top, 1—1.2 cm long. Sepals 4—5, slightly thickened, 1 cm long, irregularly splitting at flowering, finely hairy. Petals 4—5, elliptic, rounded, 1.5—2 cm long, white. Stamens very numerous; filaments brushlike spreading, slender, up to 1.5 cm long, white; anthers linear-oblong. Ovules many on bilamellate placentas. Fruit a globose or pear-shaped berry, 5—10 cm long, crowned by the persistent rim of the hypanthium and sepals; within the thin, greenish-white or yellow, slightly sour, edible outer layer the numerous seeds are embedded in a juicy, yellow to pinkish pulp. Seeds c. 0.3 mm long.

Probably native of tropical America from southern Mexico south to South America but the range is greatly extended through cultivation; also introduced in tropical and subtropical regions of the Old World. Planted and naturalized in southern Florida and from Bahamas and Bermuda throughout the West Indies to Trinidad and Brazil. Cultivated in the islands of the Netherlands Antilles; naturalized in Saba.

The fruits are rich in vitamin C and have a strong mellow odour at maturity.

Vernacular names: *guyaba* (Leeward Group).  
*guave, guave tree* (Windward Group).

CURAÇAO: Klein Santa Marta (Stoffers 107, st. Sept.); without loc. (Aschenberg s.n., fl.).

SABA: road to Windwardside (Arnoldo 595, fl. Aug.); Booby Hill (Boldingh 1615, fl. July); The Bottom, 220 m (Stoffers 3297, st. May); between The Bottom and Crispine, 200—350 m (Stoffers 3037, fl. Ap.); Bottom Hill, 300—350 m (Stoffers 3144, fl. May); hill north-west of The Bottom, 250—275 m (Stoffers 2921, fl. Ap.); slope of The Mountain near Windwardside, 400—475 m (Stoffers 3338, fl. May); without loc. (Boldingh s.n., st.).

St. EUSTATIUS: without loc. (van Groll-Meyer 48, fl.).

St. MARTIN: hills along western side of Cul de Sac (Stoffers 2564, fl. March); from Philipsburg to Belvedere (Boldingh 2582, fl. Aug.).

***Psidium sartorianum* (O. Berg) Ndz.**

NIEDENZU, in ENGLER & PRANTL, Nat. Pflanzenfam. 37: 69. 1893; ARNOLDO, Zakflora 169. 1964; — *Mitranthes sartorianum* O. BERG, Linnaea 29: 248. 1858; — *Calyptrorpsidium sartorianum* (O. BERG) KRUG & URBAN, in ENGLER, Bot. Jahrb. 19: 581. 1895; LEON & ALAIN, Fl. Cuba 3: 416. 1953.

Shrub or small tree, up to 3 m high; bark grey, smooth, glabrous or nearly so; young twigs terete or nearly so. Leaves petiolate; petioles slender, 2—3.5 mm long; blade ovate, rounded or obtuse to acute at the apex, acute or acute-acuminate at the base, 2.5—5 × 1—2.5 cm, coriaceous, glabrous, with pellucid glands; midrib flat above, prominent beneath, lateral veins about 6 at each side, ascending, obsolete above and prominulous beneath. Flowers usually 1 on an axillary, 1.0—1.5 cm long, slender peduncle, over 1 cm across. Hypanthium cup-shaped, 2 mm long and wide. Sepals united, irregularly splitting with one large, more or less lid-like, deciduous segment and 2—3 other persistent segments. Petals 4—5, rounded, 4 mm long, caducous, ciliate. Stamens numerous; filaments filiform, 2—2.5 mm long; anthers ovate, small. Ovary glabrous, 2—3-locular; style firm; stigma slightly thickened. Ovules many in a single row at each side of a bi-lamellate placenta. Fruit a subglobose berry, 1.5—2.0 cm in diam., greenish-yellow. Seeds several, angular, concolorous.

Mexico to Panama, Cuba, and Curaçao.

In deciduous seasonal forest.

CURAÇAO: hills near Knip (Stoffers 1102, fl. & fr. Dec.).

***Calyptranthes* Swartz, Prodr. 5, 79. 1788 nom. cons.**

Shrubs or trees, glabrous or pubescent, hairs sometimes dibrachiate; branchlets sometimes with 2 wings or angles terminating distally at nodes between the opposing leaf-bases. Inflorescence consisting of axillary or terminal myrcioid panicles, main-axis of axillary panicles usually aborting above the lowest node.

Bracts deciduous. Hypanthium prolonged above the ovary, its tube not splitting longitudinally. Bracteoles deciduous before anthesis. Calyx completely closed in bud, circumscissile; operculum usually attached at one side during anthesis, at length dehiscent. Petals wanting (in a few species 2—5). Stamens numerous; filaments filiform; anthers with longitudinal dehiscence. Ovary 2-locular; style filiform; stigma minute. Ovules 2 in each locule. Fruit commonly globose or even oblate, fleshy or nearly dry, often bearing remnants of sepals and hypanthium. Embryo myrcioid.

Perhaps 50—75 species from Florida and Mexico through the West Indies and eastern South America to Uruguay; a few species in Costa Rica and Panama.

***Calyptranthes boldingii* Urb.**

URBAN, *Symb. Ant.* 6: 22. 1909; BOLDINGH, *Fl. D.W. Ind. Isl.* 1: 146. 1909; *Fl. Ned. W. Ind. Eil.* 306. 1913.

Glabrous shrub, up to 2 m high; twigs terete, brownish-grey; bark with longitudinal fissures; twigs branching pseudo-dichotomous, those of the present year reddish-brown; internodes 1.5—4 cm long, the nodes thickened. Leaves sessile; blades orbicular or obovate-orbicular, widest above the middle, obtuse to rounded at the apex, roundish to subtruncate at the base, 1.5—3 cm in diam., midrib impressed to slightly canaliculate near the base, somewhat raised towards the top, lateral veins 6—7, prominent on both sides, anastomosing, the marginal vein about 1 mm within the margin, stiff and coriaceous, black-glandular dotted on the lower surface, the margin not curved. Inflorescence consisting of few-flowered terminal, myrcioid panicles; peduncles 0.8—2 cm long, subterete; pedicels c. 1 mm long. Operculum 0.7—1 mm. Fruit globose and often flattened at the poles, 4—5 mm in diam., crowned by the hypanthium and remnants of the sepals.

Only known from St. Martin.

ST. MARTIN: Low Lands (Boldingh 3270, fr. Sept. Lectotype and isotype in [U]).

***Pimenta* Lindley, *Coll. Bot.* pl. 19. 1821**

Trees or shrubs; branches often strongly and acutely angled. Foliage strongly fragrant when crushed. Inflorescence consisting of subterminal and axillary myrcioid panicles. Bracteoles deciduous. Flowers 4—5-merous, sometimes unisexual or apparently so. Hypanthium hardly produced above the ovary. Sepals free, persistent. Petals free, orbiculate, caducous. Stamens numerous; filaments filiform, incurved in the bud; anthers ovate, dorsifixed, opening by longitudinal dehiscence. Ovary (1—)2-locular; style subulate; stigma subcapitate or scarcely enlarged. Ovules solitary or 2—7 in each locule, pendulous on an apical placenta. Fruit a globose or oblate black berry, crowned with the persistent sepals. Seeds usually 1 or 2, subglobose or reniform, with a membranaceous testa. Embryo pimentoid.

Perhaps 10 species in Central America and the West Indies: widely cultivated and naturalized in warm regions.

***Pimenta racemosa* (Mill.) J. W. Moore**

J. W. MOORE, in Bernice P. Bishop Mus. Bull. 102: 33. 1933; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 27. 1924; WILLIAMS, Fl. Trinidad & Tobago 1: 525. 1947; GOODING *et al.*, Fl. Barbados 313. 1965; ADAMS, Flowering plants of Jamaica 517. 1972; FOURNET, Fl. Guadeloupe & Martinique 901. 1978; — *Caryophyllus racemosus* MILLER, Gard. Dict. ed. 8. 1768; — *Amomis caryophyllata* (JACQUIN) KRUG & URBAN, in Engler, Bot. Jahrb. 19: 573. 1895; DUSS, Fl. phan. Ant. franç. 262. 1897; BOLDINGH, Fl. D.W. Ind. Isl. 1: 144. 1909; URBAN, Symb. Ant. 4: 441. 1910; BOLDINGH, Fl. Ned. W. Ind. Eil. 305. 1913; URBAN, Symb. Ant. 8: 478. 1921; FAWCETT & RENDLE, Fl. Jamaica 5(3): 326. 1926; WILLIAMS, Fl. Trinidad & Tobago 1: 337. 1931; QUESTEL, Fl. Isl. St. Bartholomew 163. 1941; LEON & ALAIN, Fl. Cuba 3: 433, fig. 196. 1953; — *Myrtus caryophyllata* JACQUIN, Obs. 2: 1. 1767.

Evergreen tree, up to 13 m high, or sometimes a shrub; stems often slightly angled and grooved; bark smooth, grey to light brown, peeling off in thin strips; twigs glabrous, 4-angled when young, green to dark-green with glandular dots. Leaves opposite, petiolate; petiole 5–10 mm long, green with reddish tinge; blades obovate, elliptic or ovate, usually rounded or emarginate, sometimes obtusely acuminate at the apex, attenuate or somewhat rounded at the base, 4–14 × 2.5–6.5 cm, coriaceous, with minute glandular dots, glabrous and shiny dark-green on the upper surface, paler or finely grey-hairy beneath, margin slightly curved down, midrib impressed above, prominent beneath, lateral veins numerous, prominulous on both sides, often anastomosing and forming a marginal vein at short distance within the margin; veins laxly reticulate. Inflorescence consisting of many-flowered, sparsely puberulous, glabrescent, axillary and terminal panicles. Hypanthium tubular to turbinate, 3 mm long and prolonged above the ovary, glabrous, with glandular dots. Sepals 5, triangular, 1.5 mm long, spreading, glabrous outside, pubescent inside, ciliate. Petals 5, white, 4–5 mm long, rounded, spreading, glabrous. Stamens numerous; filaments white, c. 5 mm long; anthers small. Ovary 2-locular; style slender, slightly bent; stigma somewhat capitate. Ovules 2–5 or more in each locule on an apical placenta. Berry globose or ovoid, crowned by the persistent reflexed sepals, 8–12 mm in diam., fleshy, black. Seeds few, c. 3 mm long, brown.

The species is easily recognized by the strong pungent odour of the leaves when crushed.

Native of the West Indies, Venezuela, and Guianas; cultivated throughout the tropics.

In evergreen forest and evergreen woodlands but also in drier vegetations in the lower part of Saba.

Vernacular names: cinnamon tree, bayberry (Windward Group).

SABA: Castle Hill near The Bottom (Arnoldo 559, fl. Aug.; Stoffers 3292, st. May); between The Bottom and Mary's Point, 300 m (Boldingh 1479, fl. July); between

The Bottom and The Saddle, 200—350 m (Stoffers 3407, st. May); Great Hill (Stoffers 3194, st. May); Bottom Hill, 300 m (Stoffers 3358, st. May); without loc. (Boldingh 1987, fr.; 1557, fl.; 1596, fl.).

ST. EUSTATIUS: top of The Quill (Stoffers 3951, st. July; 3677, st. July); id., near Glass Bottle, 380 m (Stoffers 3600, st. July); without loc. (Boldingh 493, st.).

ST. MARTIN: without loc. (Boldingh 3156, st.).

*Myrcia* DeCandolle ex Guillemain, Dict. Class. Hist. Nat. 11: 378, 401, 406. 1897

Trees or shrubs, glabrous or pubescent, rarely with some dibrachiate hairs. Inflorescence a myrcioid panicle, axillary or subterminal. Bracts and bracteoles mostly small and deciduous rarely foliaceous and persistent. Flowers 4—5-merous. Hypanthium not or variously prolonged above the ovary. Sepals imbricate, subequal or unequal, sometimes deciduous from the hypanthium but not splitting longitudinally. Petals free, spreading, orbiculate or obovate, white. Stamens numerous; filaments filiform; anthers with lateral longitudinal dehiscence. Ovary 2(—3)-locular; style filiform; stigma minute. Ovules 2 in each locule. Fruit an ovoid to globose or oblate berry, fleshy or nearly dry, crowned by the persistent sepals or the sepals individually deciduous or by the persistent free margin of the hypanthium. Seeds 1—3, large, nearly filling the fruit, ovoid to globose with thin, lustrous, brittle, cartilaginous testa. Embryo myrcioid.

A large genus of tropical America, including probably several hundred species.

#### Key to the species:

1. Inflorescence 1—3-flowered; leaves acutish or obtuse at the apex; Leeward Group . . . . . *M. curassavica*  
Inflorescence 5—many-flowered; leaves acuminate, retuse or long-acuminate with obtuse apex; Windward Group . . . . . 2
2. Leaves elliptic to oblong or obovate, up to 5 cm long; petals 3—4.5 mm long; hypanthium glabrous; ovary 3-locular . . . . . *M. citrifolia*  
Leaves ovate-lanceolate, up to 10 cm long; petals 3 mm long; hypanthium sericeous outside; ovary 2-locular . . . . . *M. splendens*

#### *Myrcia curassavica* (Amsh.) Stoffers

STOFFERS, Proc. Kon. Ned. Akad. Wet. Amsterdam. C 84: 349. 1981; — *Aulomyrcia curassavica* AMSHOFF, Rec. trav. bot. Néerl. 42: 10. 1950; ARNOLDO, Zakflora 30. 1954; Zakflora 168. 1964; — *Aulomyrcia curassavica* AMSHOFF var. *acutata* AMSHOFF, Rec. trav. bot. Néerl. 42: 10. 1950; ARNOLDO, Zakflora 168. 1964.

Branching shrub or rarely a small tree; young twigs and buds shortly spreading-pubescent, soon glabrate, dense-foliolate; in age twigs fissured and bark peeling off. Leaves petiolate; petioles slender, about 2 mm long; blades lanceolate to oblong-elliptic, attenuate, acutish or obtuse at the apex, obtuse or acute at the

base, coriaceous to chartaceous, glabrous, glandular dotted, black punctate beneath when dry, 2.5—5 × 1—2.5 cm; midrib canaliculate or sometimes slightly raised above, prominent beneath; lateral veins 5—10, slightly raised to both sides. Inflorescence axillary, glabrous, about 2 cm long, 1—3-flowered, rhachis and pedicels filiform. Bracts subulate, deciduous. Flowerbud obovoid, 2.5 mm long, gland-dotted. Flowers 7—8 mm across. Hypanthium prolonged above the ovary, glabrous. Sepals 4, subequal, suborbicular, ciliate and persistent, about 1 mm long. Petals 4, about 2 mm long, white. Stamens numerous; filaments slender; anthers small. Ovary 2-locular; style filiform; stigma minute. Ovules 2 in each locule, ascending. Fruit a globose berry, 7—10 mm in diam., black. Seeds one.

Bonaire and Curaçao.

In deciduous seasonal forest.

BOINAIRE: without loc. (Boldingh 7230, st.; 7229, st.; 7223, st.).

CURAÇAO: hills near Knip (Arnoldo 1740, flb. June; 1073, fl. June, type of *Aulomyrcia curassavica*); id., near Seroe Christoffel (Arnoldo 1083, type of *A. curassavica* var. *acutata*; Stoffers 237a, st. Oct.); without loc. (Boldingh 4855, st.; 5522, fr.; 4858, st.; 5521, fr.; 4944, fr.).

#### *Myrcia splendens* (Sw.) DC.

DECADOLLE, Prodr. 3: 244. 1828 GRISEBACH, Fl. Br. W. Ind. Isl. 234. 1860 ['1864']; DUSS, Fl. phan. Ant. franç. 265. 1897; BOLDINGH, Fl. D.W. Ind. Isl. 1: 145. 1909; URBAN, Symb. Ant. 4: 443. 1910; BOLDINGH, Fl. Ned. W. Ind. Eil. 306. 1913; URBAN, Symb. Ant. 8: 479. 1921; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 29. 1925; FAWCETT & RENDLE, Fl. Jamaica 5(3): 328. 1926; WILLIAMS, Fl. Trinidad & Tobago 1: 341. 1931; LEON & ALAIN, Fl. Cuba 3: 437. 1953; GOODING *et al.*, Fl. Barbados 313. 1965; ADAMS, Flowering plants of Jamaica 517. 1972; FOURNET, Fl. Guadeloupe & Martinique 866, fig. 419. 1978; — *Myrtus splendens* SWARTZ, Prodr. 79. 1788.

Evergreen shrub or small tree up to 6 m high; bark brown or grey, rough, fissured and flaky or divided into many small plates; young twigs slender, subterete, pubescent, soon glabrate. Leaves petiolate; petiole slender, 1—2 mm long; blades ovate-lanceolate, long-acuminate, with obtuse apex, rounded or obtuse at the base, 2—10 × 1—5 cm, chartaceous to coriaceous, minutely glandular-dotted, glabrous or hairy when young, the margin slightly curved downwards, upper surface shiny green to dark green, paler green and slightly shiny beneath; midrib impressed above, prominent beneath, lateral veins numerous, anastomosing at some distance within the margin, distinct, conspicuously reticulate. Inflorescence consisting of axillary and subterminal, pyramidal, many-flowered, 2—5 cm long myrcioid panicles; branches slender, finely pubescent, the lateral branches mostly in 3 pairs. Flowers white. Hypanthium tubular, about 1.5 mm long and wide, white-sericeous outside, hardly prolonged above the ovary. Sepals 5, obtuse, 0.5 mm long, glabrescent. Petals 5, rounded, about 3 mm long, pubescent outside. Stamens numerous; filaments white, spreading,

nearly 1 cm across; anthers small. Ovary 2-locular; style about 3 mm long; stigma capitate. Ovules 2 in each locule. Fruit an ellipsoid to subglobose berry with thin flesh, dark blue or blackish. Seeds 1 or rarely 2, large.

Greater Antilles, Lesser Antilles south to St. Vincent and Barbados, Trinidad and Tobago; from Colombia to Peru, Bolivia, and Brazil.

Common in rainforest and evergreen seasonal forest, rarely in dry scrub.

Vernacular name: Surinam cherry? (Windward Group).

SABA: Windwardside (Boldingh 1945, flb. July); slope of The Mountain near Windwardside, 400—475 m (Stoffers 3341, flb. May); road to The Mountain (Arnoldo 781, fl. Aug.); near The Saddle, 350—400 m (Stoffers 4118, st. Aug.); Castle Hill, seaside, 300—350 m (Stoffers 4180, fl. Aug.; 4156, st. Aug.).

St. EUSTATIUS: slope of The Quill, 150 m (Boldingh 1112, fl. June); id., near Bengalen, 50—200 m (Boldingh 656, st. June; 684, st. June); northern slope of The Quill, 240 m (Stoffers 4005, fl. July); western slope of The Quill, 350 m (Boldingh 1218, fl. June; 1222, st. June; 420, st. June); bottom of The Quill (Stoffers 3620, st. July; 3651, st. July; 4781, st. Aug.); top of The Quill, 350—450 m (Stoffers 3675, fl. July; Boldingh 200, st. June; 285, st. June; 358, st. June); without loc. (van Groll-Meyer 177, fl.; 213, st.);

St. MARTIN: Mount Paradise, 150—400 m (Boldingh 3195, fr. Sept.; Le Gallo 849, st. July); without loc. (Boldingh 3626, st.).

**Myrcia citrifolia** (Aubl.) Urb.

URBAN, in Fedde, Repert. 16: 150. 1919; — *Myrtus citrifolia* AUBLET, Pl. Guian. franç. 2: tables des noms p. 20. ad Vol. 1: 513, nr. 4. 1775.

Evergreen shrub or small tree, about 2 m high; bark grey, smooth, with thin fissures, peeling off in thin flakes; twigs very slender, compressed, brown with minute hairs, often soon glabrate. Leaves petiolate; petioles 2—3 mm long, puberulous; blades elliptic to oblong or obovate, rounded, acuminate or retuse at the apex, rounded, acute or obtuse at the base, chartaceous to coriaceous, up to 5 × 3 cm, glabrous except for the midrib, upper surface yellow-green to dark green, shiny or dull light green and glandular dotted beneath, the margin revolute; midrib prominent to flat above, prominent beneath, lateral veins prominent on both sides, anastomosing in a marginal vein about 2 mm within the margin. Inflorescence consisting of terminal or rarely also axillary panicles; peduncle and pedicels slender. Hypanthium prolonged above the ovary, c. 2 mm long, glabrous. Sepals 5, subequal, broadly triangular-ovate, c. 2 mm long. Petals 5, orbicular, glandular-dotted, 3—4.5 mm long. Stamens numerous; filaments filiform; anthers ovate, small. Ovary 3-locular; style slender; stigma minute. Ovules 2 in each locule. Fruit a subglobose red berry with dark-purple flesh. Seeds 1—3, brown, c. 8 mm long.

Greater Antilles, Lesser Antilles south to Grenada and Barbados; Venezuela, Suriname, and Guiana.

var. *imrayana* (Gris.) Stehlé & Quent.

STEHLÉ & QUENTIN, Fl. Guadeloupe & Depend. & Martinique 2(3): 57. 1949; FOURNET, Fl. Guadeloupe & Martinique 869. 1978; — *Myrcia coriacea* DECANOLLE var. *imrayana* GRISEBACH, Fl. Br. W. Ind. Isl. 234. 1860 [‘1864’].

Twigs appressed pubescent, ferrugineous; leaves small, 2.5—4 × 1.5—2.5 cm, dull; peduncle shorter or sometimes slightly longer than the subtending leaf, 5—15-flowered.

Guadeloupe, Martinique, Saba, St. Eustatius, and St. Martin.

In forest and woodlands.

SABA: Parish Hill, 400 m (Boldingh 1369, fl. July); Castle Hill, sea-side, 300—350 m (Stoffers 4192, fl. Aug.); Booby Hill (Arnoldo 786, fl. Aug.; Stoffers 4299, fl. Aug.); from Hellsgate to Mary’s Point (Boldingh 2043, fl. July); slope of The Mountain near Windwardside, 600 m (Boldingh 2180, fr. July); in gut between Hellsgate and Sandy Cruz, 550 m (Stoffers 3440, fl. May); without loc. (Boldingh 1568, fl. July).

St. EUSTATIUS: slope of The Quill near Bengalen, 170 m (Stoffers 3779, fl. July); id. near Glass Bottle, 275—380 m (Stoffers 3842, fl. July; 3556, fl. July); top of The Quill, 380—480 m (Stoffers 3573, st. July; 3919, fl. July; 3914, fl. July; 3937, fl. July; 3959, fl. July; Boldingh 173, fl. June; 260, fl. June; 188, fl. June; 505, fl. June; 346, st. June); slope of The Quill between Glass Bottle and White Wall, 100—270 m (Stoffers 4056, st. Aug.; 4093, st. Aug.; 4101, fr. Aug.); near White Wall (Stoffers 4776, st. Aug.); without loc. (v. Groll-Meyer 114, fr.).

St. MARTIN: Mount Paradise, 300—400 m (Boldingh 3221, fl. Sept.; 3352, fr. Sept.; Le Gallo 860, fl. July; 874, fl. July; 875, fl. July; 896, st. July); id., lower part (Boldingh 3189, fl. Sept.); Low Lands (Boldingh 3268, fl. Sept.).

*Myrcianthes* O. Berg, Linnaea 27: 315. 1856

Small or medium-sized trees. Leaves opposite or ternate. Inflorescence consisting of 1—7(—30)-flowered dichasia, solitary in the leaf-axils, sometimes numerous in the upper axils as to form a compound inflorescence or modified into a terminal myrcioid panicle bearing the flowers in small dichasia at the tips. Central flowers of the dichasia usually sessile, 4-merous or an occasional flower 5-merous. Hypanthium not prolonged above the ovary. Sepals 4 or rarely 5, distinct, persistent. Petals 4 or in some species regularly 5, conspicuous. Stamens numerous; filaments filiform; anthers small. Ovary 2-locular. Ovules 5—20 in each locule, radiating from a centrally attached placenta. Fruit a berry. Seeds 1 or 2. Embryo myrcioid.

About 40 species from Florida and Mexico to Argentine and Bolivia; West-Indies.

**Myrcianthes fragrans** (Sw.) McVaugh

McVAUGH, Fieldiana Bot. 29: 485. 1964; ADAMS, Flowering plants of Jamaica 520. 1972; FOURNET, Fl. Guadeloupe & Martinique 896, fig. 436. 1978; — *Myrtus fragrans* SWARTZ, Prodr. 79. 1788; — *Ananomis fragrans* (SWARTZ) GRISEBACH, Fl. Br. W. Ind. Isl. 240. 1860 [1864]; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 42. 1925; — *Eugenia fragrans* (SWARTZ) WILLDENOW, Spec. Plant. 2: 964. 1799; BOLDINGH, Fl. D.W. Ind. Isl. 1. 146. 1909; URBAN, Symb. Ant. 4: 451. 1910; BOLDINGH, Fl. Ned. W. Ind. Eil. 308. 1913; FAWCETT & RENDLE, Fl. Jamaica 5(3): 351. 1926; QUESTEL, Fl. Isl. St. Bartholomew 163. 1941; LEON & ALAIN, Fl. Cuba 3: 462. 1953.

Evergreen tree, up to 10 m high, the base becoming buttressed; bark mottled, tan-grey, peeling or flaking off in plates; twigs slender, brown, finely pubescent. Leaves nearly glabrous, petiolate; petiole 3–6 mm long, finely pubescent; blades elliptic to ovate or obovate, rounded or obtusely pointed (or sometimes notched) at the apex, cuneate at the base, 2.5–6.5 × 1.5–4.5 cm, thick and leathery, becoming nearly glabrous, with minute glandular dots, shiny green on the upper surface, dull green beneath; midrib impressed above, prominent beneath, lateral veins 8–12 at each side, indistinct, slightly elevated on both sides when dry, anastomosing in an arched marginal vein. Inflorescence more or less appressed pubescent, consisting of 3–7-flowered dichasia at the end of a 2.5–4 cm long, axillary peduncle. Flowers fragrant, c. 10 mm across. Hypanthium c. 3 mm long, light green, puberulous and often densely white-hairy. Sepals 4, light green, in 2 unequal pairs, 3 mm long. Petals 4, concave, 4.5 mm long. Stamens many; filaments filiform, spreading, 7 mm long; anthers small. Ovary 2-locular; style filiform, curved, 6–7 mm long or less; stigma pointed. Ovules 15–20 in each locule. Fruit a globose, purple-black berry, 8–10 mm in diam. Seeds usually 1–2, bean-shaped.

Florida, Mexico, Central and northern South America, West Indies.

ST. MARTIN: Gut from Bethlehem to Cul de Sac (Boldingh 3417, st. Sept.).

**Myrciaria** O. Berg, Linnaea 27: 320. 1856

Shrubs or small trees, pubescent or quite glabrous. Bracts and bracteoles often ciliate. Flowers subsessile in axillary clusters (much abbreviate racemes), usually 4 in each cluster. Bracts and bracteoles ovate, membranaceous, the bracteoles usually larger than the bracts. Hypanthium a funnel-form tube, persistently enveloped by the often connate bracteoles; the tube circumscissile at base and at anthesis cleanly deciduous from the ovary. Sepals 4, distinct, imbricate, at anthesis mostly separated by irregularly fissures in the distal part of the hypanthium. Petals 4, distinct, white. Stamens born at the top of the hypanthium-tube, numerous (50–100); filaments filiform; anthers short, with longitudinal dehiscence. Ovary 2-locular; style slender, tapering; stigma minute. Ovules 2 in each locule. Fruit a globose, juicy drupe-like, 1–2-seeded berry, naked and umbilicate at the apex. Seeds suborbicular, compressed, in dried fruits surrounded by a spongy-crustose endocarp and a membranaceous testa. Embryo eugenoid.

About 20 species in tropical and subtropical America.

**Myrciaria floribunda** (West ex Willd.) O. Berg

O. BERG, *Linnaea* 27: 330. 1856; FOURNET, *Fl. Guadeloupe & Martinique* 897. 1978; — *Eugenia floribunda* WEST ex WILLDENOW, *Spec. Plant.* 2: 960. 1800; GRIEBACH, *Fl. Br. W. Ind. Isl.* 239. 1860 [‘1864’]; DUSS, *Fl. phan. Ant. franç.* 273. 1897; BOLDINGH, *Fl. D.W. Ind. Isl.* 1: 146. 1909; *Fl. Ned. W. Ind. Eil.* 308. 1913; URBAN, *Symb. Ant.* 8: 488. 1921; BRITTON & WILSON, *Sci. Surv. Porto Rico & Virgin Isl.* 6: 39. 1925; WILLIAMS, *Fl. Trinidad & Tobago* 1: 346. 1931; LEON & ALAIN, *Fl. Cuba* 3: 455. 1953.

Evergreen shrub or small tree, up to 7 m high, strongly branched; bark smooth; twigs slender and internodes short, c. 2 cm long, puberulous but soon glabrate. Leaves opposite, petiolate; petioles slender, 2—5 mm long; blade elliptic-oblong to lanceolate-oblong or lanceolate, long-acuminate at the apex, acute at the base, 2—7 × 1—2.5 cm, chartaceous, with glandular dots; young leaves pubescent on the midrib and the margin, glabrate; midrib flat above and prominent beneath; lateral veins prominulous to nearly obsolete at both sides, numerous; upper surface dull green, the lower surface dull light-green. Flowers white, almost sessile, 2—5 together at the base of the leaves. Bracteoles small, ovate, connate and enclosing the hypanthium. Hypanthium funnel-shaped, glabrous, 1.5 mm long and at last circumscissile above the ovary. Sepals 4, 1 mm long, imbricate, rounded and fringed. Petals obovate, 1 mm long, fimbriate. Stamens many; filaments long, 2.5—3 mm; anthers small. Ovary half-inferior, pilose at the apex, 2-locular; style slender. Ovules 2(—4) in each locule. Fruit a globose, red or yellow berry, 8—15 mm in diam. Seeds 1—2.

From southern Mexico through Central America, and from Colombia, Venezuela and Guianas to Brazil and Peru; West Indies, but not recorded from Jamaica.

In thickets and pasture grounds.

Vernacular name: guave berry (Windward Group).

ST. EUSTATIUS: without loc. (van Groll-Meyer 200, fl.).

ST. MARTIN: pasture grounds near Bellevue (Boldingh 2831, fl. Aug.); Low Lands, near Red Pond (Le Gallo 886, fl. June); gut from Bethlehem to Cul de Sac, 100—200 m (Boldingh 3417, st. Sept.).

**Syzygium** P. Browne ex Gaertner, *Fruct. & Sem.* 1: 166, t. 33. 1788, nom. cons.

Trees or shrubs, mostly glabrous. Leaves pinninerved, usually with an intramarginal vein. Inflorescence consisting of terminal and axillary panicles or cymes or flowers solitary and axillary. Flowers 4—5-merous. Hypanthium not or variously prolonged above the ovary, its base usually prolonged into a pseudopedicel above the bracteoles. Bracteoles mostly inconspicuous and fugaceous. Sepals various, persistent or deciduous, rarely the upper part of the hypanthium splitting between them after anthesis. Petals free or more or less united into a calyptra. Stamens numerous, free or obscurely united into 4

bundles; filaments filiform; anthers opening by longitudinal dehiscence. Ovary 2(—4)-locular, the locules commonly near the distal part of the ovary; style filiform; stigma minute. Ovules few to many in each locule, in crowded clusters attached to the central dissepiment. Fruit a fleshy or dry and leathery berry with 1—2 or rarely more seeds. Seeds usually large with membranaceous to crustaceous testa. Embryo with fleshy, completely free or partly fused cotyledons.

About 700—800 species in the tropics of the Old World, mostly in Asia; seven species introduced and naturalized in America.

**Syzygium jambos** (L.) Alst.

ALSTON in TRIMEN, Handb. Fl. Ceyl. Suppl. 115. 1931; ARNOLDO, Gekw. en nutt. planten Ned. Ant. 128. 1954; Gekw. en nutt. planten Ned. Ant. 202. 1971; ADAMS, Flowering plants of Jamaica 529. 1972; FOURNET, Fl. Guadeloupe & Martinique 873, fig. 422. 1978; — *Eugenia jambos* LINNAEUS, Spec. Plant. 470. 1753; BOLDINGH, Fl. D.W. Ind. Isl. 1: 147. 1909; Fl. Ned. W. Ind. Eil. 308. 1913; URBAN, Symb. Ant. 8: 489. 1921; FAWCETT & RENDLE, Fl. Jamaica 5(3): 352. 1926; — *Jambosa vulgaris* DECANDOLLE, Prodr. 3: 286. 1828; GRISEBACH, Fl. Br. W. Ind. Isl. 235. 1860 [1864]; DUSS, Fl. phan. Ant. franç. 274. 1897; LEON & ALAIN, Fl. Cuba 3: 466, fig. 202. 1953; — *Jambosa jambos* (LINNAEUS) MILLSPAUGH, Field. Mus. Bot. 2: 80. 1900; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 41. 1925.

Evergreen tree up to 10 m high; stems frequently crooked; bark brown, smooth with many small fissures. Leaves opposite, petiolate; petiole stout, canaliculate, up to 1.3 cm long; blade lanceolate, attenuate-acuminate at the apex, acute at the base, up to 20 × 6 cm, coriaceous, glabrous, shiny dark-green and with minute glandular dots, the midrib prominent beneath, the lateral veins in about 8 pairs, ascending, the marginal vein about 4 mm within the margin. Inflorescence consisting of terminal, glabrous, few(—10)-flowered corymbs, the ultimate flowers solitary. Hypanthium shortly produced above the ovary, conical, pinkish-green, glabrous, about 1.5 cm high. Sepals 4, semi-orbicular, 6—7 mm long, glabrous, persistent on the fruit. Petals 4, semi-orbicular, about 1 cm long, white and faintly tinged with green, concave, gland-dotted. Stamens numerous, widely spreading, up to 10 cm across. Ovary 2-locular; style slender, whitish, long-persistent. Ovules many in each locule on an incassate placenta. Fruit a pear-shaped or subglobose yellowish berry, about 3 cm in diam., crowned by the recurved, persistent, carneous sepals; flesh yellow with only little juice. Seeds 1—2, rounded, 1—1.2 cm in diam.

Native of south-eastern Asia but now widely cultivated and naturalized through the tropics, including the West Indies and tropical continental America from Mexico south to Brazil.

Vernacular name: plum rose (Windward Group).

ST. EUSTATIUS: slope of The Quill near Bengalen, 50—200 m (Boldingh 644, st. June); northern slope of The Quill, 240 m (Stoffers 3981, st. July).

ST. MARTIN: Mount Paradise, 300—400 m (Boldingh 3347, st. Sept.).

Trees or shrubs, mostly pubescent, in some species the hairs dibrachiate. Leaves pinninerved, with strong or weak intramarginal veins. Inflorescence predominantly consisting of bracteated axillary racemes or rarely panicles or the flowers partly or completely in opposite bracteated pairs at the lower nodes of otherwise leafy branches ('Stenocalyx type' of flowering). Flowers 4-merous. Hypanthium not prolonged above the ovary, its base very rarely prolonged into a pseudopedicel. Bracteoles mostly persistent and conspicuous. Sepals usually persistent, conspicuous. Petals free. Stamens usually numerous; filaments free, filiform; anthers opening by longitudinal dehiscence. Ovary 2(1—4)-locular; the locules usually near the middle of the ovary; style filiform; stigma minute. Ovules 2 to numerous in each locule, in crowded clusters attached to the central dissepiment. Fruit a fleshy or dry berry with 1—2 or rarely more seeds. Seeds usually large, with membranaceous to crustaceous testa. Embryo eugenoid.

Probably 500 species in tropical and subtropical America and perhaps 50—60 species in the Old World from tropical Africa through southern Asia to the Philippines and Hawaii, New Caledonia and N.E. Australia.

**Key to the species:**

1. Sepals, at least the larger ones, 3—4 mm long . . . . . 2  
  Sepals 1—2 mm long . . . . . 3
2. Petioles 5 mm long, leaves shortly acuminate at the apex; fruit globose, 6—8 mm in diam. . . . . *E. uniflora*  
  Petioles 2 mm long, leaves obtuse or acute at the apex; fruit depressed-globose, 2.5—3 cm in diam., with 8 vertical ridges . . . . . *E. ligustrina*
3. Inflorescence puberulous or tomentose . . . . . *E. monticola*  
  Inflorescence essentially glabrous but bracteoles and sepals sometimes ciliate and/or puberulous abaxially . . . . . 4
4. Pedicels 4—15 mm long . . . . . 5  
  Pedicels up to 2 mm long or flowers sessile . . . . . 6
5. Inflorescence of sessile umbels . . . . . *E. procera*  
  Inflorescence racemose . . . . . *E. rhombea*
6. Leaves almost sessile . . . . . *E. foetida*  
  Leaves petiolate . . . . . 7
7. Petioles 1—3 mm long; inflorescence of sessile clusters . . . . . *E. cordata*  
  Petioles 3—4.5 mm long; inflorescence shortly racemose . . . . . *E. axillaris*

***Eugenia uniflora* L.**

LINNAEUS, Spec. Plant. 470. 1753; GRISEBACH, Fl. Br. W. Ind. Isl. 239. 1860 [1864]; DUSS, Fl. phan. Ant. franç. 268. 1897; BOLDINGH, Fl. D.W. Ind. Isl. 1: 148. 1909; Fl. Ned. W. Ind. Eil. 309. 1913; BRITTON & MILLSPAUGH, Bahama Fl. 304. 1920; URBAN, Symb. Ant. 8: 484. 1921; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 34. 1925; FAWCETT & RENDLE, Fl. Jamaica 5(3): 334. 1926; LEON & ALAIN, Fl. Cuba 3: 452. 1953; ADAMS, Flowering plants of Jamaica 522. 1972; FOURNET, Fl. Guadeloupe & Martinique 885, fig. 429. 1978.

Shrub or small tree, up to 6 m high, glabrous, much-branched; twigs slender, light brown. Leaves petiolate; petioles about 2 mm long; blades ovate to ovate-lanceolate or elliptic, shortly acuminate at the apex, obtuse to rounded or subcordate at the base, 2.5—6 × 1.5—3 cm, with numerous glandular dots, margin slightly recurved, chartaceous, glabrous, shiny dark-green on the upper surface, dull green beneath; midrib sulcate above, prominent beneath, the lateral veins prominulous on both sides, arcuate-anastomosing at c. 3 mm within the margin, the veins laxly reticulate. Flowers solitary in the axils of bracts at the base of young shoots or flowers fascicled, 4—8 together. Pedicels slender, up to 3.5(—4) cm long. Bracts up to 5 mm long, scarious. Sepals 4, oblong, ciliate, up to c. 4 mm long, reflexed, persistent. Petals 4, obovate, unguiculate, spreading, 8—10 mm long, white, tinged with pink, caducous. Stamens numerous; filaments filiform, white, c. 6 mm long; anthers small. Ovary 2-locular, 8-ribbed; style slender, white; stigma somewhat capitate. Ovules several in each locule, attached to a peltate placenta thickened in the middle. Berry depressed-globose, 2.5—3 cm in diam., with 8 vertical ridges, red, juicy and slightly sour. Seed 1, large. Embryo bean-like.

Native of tropical America; cultivated in the tropics and subtropics.

In secondary woodlands.

Vernacular names: honey berry, Surinam cherry (Windward Group).

SABA: gut near The Bottom (Boldingh 1424, fr. July); Castle Hill, sea-side 300—350 m (Stoffers 4187, fr. Aug.); along road from The Bottom to Crispine, 220—350 m (Stoffers 2990, fl. Ap.; 2947, fl. Ap.; 3038, fl. Ap.); Crispine, 400 m (Boldingh 1720, fr. July); Windwardside (Arnoldo 666, fl. Aug.); slope of The Mountain above Windwardside, 400—475 m (Stoffers 3339, fl. & fr. May).

St. EUSTATIUS: lower part of Signal Hill (Boldingh 117, st. May); in garden in Oranjestad (Boldingh 861, fl. June); in deserted plantation near Tumble Down Dick Bay (Boldingh 143, st. May).

***Eugenia monticola* (Sw.) DC.**

DECADOLLE, Prodr. 3: 275. 1828; DUSS, Fl. phan. Ant. franç. 269. 1897; BOLDINGH, Fl. D.W. Ind. Isl. 1: 147. 1909; URBAN, Symb. Ant. 4: 448. 1910; BOLDINGH, Fl. Ned. W. Ind. Eil. 309. 1913; URBAN, Symb. Ant. 8: 485. 1921; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 35. 1925; FAWCETT & RENDLE, Fl. Jamaica 5(3): 347. 1926;

WILLIAMS, Fl. Trinidad & Tobago 1: 348. 1931; QUESTEL, Fl. Isl. St. Bartholomew 162. 1941; LEON & ALAIN, Fl. Cuba 3: 456. 1953; GOODING *et al.*, Fl. Barbados 311. 1965. ADAMS, Flowering plants of Jamaica 525. 1972; FOURNET, Fl. Guadeloupe & Martinique 884, fig. 427. 1978; — *Myrtus monticola* SWARTZ, Prodr. Veg. Ind. Occ. 78. 1788.

Evergreen shrub or small tree, up to 5 m high; bark grey, smooth to slightly fissured; twigs very slender, shortly pubescent, glabrescent, densely foliate, internodes short, 1—2 cm long. Leaves distichous, petiolate; petioles slender, 2—3 mm long, pubescent; blades ovate to rhomboid-ovate or narrowly ovate to lanceolate, short-obtusely acuminate or obtuse at the apex, acute at the base, 1.5—4 × 0.5—2 cm, chartaceous to coriaceous, glabrous except for the midrib, with numerous minute glandular dots, dull green above, paler beneath; midrib flat to impressed above, prominent beneath, lateral veins nearly obsolete on both sides of the leaves, margin curved down. Inflorescence consisting of axillary and lateral, few- to many-flowered racemose clusters, crowded, rachis short, up to 1 cm long, puberulous; pedicels 1—3 mm long. Bracts and bracteoles small, triangular, obtuse at the apex, about 1 mm long. Sepals 4, rounded, unequal, ciliate and sparsely pilose, up to 1.5 mm long. Petals white, about 2 mm long, gland-dotted. Stamens many; filaments white, threadlike, 2.5 mm long; anthers small. Ovary 2-locular, puberulous; style slender; stigma more or less pointed. Ovules 4—8 in each locule. Berry globose, 5—6 mm in diam., turning from red to black at maturity. Seed 1. Embryo eugenioid.

From Venezuela to French Guiana, West Indies. Also recorded from Guatemala.

In dry woodlands.

Vernacular name: birds berry (Windward Group).

St. MARTIN: Mount Paradise (Boldingh 3220, st. Sept.).

According to annotations by R. McVaugh the following collections are atypical by their short inflorescence and petioles like in *Eugenia foetida*:

St. MARTIN: Low Lands (Le Gallo 832, fl. July; 837, fl. July; 846, fl. July; 910, fl. July); near Simson Bay Lagoon (Boldingh 2745, st. Aug.); Naked Boy Hill, 200 m (Boldingh 2585, fl. Aug.); Mount Paradise (Boldingh 3330, fl. Sept.); hill between Mont des Accords and Sentry Hill (Boldingh 2863, fl. Aug.).

***Eugenia ligustrina* (Sw.) Willd.**

WILLDENOW, Spec. Plant. 2: 962. 1799; GRISEBACH, Fl. Br. W. Ind. Isl. 239. 1860 ['1864']; DUSS, Fl. phan. Ant. franç. 268. 1897; BOLDINGH, Fl. D.W. Ind. Isl. 1: 147. 1909; URBAN, Symb. Ant. 4: 446. 1910; BOLDINGH, Fl. Ned. W. Ind. Eil. 308. 1913; URBAN, Symb. Ant. 8: 484. 1921; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 34. 1925; FAWCETT & RENDLE, Fl. Jamaica 5(3): 334. 1926; WILLIAMS, Fl. Trinidad & Tobago 1: 346. 1931; QUESTEL, Fl. Isl. St. Bartholomew 162. 1941; LEON & ALAIN, Fl. Cuba 3: 466. 1953; GOODING *et al.*, Fl. Barbados 311. 1965; ADAMS, Flowering plants of Jamaica 522. 1972; FOURNET, Fl. Guadeloupe & Martinique 888, fig. 430. 1978.

Shrub or small tree, up to 5 m high; bark grey, slightly fissured to peeling; twigs slender, light grey-brown, puberulous but soon glabrate, internodes up to 1.5 cm long; buds narrow pointed, 4-angled and c. 5 mm long, covered with overlapping pointed scales. Leaves petiolate; petioles slender, up to 5 mm long, yellowish; blades narrowly elliptic to elliptic-oblong, obtuse or acute at the apex, acute at the base, 2.5—5.5 × 1.2—2.5 cm, coriaceous, with many glandular dots, shiny green above, dull yellow-green beneath, margin revolute; midrib impressed above, prominent beneath, lateral veins faint, ascending, the marginal vein about 1 mm within the margin. Flowers usually solitary in the axils of the bracts at the base of young shoots. Bracts linear-lanceolate, 5—8 mm long. Pedicels slender, up to 2(—3.5) cm long, glabrous. Sepals 4, oblong, 3—3.5 mm long, gland-dotted. Petals 4, 6—7 mm long, white. Stamens many; filaments shorter than the petals; anthers very small. Ovary subglobose, 2-locular; style slender, widened in the stigmatic part. Ovules 4—8 in each locule, attached to a placenta thickened in the middle. Berry globose, crowned by the persistent sepals and covered with glandular dots, 6—8 mm in diam., red turning black. Seeds 1—3, rounded.

West Indies, from Venezuela south to Brazil.

Common in dry woodlands and shrubvegetations.

Vernacular names: black berry, black cherry (Windward Group).

ST. EUSTATIUS: between Glass Bottle and White Wall, 150—200 m (Stoffers 4112, st. Aug.); hill near Concordia, 100 m (Boldingh 952, st. June); deserted plantation near Tumble Down Dick Bay (Boldingh 148, st. May); hills north-west of Zeelandia, 50 m (Stoffers 3825, fl. July); from Little Mountains to Venus Bay (Boldingh 992, fr. June; 986, fl. June); Solitude, 120 m (Stoffers 3713, st. July; 3701, fl. July; 3705, fl. July); slope of The Quill, 350 m (Boldingh 392, st. June); id., near Bengalen, 170 m (Stoffers 3784, st. July); top of The Quill, 500 m (Boldingh 473, fr. June; 497, st. June; 482, st. June); without loc. (Boldingh s.n., st.).

ST. MARTIN: from Philipsburg to Guana Bay (Boldingh 2411, st. Aug.; Le Gallo 920, st. July; 842, st. July); lower part of the hills between Mont Chambord and Mont Vernon (Boldingh 2946, st. Aug.; 2952, fr. Aug.); Princes Quarter (George s.n., sub Boldingh 2484, st. Aug.); Cole Bay Hill (Stoffers 4509, fl. Aug.); top of Mount William (Stoffers 2544, st. March); slope of Fort St. Louis (Le Gallo 986, st. Aug.); Vineyard Hill (Stoffers 4513, st. Aug.); from Philipsburg to Belvedere (Boldingh 2584, st. Aug.); Cul de Sac? (Boldingh 2607, st. Aug.); Milldrum Hill, 300—400 m (Boldingh 3137, fl. Sept.); Low Lands (Boldingh 3280, fr. Sept.).

*Eugenia axillaris* (Sw.) Willd.

WILLDENOW, Spec. Plant. 2: 960. 1799; DUSS, Fl. phan. Ant. franç. 270. 1897; BOLDINGH, Fl. D.W. Ind. Isl. 1: 146. 1909; URBAN, Symb. Ant. 4: 448. 1910; BOLDINGH, Fl. Ned. W. Ind. Eil. 307. 1913; BRITTON & MILLSPAUGH, Bahama Fl. 303. 1920; URBAN, Symb. Ant. 8: 486. 1921; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 36. 1925; FAWCETT & RENDLE, Fl. Jamaica 5(3): 346. 1926; QUESTEL, Fl. Isl. St. Bartholomew 162. 1941; LEON & ALAIN, Fl. Cuba 3: 454, fig. 201. 1953; ADAMS, Flowering plants of

Jamaica 527, 1972; FOURNET, Fl. Guadeloupe & Martinique 876, fig. 423, 1978; — *Myrtus axillaris* SWARTZ, Prodr. 78. 1788; — *Eugenia monticola* GRISEBACH 236. 1860 [1864] not DECANDOLLE.

Evergreen shrub or small tree, up to 5 m high, glabrous; bark grey, becoming rough and slightly fissured or furrowed; twigs slender, light green. Leaves petiolate; petiole slender, curved, 3—4.5 mm long, purplish or light green; blade elliptic, ovate or oblong, obtusely long-acuminate at the apex, acute at the base, 4—8 × 2—5.5 cm, coriaceous, faint pellucid dots on the lower surface; midrib flattened, prominent beneath, lateral veins about 6—8 at each side, anastomosing at 1—2 mm within the slightly curved down margin, green to dark green and slightly shiny on the upper surface, dull green beneath. Inflorescence consisting of very short, few-flowered racemose clusters on a 0.8 mm long peduncle or the flowers solitary. Pedicels c. 1 mm long or flowers almost sessile. Bracts and bracteoles small. Flowers 4-merous, c. 5 mm across. Hypanthium cup-shaped, less than 1.5 mm long, enclosing the ovary. Sepals 4, gland-dotted, less than 1 mm long. Petals 4, rounded, white, gland-dotted, c. 1.8 mm long. Stamens many; filaments short, spreading; anthers minute. Ovary 2-locular; style slender; stigma somewhat pointed. Ovules 1—few in each locule. Fruit a globose, juice berry, crowned by the persistent sepals, about 1 cm in diam. but often deformed by insect larvae and then enlarged to 1.5 cm in diam., colour changing from green to red to black. Seeds 1, round, brown, c. 6 mm in diam.

Florida, Bermuda, Bahamas, Greater Antilles, Lesser Antilles south to St. Vincent; southern Mexico and from Honduras to Nicaragua.

Rather common shrub in vegetations ranging from evergreen seasonal forest to dry evergreen woodland.

Vernacular names: choaky berry, pigeon berry (Windward Group).

SABA: The Mountain, 400 m (Boldingh 1740, st. July); Ladder Gut (Boldingh 2000, st. July); Spring Bay Gut (Boldingh 2117, st. July); Windwardside (Boldingh 1883, fl. July); top of the cliff near the seaside of Booby Hill (Boldingh 1607a, st. July); Booby Hill, 475 m (Stoffers 3164, st. June); without loc. (Arnoldo 999, fl. Aug.).

ST. EUSTATIUS: slope of The Quill near Bengalen, 50—200 m (Boldingh 641, fr. June); top of The Quill near Glass Bottle, 400 m (Stoffers 3586, st. July); Gilboa Hill, 150 m (Boldingh 1120, fr. June); without loc. (Boldingh s.n., st.; 3579, st.).

ST. MARTIN: between Belvedere and Oyster Pond (Boldingh 3072, fl. Aug.; 3055, fr. Aug.); from Philipsburg to Guana Bay (Boldingh 2392, fl. Aug.); hills along the northern side of Cul de Sac (Stoffers 2604, fr. March; 2607, st. March; 2636, fr. March); top of Mount William (Stoffers 2543, fr. March); Low Lands (Boldingh 3263, fr. Sept.; Le Gallo 832, fl. July); id., near Grape Point (Le Gallo 834, fl. July; 919, fl. July; 877, fl. July; 865, fl. July); Tintamarre (Le Gallo 1041, fr. Oct.; 1038, fr. Oct.; Boldingh 3388, st. Sept.; 3396, st. Sept.).

**Eugenia foetida Pers.**

PERSOON, Syn. Plant. 2: 29. 1806; — *Eugenia buxifolia* (SWARTZ) WILLDENOW, Spec. Plant. 2: 960. 1800; URBAN, Symb. Ant. 4: 448. 1910; BRITTON & MILLSAUGH, Bahama Fl. 303. 1920; URBAN, Symb. Ant. 8: 486. 1921; LEON & ALAIN, Fl. Cuba 5: 460. 1953; — *Eugenia monticola* auct. non DECAUDOLLE; BOLDINGH, Fl. D.W. Ind. Isl. 1: 147. 1909; Fl. Ned. W. Ind. Eil. 309. 1913.

Shrub or small tree, up to 5 m high; bark reddish-brown to greyish, smooth, becoming somewhat fissured or mottled into large plates; twigs slender, grey, often finely pubescent. Leaves almost sessile; blades varying greatly in shape and size, mostly broadest above the middle, obovate, oblanceolate or nearly oblong, rounded at the apex, tapering into a long-pointed base, 1.5—4 × 0.5—1.5 cm, glabrous, slightly thickened at the margin and curved down, dull or slightly shiny green above, light green and glandular-dotted beneath; midrib somewhat impressed above, prominent beneath, lateral veins 4—6, obsolete above, conspicuous beneath, anastomosing c. 1 mm within the margin, veins reticulate. Inflorescence consisting of few-flowered axillary clusters or inserted below the petioles or flowers solitary. Flowers 4-merous, more or less fragrant, about 4 mm across. Pedicels slender, short. Hypanthium cupshaped, 2 mm. Sepals 4, ovate, 1.2 mm long. Petals 3 mm long, white, gland-dotted, roundish. Stamens numerous; filaments filiform, spreading, 4 mm across; anthers very small. Ovary 2-locular; style long, slender; stigma pointed. Ovules few in each locule. Fruit a globose berry, 6 mm in diam., changing from yellow-orange to black or dark brown, crowned by the persistent sepals. Seeds 1 or rarely 2.

Bahamas, Greater Antilles and Virgin Islands, St. Martin; southern Florida, Mexico and Guatemala.

On limestone in St. Martin.

ST. MARTIN: Low Lands (Le Gallo 852, fl. July; 855, fl. July; 858, fl. July; 887, fl. July); id., near Mullet Pond (Boldingh 2768, fl. Sept.); Terres Basses (Boldingh 3283, st. Sept.).

Fort St. Louis (Le Gallo 918, fl. July, leaves resembling those of *E. monticola*).

**Eugenia rhombea** (O. Berg) Kr. & Urb.

KRUG & URBAN, in ENGLER, Bot. Jahrb. 19. 644. 1895; URBAN, Symb. Ant. 4: 449. 1910; BOLDINGH, Fl. Ned. W. Ind. Eil. 309. 1913; BRITTON & MILLSAUGH, Bahama Fl. 304. 1920; URBAN, Symb. Ant. 8: 487. 1921; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 37. 1925; FAWCETT & RENDLE, Fl. Jamaica 5(3): 349. 1926; QUESTEL, Fl. Isl. St. Bartholomew 162. 1941; LEON & ALAIN, Fl. Cuba 3: 457. 1953; ADAMS, Flowering plants of Jamaica 527. 1972; FOURNET, Fl. Guadeloupe & Martinique 895, fig. 435. 1978; — *Eugenia foetida* RICH. var. *rhombea* O. BERG, Linnaea 27: 212. 1854.

Shrub or sometimes tree-like, up to 3 m high. Leaves petiolate; petioles 3—7 mm long; blades narrowly to broadly ovate, narrowed from the middle to a

narrow but rounded, acute or acuminate apex, rounded or rarely acute at the base,  $3-6 \times 1.5-3.5$  cm, 1.5—2 times as long as wide, rigidly coriaceous, the cartilaginous margins decurrent on the inner angles of the sulcate petiole; midrib impressed or nearly flat above, prominent below, lateral veins 6—10 on each side, the marginal vein 1—3 mm within the margin, leaf-surface dull green above, paler beneath, glands evident beneath. Inflorescence axillary, racemose and the 2—8 flowers seemingly arising direct from the axil, or flowers solitary; pedicels slender, up to 1.5 cm long. Bracts deciduous, to 1.5 mm long, their bases persistent; bracteoles broadly or narrowly ovate, scarious, 0.8 mm long, ciliate, persistent; bracteoles broadly or narrowly ovate, scarious, 0.8 mm long, ciliate, persistent. Hypanthium hemispheric, soon oblate. Sepals 4, in unequal pairs, up to 3.5 mm wide, concave. Petals 4, white, obovate, 4 mm long. Stamens numerous; filaments 4—5 mm long, united into a ring provided with bristly hairs; anthers small. Ovary 2-locular; style c. 5 mm long. Ovules about 15 in each locule. Fruit a globose to oblate, somewhat glandular, scarlet to black berry, about 7 mm in diam. Seeds one.

Florida, Mexico, northern Central America, Bahamas, Greater Antilles, Lesser Antilles south to Guadeloupe.

In evergreen woodland.

SABA: along roads between The Bottom and Windwardside, 200 m (Boldingh 1356, fl. July).

St. EUSTATIUS: deserted plantation near Tumble Down Dick Bay (Boldingh 149, fl. May); Signal Hill, 200 m (Boldingh 1037, st. June).

St. MARTIN: along roads from Grande Case to Marigot (Boldingh 3100, st. Sept.); Mount Paradise (Boldingh 3321, st. Sept.); Kay Bay Hill (Arnoldo 1298, fl. March).

**Eugenia cordata** (Sw.) DC.

DECANOLLE, Prodr. 3: 272. 1828; — *Myrtus cordatus* SWARTZ, Prodr. 78. 1788.

Evergreen shrub or small tree, up to 5 m high; bark smooth, grey; twigs slender, light grey or brown, minutely hairy when young. Leaves sessile; blades elliptic or short-ovate, rounded at the apex, cordate and clasping or subcordate to rounded at the base, subcoriaceous to subchartaceous,  $2-8 \times 1.2-4$  cm, shiny green above, dull green beneath, glandular dots minute, margin slightly curved downward; veins inconspicuous. Inflorescence consisting of crowded clusters of sessile flowers, axillary or lateral, mostly below the leafbases. Flowers small, white, less than 6 mm across. Sepals unequal, the larger ones rounded, broad, about 1 mm long. Petals up to 3 mm long, suborbicular. Stamens many; filaments filiform; anthers small. Ovary 2-locular; style filiform; stigma pointed. Ovules many in each locule. Fruit a subglobose to ovoid berry, greenish, about 7 mm long. Seeds 1 or 2.

Puerto Rico and Virgin Islands, Lesser Antilles from St. Eustatius to Guadeloupe and Dominica.

var. *sintenisi* (Kiaersk.) Kr. & Urb.

KRUG & URBAN, in ENGLER, Bot. Jahrb. 19: 656. 1895; — *Eugenia sintenisi* KIAERSKOU, Bot. Tidskr. 17: 263. 1890; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 39. 1925; FOURNET, Fl. Guadeloupe & Martinique 892, fig. 433. 1978.

Small tree or shrub, glabrous throughout. Leaves oval to obovate, narrowed at the base, subchartaceous, 4—8 × 2—3 cm, obtuse or rounded at the apex, narrowed to cuneate at the base; midvein whitish; petiole 1—3 mm long.

Distribution as the species.

In dry evergreen woodlands.

ST. EUSTATIUS: Gilboa Hill, 80 m (Stoffers 4029, st. July; 4030, fl. July; Boldingh 1121, fl. June); from Signal Hill to Venus Bay (Boldingh 960, st. June); near White Wall (Boldingh 1266, fr. June).

*Eugenia procera* (Sw.) Poir.

POIRET, in LAMARCK, Encycl. Suppl. 3: 129. 1813; GRISEBACH, Fl. Br. W. Ind. Isl. 238. 1860 [1864]; URBAN, Symb. Ant. 4: 449. 1910; Symb. Ant. 8: 487. 1921; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 6: 37. 1925; WILLIAMS, Fl. Trinidad & Tobago 1: 348. 1931; GOODING *et al.*, Fl. Barbados 312. 1965; FOURNET, Fl. Guadeloupe & Martinique 893, fig. 434. 1978; — *Myrtus procera* SWARTZ, Prodr. 77. 1788; — *Eugenia rhombea* auct. non (BERG) KR. & URB.; ARNOLDO, Zakflora 32. 1954; Zakflora 168. 1964.

Shrub or small tree, up to 5 m tall; bark grey, smooth, peeling off in rectangular plates; twigs slender, finely hairy when young. Leaves petiolate; petioles 2—4(—6) mm long, firm, pubescent to glabrate; blades ovate to oblong-ovate or elliptic, obtusely acuminate to long-acuminate at the apex, cuneate to rounded at the base, 2.5—5(—8) × 1—2.5(—4.5) cm, herbaceous to coriaceous, with many glandular dots, dull green above, paler beneath, margin only thickened or revolute; midrib not impressed above, prominent beneath, lateral veins many, fairly prominent beneath, anastomosing into the marginal vein, 1—1.5 mm within the margin. Flowers several together in sessile, axillary umbels, 6—7 mm across, fragrant. Bracteoles roundish, ciliate. Pedicels slender, more or less equal in length, 4—10(—15) mm long, glabrous. Hypanthium cup-shaped. Sepals 4, rounded, 1.5—2 mm long, persistent, ciliate. Petals 4, white, c. 3 mm long, rounded. Stamens many; filaments filiform, c. 3 mm long; anthers small. Ovary 2-locular; style slender; stigma small. Ovules many in each locule. Berry subglobose, about 5—9 mm in diam., black, crowned by the persistent sepals, viscid. Seeds 1 or 2.

West Indies, Venezuela, and Colombia.

In the drier vegetations on the islands of Saba, St. Eustatius, and St. Martin; on Curaçao in the hilly western part and there also on limestone hills.

CURAÇAO: calcareous hills north of road from Westpunt to Savonet (Boldingh 4953, st. Nov.); hills to the east of Westpunt (Boldingh 4935, st. Nov.); Seroe Christoffel (Stoffers 1210, flb. Dec.; Arnoldo 1130, fl. Dec.; s.n., fr. Dec.); *ibid.*, near Grote Steen (Stoffers 1307, fl. Dec.; 1276, fl. & fr. Dec.); hills near Knip (Stoffers 1111, fr. Dec.; 5106, fr. Nov.).

SABA: Spring Bay Gut (Boldingh 2098, fr.).

According to annotations by R. McVaugh the following collections are atypical: "Perhaps *E. procera*":

BONAIRE: Brandaris (Arnoldo 995, defl. June).

"Apparently *Eugenia procera* (Sw.) Poir.":

CURAÇAO: Seroe Christoffel (Arnoldo 1087, fl. Sept.); hills near Knip Plantation (Stoffers 1158, st. Dec.); hills between Santa Cruz and Seroe Christoffel (Boldingh 5600, st. Nov.).

SABA: along roads, 200—300 m (Boldingh 1711A, st. July). Specimen named *Eugenia splendens* by Boldingh.

St. EUSTATIUS: deserted plantation near Tumble Down Dick Bay (Boldingh 150, st. May).

St. MARTIN: in orchard near Bellevue (Boldingh 2833, st. Aug.); from Philipsburg to Guana Bay (Boldingh 2393, st. Aug.); Naked Boy Hill, 50—200 m (Boldingh 2696, st. Aug.); Mount Paradise (Le Gallo 879, st. July). Specimen named *Eugenia axillaris* by Boldingh.

**Pseudanamomis** Kausel, Ark. Bot. Stockh. Andra Ser. 3: 511, fig. 22, 23. 1956

Tree or large shrub, pubescent. Inflorescence axillary, pedunculate, irregularly several-flowered, subumbellate, or with supernumerary branches, or the central axis prolonged and the whole suggesting a reduced myrcioid panicle or sometimes a 3-flowered dichasium. Bracteoles deciduous before anthesis. Flowers 5-merous. Hypanthium not produced above the ovary. Sepals unequal, imbricate in bud, separating from the hypanthium and falling when the fruit matures. Petals free, white. Stamens numerous; filaments filiform; anthers small, with longitudinal dehiscence. Ovary 2-locular; style straight and tapering; stigma minute. Ovules usually 5—6 in each locule, in a subcapitate group attached near the middle of the septum. Fruit a fleshy berry. Seeds 1—2, bean-like. Embryo with 2 thick plano-convex cotyledons united about one-third their length; radicle less than half as long as the cotyledons; testa membranaceous.

Only one species in Venezuela and Antilles.

**Pseudanamomis umbellulifera** (Kunth) Kausel

KAUSEL, Ark. Bot. Stockh. Andra Ser. 3: 512. 1956; — *Myrtus umbellulifera* KUNTH, in H.B.K., Nov. Gen. et Spec. 6: 135. 1823 ed. quart.; — *Anamomis umbellulifera* (KUNTH) BRITTON, Sci. Surv. Porto Rico & Virgin Isl. 6: 42. 1925; WILLIAMS, Fl. Trinidad

& Tobago 1: 344. 1931; — *Eugenia umbellulifera* (KUNTH) KRUG & URBAN, in URBAN, Bot. Jahrb. 19: 665. 1894; URBAN, Symb. Ant. 4: 452. 1910; Symb. Ant. 8: 489. 1921.

Tree; branches terete, glabrous, the younger ones compressed and somewhat dusky-tomentose. Leaves petiolate; petiole 2—5 mm long, glabrescent; blade elliptic, rounded and emarginate at the apex, rounded at the base, 3—6 × 2—4 cm, margin entire, coriaceous, green above, paler beneath, glabrous on both sides, conspicuously net-veined, midvein prominent beneath. Inflorescence few- to many-flowered, subumbellate, rusty-woolly; peduncle up to c. 9 mm long. Hypanthium densely rusty-woolly. Sepals 5, suborbicular, unequal, ciliate, glandular-punctate. Petals 5, white, 8 mm long, subrounded to elliptic, obtuse, concave, glabrous, glandular-dotted, much longer than the sepals. Stamens numerous, slightly longer than the petals; filaments slender, glabrous; anthers subrounded, retuse at the apex, cordate at the base, dorsally attached, with longitudinal dehiscence. Ovary 2—3-locular, more or less tomentose; style subulate, glabrous, longer than the filaments; stigma simple. Ovules 4—6 in each locule. Fruit oblong-ellipsoidal, about 5.5 cm long and 3.5 cm broad, leathery, with pleasant apricot-coloured juicy pulp. Seeds about 3, white.

Hispaniola, Venezuela, Trinidad, and Tobago; cultivated in Puerto Rico.

CURAÇAO: without loc. (Boldingh 5568, st.).

**Myrtus** Linnaeus, Spec. Plant. 471. 1753

Shrubs or small trees with very varied foliage. Inflorescence axillary, usually racemose and then the axis of the raceme often strongly reduced, or the inflorescence of the Stenocalyx type or the flowers solitary. Flowers 5(—4)-merous, pedicellate. Hypanthium not or scarcely produced above the ovary. Bracteoles deciduous. Sepals usually distinct, persistent. Petals free. Stamens numerous, up to 100 or more; filaments free, filiform; anthers short or subrounded, with longitudinal dehiscence. Ovary mostly 2- (rarely 3-) locular; style slender; stigma not or scarcely enlarged. Ovules few or numerous, in a group attached to the central dissepiment in each locule. Fruit a few- to many-seeded berry. Seeds compressed, reniform or sub-hemispheric; testa bony. Embryo pimentoid, commonly subcylindric.

Possibly 50—100 species in tropical and warm-temperate regions of both hemispheres.

**Myrtus orbicularis** (Berg) Burret

BURRET, Notizbl. Bot. Gart. Berlin 15: 482. 1941; — *Eugenia orbicularis* BERG, Linnaea 30: 678. 1859; — *Myrtus anguillaris* URBAN, Symb. Ant. 6: 21. 1909.

Shrub, up to 3 m high; branches more or less terete; twigs somewhat compressed, minutely pubescent, reddish-brown when dry. Leaves petiolate; petioles c. 2 mm long; blades orbicular to roundish-oval, obtuse or retuse at the apex,

obtuse at the base, 1.5—3 × 1—2 cm, coriaceous, glabrous, greenish above, dull beneath, glandular punctate, slightly reticulate-veined, midvein flattish above, prominent beneath, lateral veins inconspicuous below and more or less prominent above. Inflorescence consisting of few-flowered, axillary racemes or the flowers sometimes even solitary; peduncle equalling or surpassing the leaf in length. Sepals 4, small, rounded, concave, reflexed in fruit. Petals 4, white. Stamens numerous. Berry 4 mm in diam., blackish.

Known from Barbuda, Anguilla, and Curaçao.

CURAÇAO: Zwarte Berg (Arnoldo 98, st. Jan.); without loc. (Boldingh 5111, fr.).