REVISION OF THE SAPOTACEAE OF THE MALAYSIAN AREA IN A WIDER SENSE

XXII [1]). Mastichodendron Cronquist

by

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Mastichodendron Cronquist, Lloydia 9, 1946, 245 — *Mastichodendron* (Engler) H. J. Lam, Med. Bot. Mus. Herb. Rijksuniv. Utrecht 65, 1939, 521; idem, Rec. Trav. bot. Néerl. 36, 1940, 521 — *Mastichodendron* Jacquin in Hedwig, Genera, 1906, 116, as a synonym in Bumelia — *Sideroxylon* L., section *Mastichodendron* Engler, Nat. Pfl. Fam., ed. 1, IV, 1, 1897, 144.

Trees, rarely shrubs. Leaves scattered, tertiary nerves transverse but the nerves subparallel to the secondary nerves. Stipules none. Flowers in few-flowered, axillary clusters. Sepals 5, imbricate. Corolla 5-lobed, lobes imbricate in bud. Staminodes 5, alternipetalous, inserted in the throat of the tube. Stamens 5, oppositi- and epipetalous, anthers dehiscing laterally. Ovary 5-celled, with one ovule in each cell. Fruit one-seeded, pericarp thin, seed with thin testa, scar circular, basal or basilateral, cotyledons thin, endosperm copious.

Type species: *M. foetidissimum* (Jacquin) Cronquist.

Distribution: A genus of seven species, one in Asia, one in South Africa and five in the Caribbean area of South America.

Remarks. The generic name *Mastichodendron* has never been validly published until 1946 when Cronquist validated the genus by providing a latin diagnosis. We can not regard Lam's publication of the generic name in 1939 as a valid one since nowhere one can find an indication that the name is based on Engler's section *Mastichodendron* of *Sideroxylon* (1897), in spite of the fact that the Kew Index refers to Engler as the first author and Lam as the second. The Kew Index can not be accepted to have given as the first one the correct generic name and combination of authors as at the same time it refers to Cronquist's paper of 1946. One could accept, however, the Kew Index reference as a valid publication were it not for the fact that Engler's publication of the sectional name *Mastichodendron* is not a valid one since no type species is indicated for the section nor does Engler refer to Hedwig's paper of 1806. Even if he did so then

[1]) I—III in Blumea VI, 1952, 547—595; IV, V in Blumea VII, 1953, 364—412; IVa in Blumea VII, 1954, 481—483; IIa, IVb, Va, VI—IX in Blumea VIII, 1957, 201—509; X—XII in Nova Guinea NS 8, 1957, 87—128; XIII—XVI in Blumea IZ, 1958, 21—142; XVII in Blumea, Suppl. IV, 1958, 263—267; IIb, IXa, XVIII, XIZ in Nova Guinea NS 10, 1, 1959, 131—143; XX—XXII in the present issue.

still this combination is not valid since Jacquin's *Mastichodendron* is merely mentioned as a synonym in the genus *Bumelia* and nowhere a valid publication by Jacquin of *Mastichodendron* can be traced.

It could be supposed that Engler used the sectional *Mastichodendron* entirely independent from Jacquin's name in Hedwig's Genera, but then still the fact remains that it is a sectional name and that as a generic name it never has been validly published.

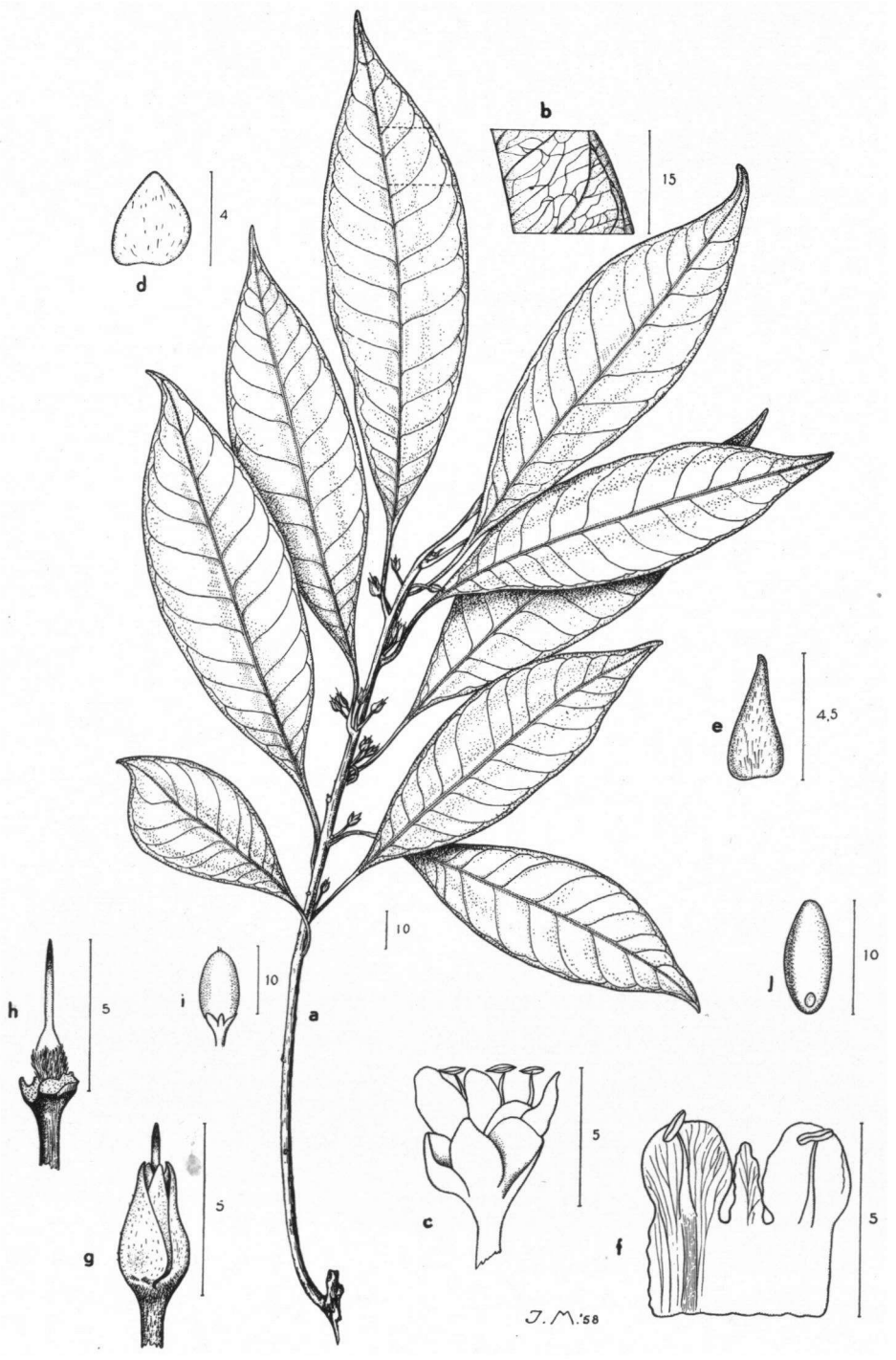
There is one more reason not to accept Lam's paper as the first paper that includes the valid publication of *Mastichodendron* as a generic name since the name is only provisionally proposed as such. On the other hand Lam confuses things by founding a subtribe *Mastichodendrinae* in the *Sideroxyloideae* (p. 524) as a "novus subtribus" which would mean that *Mastichodendron* is **not** provisionally proposed but definitely is accepted as a valid generic name.

With these objections in mind, of which some would say that it is a too rigorous applying of the nomenclatural rules, we have to accept Cronquist's paper as the first one that gives a vaild publication of the generic name *Mastichodendron.* For the same reasons we can not accept a note by Box and Philipson (Bull. Brit. Mus. (Nat. Hist.) Botany 1, 1, 1951, 22, footnote) were Lam's combination is regarded as valid.

According to Cronquist the difference between the Asian and American species of *Mastichodendron* might warrant a generic segregation but comparing the flowers of *M. foetidissimum* and *M. wightianum* these hold only good for the short corolla-tube in the former and the long one in the latter. The difference in size of the staminodes can hardly be regarded as sufficient for a generic separation. Also the position of the scar is no reliable detail since in *M. wightianum* the scar is either basal or basilateral, so similar to those of the American species.

1. M. wightianum (Hooker & Arnold) van Royen, nov. comb. — *M. wightianum* (Hooker & Arnold) H. J. Lam, l. c. 1939, 521, and l. c. 1940, 521 — *Sideroxylon wightianum* Hooker & Arnold, Bot. Beechey Voyage, 1841, 196, t. 141; A. DC, Prodr. 8, 1844, 178; Bentham in Hooker, Kew Journ. of Bot. 4, 1852, 302; Seemann, Bot. Voy. Hérald, 1852—'57, 397; Bentham & Hooker, Fl. Hongkong, 1860, 209; Hemsley, Journ. Linn. Soc. 26, 1889, 68; Lecomte, Fl. Gén. Indo-Chine 3, 7, 1930, 887—888 — *Bumelia harmandii* Lec., Bull. Mus. hist. nat. Paris 29, 1923, 179 and Fl. Gén., Indo-Chine 3, 7, 1930, 885.

Trees up to 7 m, rarely shrubs. Branchlets slender, 2—3 mm in diam., ferruginously tomentose but soon glabrous. *Leaves* elliptic, elliptic-oblong or obovate-oblong, 9—17 by 2.5—4 cm, obtusely or acutely acuminate, base narrowly cuneate, decurrent along sides of petiole; thin-coriaceous, glabrous on either side; midrib angular and prominulous above, rounded and prominent below, secondary nerves 12—17 pairs, ascending at an angle of c. 60°, curved, diminishing until inconspicuous, prominent on either side but usually stronger so below, tertiary nerves distinct on either side. Petioles 1—2 cm long, triangular in transverse section, angular below, slightly puberulous near the base only. *Flowers* in 2—5-flowered, axillary clusters; pedicels angular, 5—10 mm long, brownish sericeous-tomentose. *Sepals* lanceolate or ovate, 2—5 by 1.5—2.5 mm, obtuse, brownish sericeous-tomentose on the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outside, glabrous within, inner sepals fimbriate along the margin. *Corolla* 5—6 mm long, glabrous, lobes suborbicular, 2.5—3.5 mm in diam., rounded. *Staminodes* oblong or ovate-oblong, 2—3 by 1—1.5 mm, obtuse. *Stamens* 5, 3—4 mm long, filaments filiform, c. 2.5 mm long, glabrous, anthers oblong, c. 1.2 mm long, mucronate, glabrous. *Ovary* ellipsoid, c. 1.5 by 1 mm, 5-celled and -grooved, ferruginously hirsute at base. Style filiform, c. 4 mm long, glabrous. *Fruits* ellipsoid or obovoid, 1—1.5 by c. 0.5 cm, obtuse at apex and often with a short remnant of the style; pericarp glabrous; seeds ellipsoid, laterally compressed, slightly smaller than the fruit, testa cartilaginous, scar circular, basal or basilateral, cotyledons thin, endosperm copious.

Type specimen: *Millett s.n.* in K.

Vernacular name: Wight's ironwood (Hongkong).

Distribution: Hongkong, SE China, Indo-China.

HONGKONG. Happy Valley: *Feilberg s.n.* (C, L, S), tree, fl.; Botanical Garden: *Forbes 266* (BM), fl.; without known loc.: *Wright 25* (?) (K, L, US), fl. & fr.; ibidem: *Stinds s.n.* (BM), fl.; ibidem: *Seemann 2477* (BM), fl.; ibidem: *Hance 853* (BM), fl. & fr. Nov.

CHINA. Kwantung prov., Tapu distr., Tung Koo Shan, thicket along roadside on gray clay: *Tsang 21706* (A, K), tree 2.3 m, fl. & fr. Sept.; Yang Shan distr., south of Linchow at Yang Shan and vicinity: *Tsui 517* (A, K), tree 3 m, fr. green; near Macao: *Nelson s.n.* (BM), fl.; ibidem: *Millett s.n.* (K); Lantau Island, Taai Ue Shaan, in small ravine: *Tsang 16568* (BM), fl. white, Dec.; Kwangsi prov., Shang-Sze distr., Shap Mau Taai Shan near Iu Shan village: *Tsang 22349* (BM), fr. May, black.

INDO-CHINA. Tonkin, Mé-Không delta: *Harmand s.n.* (P), fl., type specimen of *Bumelia harmandii* Lec.; Hony-ay Bay: *Balansa 1060* (K, P), tree 3—4 m, fl. Dec.

Remarks. Accepting Lam's publication about *Mastichodendron* as not valid the combination of authors had to been changed also, as given above.

Fig. 1. *M. wightianum*, a. branchlet with leaves and flowers, b. part of leaf showing tertiary nervation, c. flower, d. outer sepal, outside, e. inner sepal, outside, f. part of corolla, inside, g. immature fruit, h. gynaecium, i. fruit, j. seed. (*Tsang 21706*). All sizes are in millimeters.