

# CHRYSOBALANACEAE

by

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Woody plants. Leaves alternate, simple. Stipules present. Inflorescence consisting of panicles or racemes. Flowers hermaphrodite or rarely unisexual, zygomorphic; receptacle saucer-shaped or tubular. Sepals free, imbricate. Petals free, imbricate or convolute or the petals wanting. Stamens (2–)10 to numerous, inserted on the rim of the receptacle, often partly infertile or inserted unilateral only; filaments sometimes somewhat connate. Ovary often excentric in the flower, 2–3-carpellary, of which usually only one well-developed; the style basal or lateral; stigma one. Ovules usually 2, anatropous, basal. Fruit a drupe. Seeds without endosperm.

About 420 species in 17 genera in the tropics, mainly in America.

## Key to the genera:

Leaves elliptic, obovate or roundish, rounded or emarginate at the apex; stamens numerous . . . . . *Chrysobalanus*

Leaves lanceolate to elliptic, long-acuminate at the apex; stamens 3, unilateral  
*Hirtella*

## **Chrysobalanus** Linnaeus, Spec. Plant. 513. 1753

Unarmed shrubs or small trees. Leaves simple, leathery, glabrous, entire. Stipules small, deciduous. Inflorescence consisting of axillary and terminal, pubescent cymes. Flowers white, small. Receptacle more or less campanulate to funnel-shaped. Sepals 5. Petals 5, deciduous. Stamens numerous, exerted, a few sterile; filaments filiform. Ovary uni-locular, sessile at the base of the receptacle; style basal or lateral. Ovules 2, ascending. Drupe pulpy with one, 5–6-ridged stone.

Two species in tropical and subtropical America and tropical Africa, naturalized in Africa and Pacific Islands.

### **Chrysobalanus icaco** L.

LINNAEUS, Spec. Plant. 513. 1753; GRISEBACH, Fl. Br. W. Ind. Isl. 229. 1860; Duss, Fl. phan. Ant. franç. 257. 1897; URBAN, Symb. Ant. 4: 260. 1905; BOLDINGH, Fl. D.W. Ind. Isl. 1: 77. 1909; Fl. Ned. W. Ind. Eik. 200. 1913; Fl. D.W. Ind. Isl. 2: 34. 1914; FAWCETT & RENDLE, Fl. Jamaica 3(1): 253, fig. 108. 1914; URBAN, Symb. Ant. 8: 249. 1920; BRITTON & MILLSPAUGH, Bahama Fl. 154. 1920; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 345. 1924; WILLIAMS, Fl. Trinidad & Tobago 1(5): 311. 1932; QUESTEL, Fl. Isl. St. Bartholomew 112. 1941; LEON & ALAIN, Fl. Cuba 2: 221, fig. 95. 1951; ARNOLDO, Gekw. en nutt. pl. Ned. Ant. 44. 1954; GOODING *et al.*, Fl. Barbados 172. 1965; ARNOLDO, Gekw. en nutt. pl. Ned. Ant. 224. 1971; ADAMS, Flowering plants of Jamaica 314. 1972: — *C. pellocarpus* G. F. W. MEYER, Prim. Fl. Esseq. 193. 1818; GRISEBACH, Fl. Br. W. Ind. Isl. 229. 1860; BRITTON & MILLSPAUGH, Bahama Fl. 154. 1920; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 345. 1924; WILLIAMS, Fl. Trinidad & Tobago 1(5): 311. 1932; LEON & ALAIN, Fl. Cuba 2: 222. 1951; — *C. icaco* L. var. *pellocarpa* (G. F. W. MEYER) DECANDOLLE, Prodr. 2: 525. 1825; URBAN, Symb. Ant. 4: 261. 1905; Symb. Ant. 8: 250. 1920.

Shrub or small tree; branches glabrous, reddish-brown with pale lenticels. Leaves elliptic to obovate or roundish, ascending, rounded or emarginate at the apex, rounded or cuneate at the base, shining above, 4—9 × 3.5—8 cm; petiole stout, 1—4 mm long. Inflorescence consisting of terminal and axillary cymes. Flowers silky-pubescent to woolly or greyish tomentose. Receptacle about 2 mm long, tomentose outside and more or less pubescent within. Sepals 2—2.5 mm long, triangular-ovate, acute. Petals white, obovate-spathulate, about 5 mm long. Filaments filiform, hirsute to villose, 5—6 mm long, connate at the base; anthers about 0.5 mm long. Ovary globose, about 1 mm in diam., hirsute. Drupe ovoid, obovoid, or ellipsoidal, 2—5 cm long, yellowish or white to black; pericarp fleshy or thin.

Florida, West Indies, South America, and tropical Africa.

Ranging from littoral woodland to dry evergreen forest, common in thickets at lower elevations; often to be found in fields abandoned from cultivation and along roadsides.

Vernacular names: ecacs (Leeward Group).

cocoa plum, fatpork, cocoa plant, cocoa (Windward Group).

Cultivated in Aruba, Bonaire and Curaçao.

SABA: Small Rendez-Vous, 400 m (Stoffers 2924, fl. Ap.); between The Bottom and The Saddle, 220—300 m (Stoffers 3095, fl. & fr. Ap.); Crispine (Stoffers 3460, fl. & fr. May); Castle Hill, sea-side, 300—350 m (Stoffers 4159, st. Aug.); slope of The Mountain, 600 m (Boldingh 1739, fl. & fr. July); The Bottom (Boldingh 2290, flb. July; Arnolde 1364, fl. March); between The Bottom and Mary's Point, 350 m (Boldingh 1491A, fl. July); between Crispine and Small Rendez-Vous, 300—400 m (Stoffers 3057, fl. & fr. Ap.); Long Peak (Suringar s.n., fl. Ap. [L]); without loc. (Arnolde 740, fl. & fr.).

ST. EUSTATIUS: top of The Quill, 400 m (Boldingh 339, st. June); slope of The Quill, 300 m (Boldingh 880, flb. June; Suringar s.n., fl. & fr. Ap. [L]); northern slope of The Quill (Stoffers 4015, fl. July; Grand Gut (Suringar s.n., fl. May); without loc. (v. Groll-Meyer 246, st.; 224, st.).

ST. MARTIN: Airfield (Stoffers 2410, fl. & fr. March); seashore near Simson Bay (Boldingh 3036, fr. Aug.); Low Lands (Boldingh 3273, fl. Sept.); Cole Bay (George s.n. sub Boldingh 2514, st. Aug.).

**Hirtella** Linnaeus, Spec. Plant. 34. 1753

Shrubs or small trees. Leaves simple, entire. Stipules deciduous. Inflorescence consisting of axillary and terminal panicles or racemes. Flowers generally small, white or greenish. Receptacle tubular. Sepals 5, imbricate, reflexed after anthesis. Petals 5, deciduous. Stamens 3—10 or more, unilateral; filaments united at the base, long exserted; anthers small. Ovary uni-locular, inserted on one side of the receptacle; style basal or lateral. Ovules 2, erect. Fruit dry or drupaceous, one-seeded. Seed erect.

About 90 species, natives of tropical America; one species in Madagascar.

**Hirtella triandra** Sw.

SWARTZ, Prodr. 57. 1788; Fl. Ind. Occ. 1: 508. 1797; GRISEBACH, Fl. Br. W. Ind. Isl. 230. 1860; DUSS, Fl. phan. Ant. franç. 258. 1897; URBAN, Symb. Ant. 4: 261. 1905; BOLDINGH, Fl. D.W. Ind. Isl. 1: 78. 1909; Fl. Ned. W. Ind. Eil. 200. 1913; URBAN, Symb. Ant. 8: 250. 1920; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 346. 1924; WILLIAMS, Fl. Trinidad & Tobago 1(5): 317. 1932; LEON & ALAIN, Fl. Cuba 2: 221. 1951.

Shrub or small tree; twigs strigose. Leaves lanceolate to elliptic, long-acuminate at the apex, acute or rounded at the base, up to 16 × 6 cm, the midvein hirsute-strigose, the lower leaf-surface slightly scabrous and glabrescent; petiole hirsute-strigose, 2—3 mm long. Stipules linear-subulate, 8 mm long. Inflorescence consisting of terminal and axillary, pubescent, up to 25 cm long panicles. Receptacle 2 mm long. Sepals ovate to elliptic, 3 mm long, strigose-pubescent outside, velvety-pubescent within. Petals ovate to broadly obovate, about 5 × 3 mm. Stamens 3, all fertile; filaments 1.5 cm long, filiform, pink. Ovary globose, densely hirsute, about 2 mm in diam.; style 1.5 cm long, hairy at the base. Drupe oblong-obovoid, 2—2.5 cm long and 0.5—1 cm broad, more or less hirsute, especially when young.

West Indies, Panama, and northern South America.

Wet or moist places; mainly in secondary rainforest and evergreen seasonal forest.

Vernacular name: hairy plum (Windward Group).

SABA: slope of The Mountain near Santa Cruz, 500—600 m (Stoffers 4349, fl. Aug.); Castle Hill, sea-side, 300—350 m (Stoffers 4169, fl. Aug.); slope of The Mountain near Hellsgate, 600 m (Boldingh 2277, fl. July); road to The Mountain (Arnoldo 861, fl. Aug.).

ST. EUSTATIUS: bottom of The Quill (Stoffers 3658, st. July; 3659, st. July).