

MISCELLANEOUS BOTANICAL NOTES XXI

C. G. G. J. VAN STEENIS *et al.*

131. TWO BEACH PLANTS FROM NUBIAM ISLAND, MILNE BAY DISTRICT, PAPUA

Two widely distributed beach plants, but hitherto unknown from New Guinea, have been found on this small uninhabited island, situated on the southcoast of Kiriwina Sub-district, 8°30' S, 151°05' E, by Mr A. Gillison, Oct. 1966.

Triumfetta procumbens Forst. f. (*Tiliaceae*) has the huge distribution from the Seychelles in the western Indian to the Tuamotus in the Central Pacific Ocean, but is extremely rare in Malesia, where it has only been collected in the North Moluccas (Sulu and two islets south of Mindanao, further in the Admiralty Is, New Britain, the Solomons, and the Louisiades). Cf. Pacific Plant Areas 1 (1963) t. 11. This is now found in Nubiam Island (NGF 25289).

The allied *T. repens* which grows in similar habitat, wide sand beaches, and which is in contrast rather common in Malesia, has also never been found in New Guinea.

The reason why they almost exclude each other is obscure. I have suggested that certain properties of the sand beach, possibly the calcareous content, is the reason. On Nubiam I. the sand is limestone sand. And of course most beaches in the oceanic islands consist of coral limestone sand. The majority of the localities of *T. repens* are in places where the sand is derived from granite or andesite. This is probably the solution of their different ecologies; Backer already suggested a fairly large difference between the flora of calcareous and non-calcareous beaches, but to my knowledge never tabulated the species.

Capparis spinosa L. var. *mariana* (Jacq.) K. Sch. (*Capparaceae*) has, according to Jacobs (Blumea 12, 1965, 420), a wide distribution, occurring almost in all Pacific islands, but becoming rare in the vicinity of the Malesian Archipelago where it has only been found in Luzon and Timor, both coastal and inland, often on limestone, but not necessarily so. This had also been found in Nubiam Island by Mr A. Gillison in limestone beach forest and shore formation in salt spray in the Barringtonia formation (NGF 25294, 25298, det. Jacobs); an interesting record.

132. POLYGALA ELONGATA KLEIN EX WILLD. IN MALESIA (POLYGALACEAE)¹⁾

In my revision of the Malesian herbaceous species of *Polygala* there was some doubt about the occurrence of *P. elongata* in Malesia. Various sheets named so appeared to be misidentified; some sheets could not be traced. From the Philippines there were two specimens from Mindanao which may belong to this species but differ slightly from material from continental Asia. Recently, however, a new collection from New Guinea showed that *P. elongata* occurs also in Malesia.

Polygala elongata Klein ex Willd., Sp. Pl. 3 (1803) 879; Adema, Blumea 14 (1966) 273, fig. 18.

¹⁾ By F. Adema.

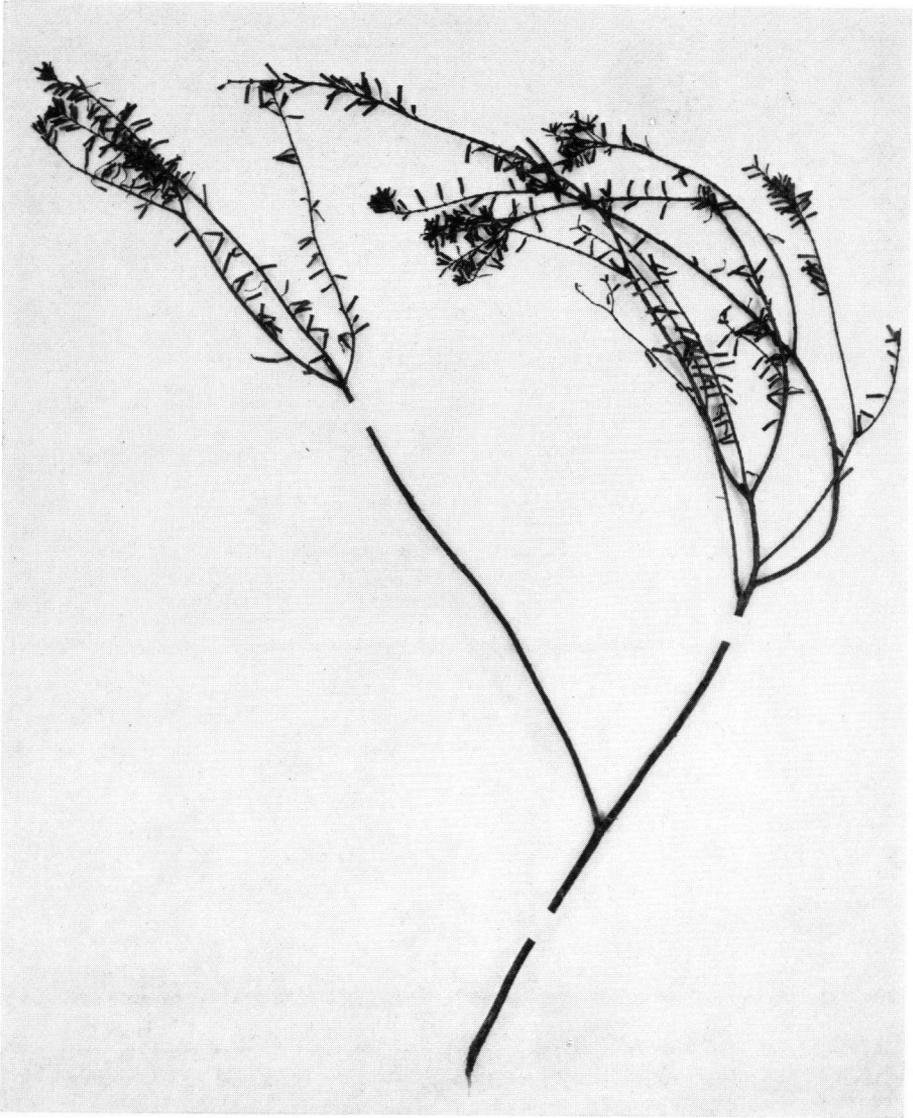


Fig. 1. *Medinilla ericoidea* Steen. Habit, $\times 0.6$. (H. J. Lam 1907).

EAST NEW GUINEA. Morobe Dist., Bulolo, in grasslands, 1000 m, flowers yellow, 28-5-1965, NGF 21112 Kairo.

133. NOTE ON TRIGONIASTRUM HYPOLEUCUM MIQ. (TRIGONIACEAE)

Last year Mr F. S. P. Ng brought to my knowledge that in my treatment of *Trigonias-trum hypoleucum* Miq. in Fl. Mal. 4 (1949) 59 an error has been made with the number of ovules. In contrast with the other genera it was stated (l.c.) that there was only 1 pendulous ovule per cell. As a matter of fact there are 2 pendulous apical ovules in each cell. It appears that consistently only one of them develops into a seed, the aborted one often remaining visible in the fruiting stage. Dr W. M. van Heel has checked this on abundant pickled material kindly provided by Mr Ng (*KEP FRI 6171*) and on fruiting collection (*King 7709*).

134. FLACOURTIACEAE

Scolopia kermodei C. E. C. Fisher, Kew Bull. (1935) 574.¹⁾

MALAY PENINSULA. Ulu Kelantan, Gua Musang, summit of limestone hill, *KEP FRI 5580* F.S.P. Ng, tree 9 m, 10 cm Ø, flowers white except for the pale yellow stigma and anthers, immature fruit green.

Distribution: Known from Burma and the Andaman Islands, new for the Malay Peninsula and Malesia.

135. PHYLLANTHUS TENELLUS ROXB. IN MALESIA (EUPHORBIACEAE)

Roxburgh described from the Calcutta Botanic Garden an annual herbaceous *Phyllanthus*, in habit resembling *P. niruri* and *P. urinaria*, which he said was introduced in 1802 from Mauritius. Baker (1877) recorded it from the Seychelles and Africa, denying having seen it from Mauritius. It is certainly not a native of India and has apparently also not naturalized, at least not on any large scale like the two other species mentioned. Hooker did not include it in the Flora of British India.

This is in great contrast with its behaviour in the New World where it occurs in the SE. United States, Central America (Jamaica and the Lesser Antiles), and Brazil. From Brazil it was, according to Webster, also described as a separate species, *P. cordovacensis*, by Mueller-Arg., and from Jamaica as *P. minor* by Fawcett & Rendle.

However, its affinity points to Old World origin, from the Madagascan area, as Leandri and Croizat take it even synonymous with *P. nummulariifolius* Poir. Webster keeps it apart but agrees to its very close alliance (J. Arn. Arb. 38, 1957, 52—53).

It remained unknown from Malesia but during a course in systematics it turned out to have been found in the nineties as a weed in the Botanic Gardens at Bogor (*Schiffner 2144, 2153*); also recently as a weed on a cemetery near Brisbane. It is noteworthy that its aggressive power is so much less in the Old World as compared with that in the New World.

Phyllanthus tenellus Roxb., Fl. Ind. ed. Carey 3 (1832) 668; M.A. in DC., Prod. 15, 2 (1866) 337, pro var. *roxburghii* M.A.; Baker, Fl. Maur. (1877) 310; Hook. f. in Hook., Ic. Pl. (1887) t. 1569; Webster, J. Arn. Arb. 38 (1957) 52, fig. 6. — *Diasperus tenellus* O.K., Rev. Gen. Pl. 2 (1891) 601.

¹⁾ The identification is by Dr H. Sleumer.

- P. cordovacensis* M.A., Fl. Bras. 11, 2 (1873) t. 6 fig. 2.
P. minor Fawc. & Rendle, J. Bot. 57 (1919) 65; Fl. Jam. 4 (1920) 257.
P. nummulariifolius (non Poir.) Leandri, Not. Syst. 7 (1939) 168; Croizat, *Torreya* 42 (1942) 14.

136. THE IDENTITY OF ACACIA TOMENTELLA ZIPP. EX SPAN. FROM TIMOR
 (LEGUM.-MIMOS.)

Among some indetermined *Acacia* specimens I found in the Leyden Herbarium five sheets, all obviously collected by Zippelius in Timor in 1828, which he had named *in sched. Inga sulcata* Zipp. Blume added two other names *in sched.*, viz. *Acacia spanoghei* Bl. and *Acacia zippeliana* Bl., later ticketed by Miquel *Acacia tomentella* Zipp. This material was validly described as *Acacia tomentella* Zipp. ex Span. by Spanoghe, *Linnaea* 15 (1836) 199, and accepted by Miquel, Fl. Ind. Bat. 1 (1855) 13 as a distinct species. I have not found this name evaluated; the authentic material all belongs clearly to the common *Acacia pennata* Willd. to which it is here formally reduced.

137. CORSIA IN THE SOLOMON ISLANDS (CORSIACEAE)

Though the woody flora of the Solomons is undergoing intensive exploration since a few years, our knowledge of the herbaceous flora should also be increased. There may be interesting generic extensions among it.

This is shown by the find of *Corsia* sp., a genus hitherto not known outside New Guinea. It was collected by Mr G. F. C. Dennis (*BSIP 7866*) in South Central Guadalcanal, on a ridge top, Mt Hai'anja, c. 1500 m alt. in primary montane forest, in deep litter and moss, Jan. 17, 1967. This fits well with the occurrence in New Guinea, all known localities being between 1000 and 2300 m.

In absence of a revision the species cannot readily be identified; its flowers are notably smaller than those of the Papuan ones: hood hardly 6 mm long, other tepals 5 by hardly $\frac{1}{2}$ mm and 3-nerved.

138. AN ENIGMATIC PAPUAN MELASTOMATACEAE

On his Doormantop Expedition in 1920 Dr H. J. Lam collected a curious, c. 40 cm high shrub of ericoid habit which he recorded as common in undergrowth in montane forest, especially gregarious in openings, between 1300 and 2600 m.

Lam gave ample field characters, but from these nothing can be derived about the structure of the flower and fruit: 'leaves pale green, petiole dull purple. Calyx dull yellow-red, the lobes greenish. Corolla white. Filaments white, anthers purple. Stigma dull brown. Fruit dull red-orange'. Obviously there were only few flowers and they were delicate, reason to preserve them in liquid. Unfortunately, this material in liquid can not be traced.

Its peculiar vegetative characters are that the ericoid leaves are in whorls of 3 and have a single midrib and a truncate, toothed apex; the stems are short-glandular hairy and the flowers are solitary, axillary, with 2 pairs of bracteoles, one in the lower half and one halfway the stalk.

Originally it was referred to the *Ericaceae*, later to the *Melastomataceae*. Judging from an annotation on the label it has been in the hands of Mansfeld who affirmed the latter identification. May be the second World War prevented Mansfeld to describe it; it would seem not unlikely that he had the flowers and fruit in liquid at his disposal.

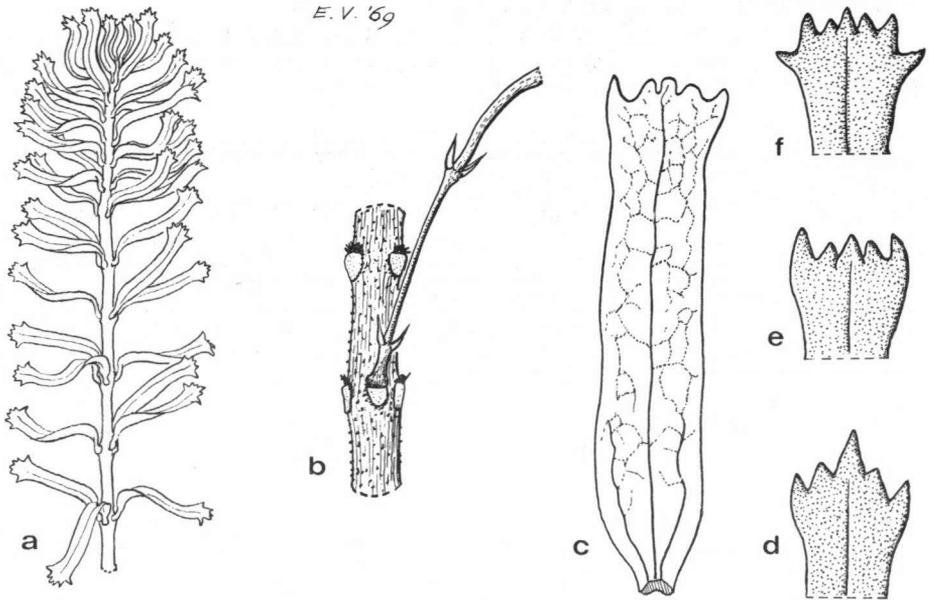


Fig. 2. *Medinilla ericoidea* Steen. a. End of twig, $\times 2$, b. flower stalk, with 2 pairs of bracts, the tip is the stipe of the ovary, $\times 6$, c. leaf, made transparent, showing basal nerves, $\times 12$, d.—f. variation in leaf tips toothings, $\times 12$. (H. J. Lam 1907).

Later this affinity was abandoned because in Old World *Melastomataceae* ericoid leaves without curvi- or plinerved veins were unknown.

However, the solution to this problematic plant, which has curiously not been re-collected in the past twenty years of intensive exploration of the Papuan flora, has now emerged, although its precise generic designation is not absolutely certain. This note largely serves to fix attention to it of all those who are engaged in field exploration in New Guinea.

The family identity emanated from pre-identifying Papuan plants collected by the personnel of the Division of Botany, Lae, among which were some curious small- and narrow-leaved species of *Medinilla* which had a toothed margin and tip, short-glandular hairy stems, and pedicels similar to the Doormantop plant.

These belong to the affinity of at least two Papuan *Medinillas* which are aberrant, viz. *M. myrtiformis* Triana and *M. monantha* Merr. The latter is variable and *M. papuana* Baker f. has been reduced to it. There is also a var. *subuninervis* Mansf. of the latter.

Though the leaves of these species are by no means ericoid, especially the latter variety shows that the curvinerved leaves in *Medinilla* may become triplinerved.

When making the leaves transparent with chloralhydrate, it appeared that also the leaves of the enigmatic plant possess two tiny basal nerves. This clue rounds off the correct family identity and generic affinity, with which Dr Bakhuizen van den Brink Jr agrees.

***Medinilla ericoidea* Steen., sp. nov. — Fig. 1—2.**

Ex affinitate *M. monanthae* Merr. et *M. myrtiformis* (Naud.) Triana. Frutex 40 cm alta, ramosa, ramuli breviter glanduloso-pilosa. Folia 3-verticillata, subcoriacea, breviter petiolata, linearia, apice truncata et grosse c. 5—7 dentata, 4—5 \times 0.6—0.7 mm. Inflorescentiae axillares, 1-florae, pedicellis 5 mm longis, basin versus et ad dimidium 2 paribus bracteolarum munitae.

WEST NEW GUINEA. Mt Doorman, rather flat, damp, mossy forest, c. 1450 m (common undergrowth between 1300—2600 m, especially in glades), *H. J. Lam* 1907, Nov. 7, 1920 (holotype in L).

Remarks. This appears to our knowledge to be the first Old World melastomataceous plant with ericoid habit, a life form which is well known from the New World, as is abundantly illustrated in *Flora Brasiliensis*: the genus *Marcetia* and some others are entirely ericoid, in other genera some species are. It is interesting to recognize that this tendency is apparently also represented in the Old World genetic capacity.

Furthermore, it is noteworthy that the heath-like life form is in no way a response to drought; contrarily, *M. ericoidea* grows in the dampest places imaginable under everwet montane conditions, where also other non-ericoid species of *Medinilla* abound. It is a striking testimony of the correctness of my objections against declaring all life forms as 'adaptations' (see *Biol. J. Linn. Soc.* 1, 1969, 101).

Whether the species of this affinity should be relegated to *Medinilla* is not absolutely certain; anyway they form certainly a special section; besides the glandular hairy stems and toothed leaves they share also a remarkably long stipe under the ovary and fruit which does not belong to the pedicel; in the basal part of the flower stalk there are two tiny bracts and halfway an other pair which should be called bracteoles. The end of the stalk is the stipe-like hypanthium. Obviously the solitary flower is a reduced cyme. See fig. 1.

Provisionally I believe it would be advisable to accommodate these species in a section of *Medinilla*, a large and variable genus.