

THE GENUS MYOPORUM IN THE NETHERLANDS' INDIES.

by

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Myoporum

BANKS & SOLANDER, ex FORSTER, Prodr. (1786) p. 44, n. v. Most important literature: R. BROWN, Prodr. (1810) p. 515; ENDLICHER, Genera (1839) p. 642; A. DE CANDOLLE, in D.C., Prodr., XI (1847) p. 706; BENTHAM, Fl. austr., V (1870) p. 2; BENTHAM & HOOKER FIL., Gen. pl., II, 2 (1876) p. 1124; F. v. MUELLER, Descr. & Ill. Myop. pl. Austr. (1886) t. 56—72; BAILLON, Hist. pl., IX (1888) p. 420, ic. 487; WERTSTEIN, in ENGL. & PR., Nat. Pflanzenfam., IV, 3b, p. 359, ic. 144, n-v, 142, 143 (1895); BAILEY, Queensland Fl., IV (1901) p. 1154; DOMIN, in Bibl. Bot., XXII, fasc. 89, p. 1163 (1929); KRÄNZLIN, in FEDDE, Repert., Beihefte, LIV (1929) p. 14.

Flowers zygomorphous, or rarely almost actinomorphic. Calyx persistent, divided down to the middle or nearly to the base into 5 lobes or segments not enlarged after flowering. Corolla with 5 lobes imbricate in bud, nearly equal, or the anterior ones rather larger; corolla tube usually short and almost campanulate or shortly cylindrical at the base. Stamens usually 4, in pairs of unequal length, inserted in the corolla tube and alternating with its anterior lobes, rarely almost equal and as many as corolla lobes, scarcely or shortly exerted; anther cells opening longitudinally, at first nearly parallel, confluent at the apex, and usually forming a single reniform cell when open. Ovary superior, not lobed, 2- to 10-celled, with one ovule in each cell, or rarely 2-celled with 2 ovules in each cell; ovules pendulous, anatropous and apotropous; style simple, un-

divided, or obscurely notched at the apex. Drupe ovate or subglobose, usually small but more or less succulent, the endocarp 2- to 10-celled; seeds usually solitary in each cell, with endosperm; embryo straight, with a superior radicle. — Shrubs, trees, or prostrate plants. Leaves spread or rarely opposite, undivided, entire or toothed. Flowers axillary, single or usually in clusters of 2, 3, or more. Bracts at the base of the pedicels very small or none, no bracteoles on the pedicels. Flowers small, white, or yellow, or pale rose-red.

Distribution (according to KRÄNZLIN): S. China, Japan, Yokugi Islands, Lu-Chu Archipelago, Formosa, New Guinea, Australia and Tasmania, Hawaii Islands, Admiralty Islands, Norfolk Island, New Caledonia, New Hebrides, Kermadec Islands, New Zealand, Rodriguez Island, Mauritius.

In the area dealt with only one species:

Myoporum papuanum KRÄNZLIN — *Myoporum tenuifolium* (non FORSTER 1786) VALETON, in Bull. Dép. Agr. Ind. Néerl., X (1907) p. 61; *Myoporum papuanum* KRÄNZLIN, in FEDDE, Repert. sp. nov., XXII (1926) p. 338; *idem*, Beihefte, LIV (1929) p. 4.

Young twigs terete, 1—5 mm in diameter between the adult leaves, attenuate towards the extremities, glabrous. Leaves at distances of 3—20 mm; petiole 4—10 mm long; lamina lanceolate, 3.5—10 cm long, 0.5—1.5 cm broad, acute or somewhat acuminate towards the acute apex, attenuate into the petiole, quite entire, chartaceous, entirely glabrous, penninervous with 3—5 lateral nerves on each side of the midrib. Flowers in a median series of 2—6 in the axils of normal leaves, on pedicels 5—9 mm long, 0.3—0.5 mm in diameter; whole flower 5—7 mm long. Calyx nearly regular, entirely glabrous, usually 5-merous, rarely 4-merous, 1.5—2 mm long, its tube cup-shaped, 0.3—0.5 mm long, 1.5—1.7 mm wide, its segments narrow-triangular, 1—1.7 mm long, 0.5—1 mm broad, often rather strongly acuminate towards the acute apex. Corolla nearly regular, 4—6-merous, usually 5-merous, entirely glabrous inside and outside, also in bud, oblong-ellipsoidal or more ovate in the state of adult bud, 4.75—6.75 mm long after opening, its tube campanulate-infundibuliformous, 3—4.25 mm long, 3—4 mm wide, its lobes spreading, 1.75—2.5 mm long, 1.5—2 mm broad, rounded at the apex. Stamens 3—5, usually 4 in number, entirely glabrous, the two longer ones 3—3.2 mm long, with filaments 2.3—2.5 mm long, inserted nearly in the middle of the corolla tube, the two shorter ones 2.25—3.2 mm long, with filaments 2—2.5 mm long, inserted somewhat below the middle of the corolla tube; anthers 0.5—1 mm long, 0.8—

1 mm broad. Pistil 3.75—5.5 mm long, entirely glabrous; ovary oviformous, conical towards the apex, rounded at the base, 3—4-celled, 1.5—3 mm long, 0.9—1.5 mm in diameter; style terete, 2—3.5 mm long, 0.3—0.4 mm in diameter; stigma 0.1—0.2 mm high, 0.4—0.5 mm in diameter. Fruit-bearing pedicels 6—11 mm long, 0.4—0.5 mm in diameter. Drupe oviformous in the dry state, acute, entirely glabrous, with reticulate wrinkles, 3—4-celled, up to 4.5 mm long, 4 mm in diameter, bearing a 3—4 mm long filiformous style or a 0.75 mm long style rudiment. (Description from all the specimens listed below.)

KRÄNZLIN describes the corolla lobes as "intus ad orificium pilis sparsissimis obsiti". VALETON, however, describes the corolla as entirely glabrous, inside and outside, and so I found it, in bud as well as in the open state. KRÄNZLIN mentions that 3 of the corolla lobes are a trifle longer than the other two and bear a minute mucro at their apex. I did not discover these small mucros, and the differences in dimensions of the lobes appear to me to be very slight.

Determining the New Guinea plants with BENTHAM's *Flora Australiensis* (V, p. 2—3), one must arrive at *M. acuminatum*. This species appears to be very polymorphous, and BENTHAM distinguishes 4 races of it. Our New Guinea plants agree as well with the race *angustifolium* (= *M. montanum* R. BR.), as with the race *parviflorum*, and more especially with the form from New Caledonia, with glabrous corolla (= *M. tenuifolium*).

KRÄNZLIN split up BENTHAM's *M. acuminatum* into 4 species, which nearly agree with BENTHAM's races, but are more sharply defined against each other. The New Guinea plants agree fairly well with his *M. montanum*, which is synonymous with BENTHAM's race *angustifolium*. They, however, neither exactly agree with any of KRÄNZLIN's species, nor with any of BENTHAM's races, and it seems advisable, therefore, to keep them, provisionally, apart as a distinct species. Both authors, however, based their distinctions upon very few specimens only, and it appears, therefore, quite possible that, after the examination of more abundant materials, *M. papuanum* will prove to be synonymous with some Australian species or variety.

According to KRÄNZLIN, the New Guinea plants come very near to *M. montanum*, but differ from it by more slender and longer-infundibulous flowers and smaller calyces. The latter character cannot be of much importance, as KRÄNZLIN describes the calyx of *M. montanum* as 1.75—2 mm long. According to him, *M. papuanum* shows, as regards the form of the corolla, a greater resemblance with *M. tubiflorum* and

M. tenuifolium, which are said to have exactly actinomorphic flowers. According to the descriptions given by KRÄNZLIN, *M. tubiflorum* and *M. tenuifolium* also differ from *M. papuanum* by leaves that are 2—2.5 cm broad, a corolla that is slightly bearded inside, and a style that is somewhat hairy. From this it is evident that his *M. montanum* almost entirely agrees with his *M. papuanum*, "zur vollendeten Täuschung", as he says himself. For KRÄNZLIN, however, a strong argument for the specific distinction lies in the fact that the distance between the distribution areas is large, whereas the present author, on the contrary, would be more inclined to accept this as an argument for the idea, that *M. papuanum* might be a geographical variation of a more polymorphic Australian species.

Distribution.

Northern New Guinea: Jotifa (?) Bay, coastal range of a thinly wooded peninsula, on muddy sand, 1—2 m alt., 16 IX 1911, K. GJELLERUP no. 682 (B); tree nearly 3 m tall, with white odourless flowers, fruits of the size of a pepper-fruit, red-brown, succulent, the leaves light-green, the bark light brownish-grey; few specimens scattered. Humboldt Bay, prof. WICHMANN's Expedition, 1903, coll. ATASRIP no. 86 (B, L).