

MORINGACEAE

by

A. L. STOFFERS

(Instituut voor Systematische Plantkunde, Utrecht)

Trees; bark yielding a gum. Leaves alternate, deciduous, 2—3-imparipinnate. Stipules wanting or modified as glands at the base of the petioles and the pinnae. Inflorescence consisting of large, axillary panicles. Flowers hermaphrodite, zygomorphic; receptacle cup-shaped. Sepals 5, unequal, imbricate, spreading or reflexed. Petals slightly unequal, the interior one reflexed. Disk lining the receptacle, with a very short free margin. Stamens 5, epipetalous; filaments slender, somewhat unequal; anthers 1-celled, dorsifixed. Staminodes 5, epipetalous, subulate. Ovary superior, stipitate, 1-locular; style slender, tubular; stigma minute. Ovules numerous, attached in 2 rows to the 3 parietal placentas, pendulous. Fruit an elongate, 1-locular, angled capsule, dehiscing by 3 valves. Seeds large, 3-winged or wingless. Embryo straight. Endosperm wanting.

About 10 species in one genus in Africa and tropical Asia, especially in the semi-arid regions; one species widely cultivated and sometimes naturalized in the tropics.

Moringa Adanson, Fam. Plant. 2: 318. 1763

Characters and distribution as the family.

Moringa oleifera Lam.

LAMARCK, Encycl. 1: 398. 1785; URBAN, Symb. Ant. 4: 257. 1905; BOLDINGH, Fl. D.W. Ind. Isl. 1: 76. 1909; Fl. Ned. W. Ind. Eil. 199. 1913; Fl. D.W. Ind. Isl. 2: 33. 1914; FAWCETT & RENDLE, Fl. Jamaica 3(1): 248. 1914; URBAN, Symb. Ant. 8: 245. 1920; QUESTEL, Fl. Isl. St. Bartholomew 111. 1941; LEON & ALAIN, Fl. Cuba 2: 208, fig. 87. 1951; ARNOLDO, Zakflora 24, fig. 11. 1954; Zakflora 167, fig. 11. 1964; Gekw. en nutt. pl. Ned. Ant. 93, fig. 133. 1954; Gekw. en nutt. pl. Ned. Ant. 198, fig. 133. 1971; GOODING *et al.*, Fl. Barbados 170. 1965; ADAMS, Flowering plants of Jamaica 310. 1972; FOURNET, Fl. Guadeloupe & Martinique 536, fig. 259. 1978; — *Guilandina moringa* LINNAEUS, Spec. Plant. 381. 1753; — *Moringa pterygosperma* GAERTN., Fruct. & Sem.

2: 314. 1791; CRISSEBACH, Fl. Br. W. Ind. Isl. 16. 1859 ['1864']; Duss., Fl. phan. Ant. franç. 12. 1897; — *Moringa moringa* (L.) MILLSPAUGH, Field Mus. Bot. 1: 490. 1902; BRITTON & WILSON, Sci. Surv. Porto Rico & Virgin Isl. 5: 387. 1924.

Tree, up to 10 m tall, often crooked; wood soft; roots thickened, pungent; twigs slender, puberulent, lenticellate. Leaves often crowded towards the top of the twigs, up to 60 cm long; pinnae and leaflets opposite; leaflets numerous, ovate, obovate or oblong, 10—25 × 5—12 mm, rounded or slightly emarginate at the apex, cuneate at the base, the lower surface pale green; petiole thickened at the base, 10—15 cm long; petiolules 1—6 mm long. Stipules and stipellae modified as small glands. Panicles erect, up to 30 cm long. Bracts small. Flowers fragrant, white with a yellow tinge, touched with crimson at the outside near the base; pedicels 5—10 mm long, articulate below the apex. Receptacle 3—4 mm long. Sepals linear to linear-oblong, reflexed, 7—13 mm long, white, the superior one smallest, the inferior one largest. Petals hairy towards the base, linear to linear-oblong, the superior one 14—17 × 6—8 mm, the inferior one 10—13 × 5—8 mm. Stamens 5; filaments 6 mm long, hairy in the lower half, apex recurved; anthers 2 × 1—1.5 mm. Staminodes subulate, 6 mm long, hairy near the base. Ovary 3-angled, 3—4 mm long, densely hairy, its stipe 2—3 mm long; style 4 mm long, upwards glabrous. Capsule linear, 3-angled, pendulous, up to 45 cm long and 1—2 cm thick; valves with 3 strong blunt ribs. Seeds globose, 10 mm in diam.; wings up to 3 cm long and c. 0.5 cm wide.

Originally from India; nowadays cultivated and sometimes subs spontaneous in all tropical countries; probably subs spontaneous in Curaçao, Saba, St. Eustatius, and St. Martin.

Vernacular names: benboom, orenga, salaster (Leeward Group).
moringo, orsellia (Windward Group).

BONAIRE: Fontein (Stoffers 541, fl. Nov.).

CURAÇAO: Plantersrust (Lens 846, fl. Ap.).

SABA: The Bottom (Boldinck 1871, fl. July); Promised Land (Stoffers 3409, fl. May). without loc. (Arnoldo 914, fl.).

ST. EUSTATIUS: Oranjestad (Boldinck 66, flb. May); without loc. (v. Groll-Meyer 227, fl.).

ST. MARTIN: from Philipsburg to Belvedere (Boldinck 2576, fl. Aug.).