## ERYTHROXYLACEAE

by

A. L. STOFFERS<br>(Instituut voor Systematische Plantkunde, Utrecht)

Glabrous trees or shrubs; flowering shoots usually conspicuously lenticellate, provided with approximate distichous, bicarinate and 2-3-aristate cataphylls at the base. Leaves alternate or opposite, petiolate. Stipules intrapetiolar, 2 or 1 to each leaf. Inflorescence consisting of axillary fascicles or the flowers solitary in the axils of the leaves or cataphylls. Flowers hermaphrodite, dimorphous, actinomorphous, 5 -merous. Sepals more or less connate, persistent. Petals free, deciduous. Stamens 10, the outer row epipetalous; filaments filiform; stamens dithecious with longitudinal dehiscence. Stamens of the brachystylous flowers all of the same length, longer than the styles; those of the dolichostylous flowers alternately shorter and longer, but always shorter than the styles. Pistil 3-carpellary; ovary 3-locular but in our species only one locule fertile; style 3, free or connate; stigma subcapitate. Fruit drupaceous, indehiscent. Seeds usually with endosperm.

Probably only one genus with more than 200 species in tropical America.
Erythroxylum P. Browne, Civ. Nat. Hist. Jamaica 1: 278. 1756
Characters and distribution as the family.
Key to the species:

1. Leaves $\mathbf{0 . 5} \mathbf{- 3 . 5} \mathbf{~ c m}$ long; drupes $\mathbf{4 - 6 ~ m m}$ long; short-shoots considerably flattened...................................................... . . E. rotundifolium Leaves $3.5-7 \mathrm{~cm}$ long; drupe 8 mm long; short-shoots not flattened E. havanense

## Erythroxylum rotundifolium Lunan

Lunan, Hort. Jam. 2: 116. 1814; Duss, Fl. phan. Ant. franç. 109. 1897; Britton \& Millspaugh, Bahama Fl. 198. 1920; Fawcett \& Rendle, Fl. Jamaica 4(2): 161. 1920; Britton \& Wilson, Sci. Surv. Porto Rico \& Virgin Isl. 5: 433. 1924; Leon \& Alain, Fl. Cuba 2: 371. 1951; Adams, Flowering plants of Jamaica 380. 1972; - Erythroxylum brevipes DeCandolle, Prodr. 1: 573. 1824; Grisebach, Fl. Br. W. Ind. Isl. 112. 1859 ['1864']; Urban, Symb. Ant. 4: 313. 1905; Boldingh, Fl. D.W. Ind. Isl. 1: 99. 1909; Fl. Ned. W. Ind. Eil. 228. 1913; Urban, Symb. Ant. 8: 317. 1920; Britton \& Wilson, Sci. Surv. Porto Rico \& Virgin Isl. 5: 432. 1924; Leon \& Alain, Fl. Cuba 2: 371. 1951; Arnoldo, Zakflora 34. 1954; Zakflora 120. 1964.

Deciduous shrub or small tree, up to 6 m tall; trunk up to c .10 cm in diam.; bark grey or light brown, smooth, becoming finely fissured; twigs strongly branched, some long and slender and many flattened short-spurs, roughened by the persistent stipules. Leaves petiolate; blades broadly obovate to obovate-oblong or roundish, rounded and slightly emarginate at the apex, cuneate to rounded at the base, $0.5-3.5 \times 0.5-2 \mathrm{~cm}$, thin to subcoriaceous, deep green above, pale green beneath, not areolate. Stipules acute, $1-1.5 \mathrm{~mm}$ long, ovate to ovate-lanceolate, acute or acuminate; petiole $2.5-5 \mathrm{~mm}$ long. Inflorescence consisting of loose, axillary clusters of 1-4 flowers; pedicels about equaling the petioles. Flowers fragrant, white. Calyx 1 mm long, 5 -cleft to the middle; lobes triangular-ovate, acute. Petals $3 \times 2 \mathrm{~mm}$, oblong, obtuse, with a ligule near the middle. Stamens 10; filaments united into a tube near the base; anthers 0.2 mm long. Ovary slightly obovoid, 1.5 mm long; styles $3 ; 1.7 \mathrm{~mm}$ long; stigma capitate. Fruit an oblong, obtuse, fleshy drupe, 4-6 mm long with the calyx persistent at the base, shining dark red, becoming dry and brown.

Bahamas, Greater Antilles, Virgin Islands, St. Martin, Guadeloupe, Curaçao, and Yucatan.
Curaçao: Seroe Christoffel, 200 m (Arnoldo 1703, fl. Oct.; Stoffers 234, f1. Oct.); Rooi Kajuda (Arnoldo 1090, fl. Aug.); Plantation Knip (Stoffers 1183, st. Dec.).

St. Martin: Cole Bay Hill (Stoffers 4501, fl. Aug.).
Erythroxylum havanense Jacq.
Jacquin, Enum. Syst. Plant. Car. 21. 1960; Duss, Fl. phan. Ant. franç. 109. 1897; Boldingh, Fl. D.W. Ind. Isl. 1: 99. 1909; Johnston, Proc. Bost. Soc. Nat. Hist. 34(7): 224. 1909; Boldingh, Fl. Ned. W. Ind. Eil. 228. 1913; Fl. D.W. Ind. Isl. 2: 44. 1914; Leon \& Alain, Fl. Cuba 2: 372. 1951.

Deciduous shrub, up to 5 m high; twigs reddish-brown, soon terete and greyish, lenticells prominent on newly emerged growth. Leaves often on short-shoots; blades elliptic, obovate or spathulate, obtuse, rounded or emarginate at the apex, acute or obtuse at the base, $3.5-7 \times 2.5-4 \mathrm{~cm}$, chartaceous to somewhat coriaceous, sometimes shiny above, margins sometimes subrevolute, midvein prominent beneath, minor venation reticulate; petioles $1-3 \mathrm{~mm}$ long, slender. Stipules bicostate but otherwise not striate, persistent. Inflorescence consisting of loose, several-flowered clusters; pedicels 4-6 mm long, striate but not angled. Flowers fragrant, white. Calyx 1 mm long, often deeply cleft, lobes deltoid. Petals $4.5-5 \mathrm{~mm}$ long, ligule near the middle. Stamens 10; filaments 2.5 mm long, united into a tube near the base; anthers $0.2-0.3 \mathrm{~mm}$ long. Ovary obovoid, 1.5 mm long; styles somewhat expanded, 2 mm long; stigma pointed. Drupe ellipsoid, fleshy, c. 8 mm long, with the calyx persistent at the base, red, becoming brownish and sulcate in drying.
Probably a wide ranging species under a number of different names.
In dry and wet vegetation types.
Vernacular name: bracelet (Windward Group).
Curaçao: Seroe Christoffel (Boldingh 5008, defl. Nov.); top of Hieronymus Berg (Boldingh 5125, fr. Nov.)

Saba: road to Mary's Point (Arnoldo 832, fl. Aug.); between Mary's Point and The Bottom, 300 m (Boldingh 1478, st. July); Spring Bay Gut (Boldingh 2128, fr. July).

St. Eustatius: from Little Mountains to Venus Bay (Boldingh 958, fr. June; Stoffers 4023, fr. July); hills near Zeelandia (Stoffers 3826, st. July); slope of The Quill near Bengalen, 170 m (Stoffers 3765, fr. July); top of The Quill, 400-500 m (Boldingh 329, fr. June; 495, st. June); slope of The Quill between Glass Bottle and White Wall, 270 m (Stoffers 4083, st. Aug.).
St. Martin: Mount Paradise (Le Gallo 888, st.); Milldrum Hill (Boldingh 3155, st. Sept.; 3314, st. Sept.).

