

MISCELLANEOUS BOTANICAL NOTES VII ¹⁾

by

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53. Reduction of *Tardiella* to *Casearia* (Flacourt.)

In a posthumous paper of Gagnepain a new monotypic genus *Tardiella annamensis* Gagn. has been described, assigned to the *Canellaceae* (Not. Syst. 15: 32—33. 1954). The author remarks that for a long time *Canellaceae* were restricted to the New World, but that later one genus, *Cinnamosma*, from Madagascar was described by Baillon. *Warburgia* occurs further in tropical East Africa.

The characters of the new genus seemed rather aberrant in *Canellaceae* which possess 3 sepals instead of 5 in *Tardiella*, in the fascicled flowers. Phytographically the occurrence of a *Canellaceae* in Tonkin would be most remarkable. The translucent dots and lines in the leaves led me to suspect identity with *Casearia* with which the description fits very well indeed.

Through the kindness of Dr Leandri, I could borrow the type from the Paris Museum, and could observe the presence of stipules (which are absent in *Canellaceae*) and corroborate my preliminary opinion which is shared by Dr Sleumer and apparently also by Dr Kuhlmann who put a label to the type assigning it to the *Flacourtiaceae*. There is no doubt whatsoever that *Tardiella* is synonymous with *Casearia*.

As to the specific identity there is less certainty as the type is rather poor and bears only juvenile leaves. Apparently it comes close to *C. glomerata* Roxb. but both Dr Sleumer and I are of opinion that a final decision should be postponed until the SE. Asiatic *Casearias* will be revised; we are reluctant to transfer it at the present moment.

It is most unfortunate that the new generic name dedicated to one of our distinguished contemporary botanists has to become obsolete, a fate she shares with many others as I remarked formerly (Bull. Bot. Gard. 17: 461. 1948); may it soon be revived in some other permanent form.

¹⁾ The first paper in this series appeared in Bull. Bot. Gard. Btzg III, 17: 383—411. 1948; the 2nd in Blumea 6: 243—246. 1948; the 3rd in Bull. Bot. Gard. Btzg III, 18: 457—461. 1950; the 4th in Reinwardtia 1: 467—481. 1952; the 5th in Acta Bot. Neerl. 2: 298—307. 1953; the 6th in Blumea 7: 595—598. 1954.

54. Field-notes on *Kjellbergiodendron* (Myrt.)

In Nov. 1953 I could make some field-notes on a cultivated specimen of *Kj. celebicum* (Koord.) Merr. in fruit in the Botanic Gardens at Bogor, in addition to the description by Burret (Notizbl. Ber.-Dahl. 13: 101—106. 1936).

Medium-sized tree, c. 15 m. Bole smooth, terete, bark reddish, peeling in thin slices like in many *Eugenias*; buttresses very small. Ripe fruit rose-peach-coloured, smooth, dull, immature green. Seed canary-yellow in section. Pericarp of immature fruits 2—4 mm diam., that of the mature ones c. 7 mm diam. Immature fruits c. 3 by 2.25 cm, mature ones 3.25 by 2.75 to 4.25 by 3.25 cm, broadly ovoid to broadly ellipsoid. Seed basally attached; testa inside brown, glossy, veined, entirely connate with the spongy pericarp which is not segregated in endo-, meso-, and exocarp; pericarp with many large oil-glands. The seed smells in section resinous-aromatic and exudes a sticky substance. Cotyledons very unequal; from the outside only one cotyledon is visible embracing the other, small cotyledon which is once folded and is about equal in size to the stout rootlet. It should be remarked that the structure of the seed stresses the affinity of this genus with *Whiteodendron* (cf. Acta Bot. Neerl. 1: 435—442. 1952).

55. Two padang plants from Southeast Celebes

Among the plants collected by J. Elbert in the Rumbia district a. 1909 I found two new records for SE. Celebes, from a place called Wambakowu, in the Rumbia District, which are apparently from an open, moist, sandy lowland locality viz: *Xyris pauciflora* Willd. (no 3087) and *Drosera burmanni* Vahl (no 3094). Siliceous sand was adhering to the roots. This would suggest the local occurrence of typical padang soils in the Rumbia District (cf. Bull. Jard. Bot. Btzg III, 12: 179—186. 1932).

56. A new *Neoalsomitra* from South Malaysia (Cuc.)

Recently I gave¹⁾ some ecological and medicinal data on a remarkable, podagric *Neoalsomitra* which is characterized by a swollen, succulent, spiny stem-base. In the absence of flowers and fruits it was impossible to verify its specific identity.

Thanks to the diligent help of the curators of Kebun Raya Indonesia, Bogor, male flowers and fruits have been received from cultivated specimens in the Botanic Gardens at Bogor. These new data corroborate my tentative opinion that it represents a new species.

Neoalsomitra podagrica n. sp. (nom. prov. in Webbia 11: ... fig. 1955).
— Fig. 1.

Differt a speciebus descriptis caudice incrassato carnosio spinoso, foliis pedatis 5-foliolatis eglandulosis, foliolis papyraceis subglabris, inflorescentia puberula pilis ecapitatis, fructu tubuloso-cupulato 1.25—2 × 0.75—0.8 cm,

¹⁾ Webbia 11: 189—196, 2 fig. 1955.

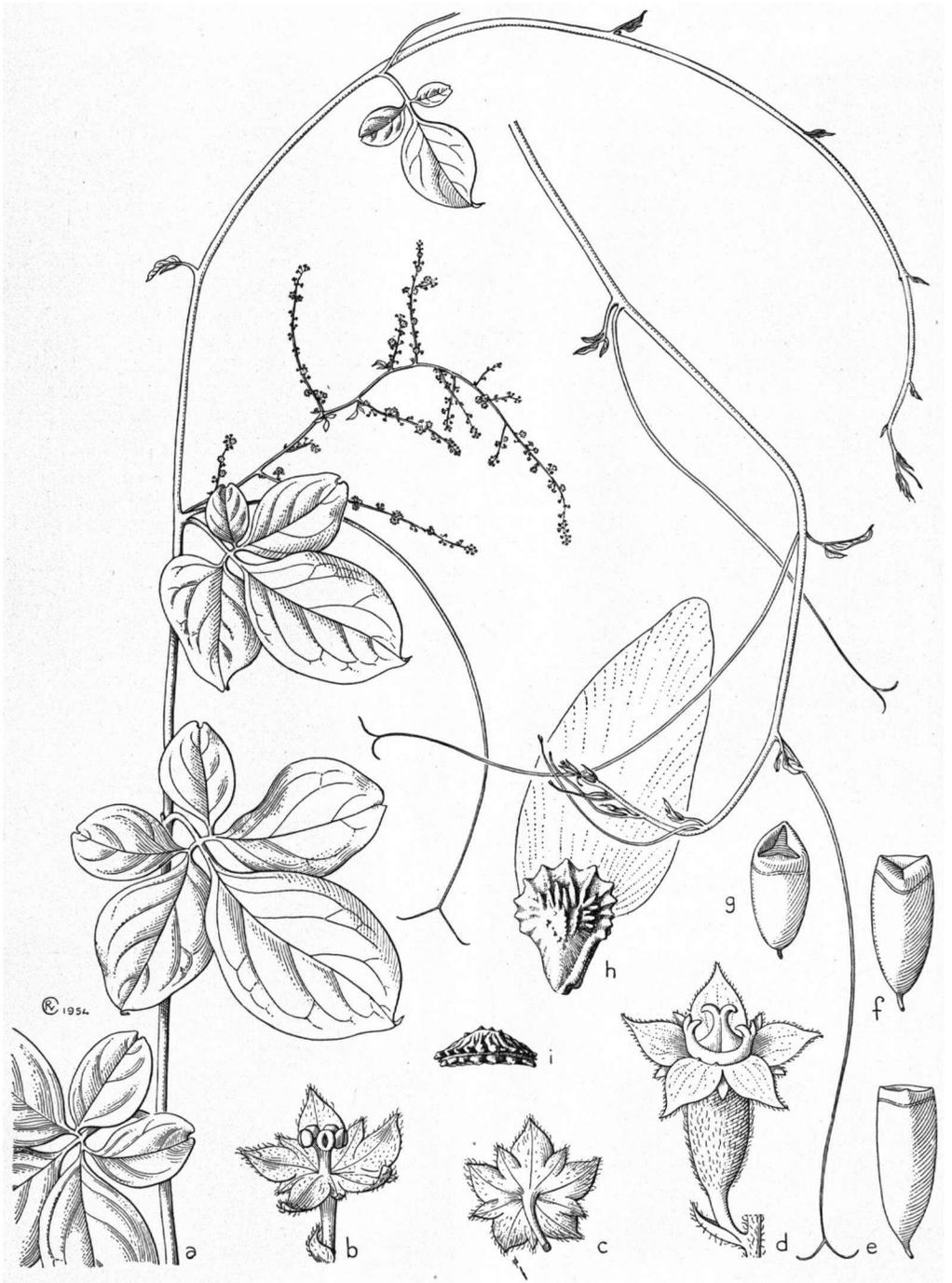
seminibus hyalino-alatis applanato-pyriformibus radiato-verruculosis 4—5 × 3—3.5 mm.

Stems green, up to 30 m or more, glabrous (infl. excepted); stem-base spindle-like thickened up to 100 by 10 cm, often followed by additional, superposed, thickened bases of lateral stems, thickenings green, fleshy, provided with obliquely patent, strong, green, hard, spines 1.5—5 cm long going up to c. 3—5 m from the base and representing metamorphosed leaves. Tendrils only on innovations, mostly early caducous, 5—15 cm long, shortly bifid. Lower leaves pedately 5-foliolate, upper leaves 3-foliolate; leaflets papyraceous to membranaceous, glabrous to faintly puberulous, obovate, bluntish, tip glandular, (caducous-)mucronate, base cuneate, all eglandular; middle leaflet largest, c. 6—11 by 4—7 cm, 1—2 cm petiolulate, lateral leaflets unequal-based, 5—10 by 3—6 cm, 0.75—1.5 cm petiolulate; lower additional leaflets smaller, 0.25—0.5 cm petiolulate, inserted on the petiolules of the lateral leaflets. Male flowers in numerous, lateral, divaricate, axillary, short-pubescent, bracteate, pyramidal, rich-flowered panicles, 14—40 cm long; ultimate branches raceme-like but flowers in fascicles; axis and stalks angular. Lower bracts represented by reduced 3-foliolate leaves, upper ones simple bracts, gradually smaller, 5—3—1 mm, narrow, acute, those below the pedicels 1 mm, haired. Pedicels 1.5—1.5 mm, glabrous, terete. Expanded flowers flat, c. 2.5—3.5 mm diam., incised to about halfway, haired. Calyx segments ovate-acute, 0.5 mm. Corolla segments broadly triangular, ovate-acute, c. 1 mm. Androecium glabrous, c. 1 mm high, the column c. 0.75 mm, terete. Anthers 5, on horizontal short filaments 0.25 mm; anthers roundish c. 0.25 mm, with a vertical slit, connective not produced. Female flowers greenish-yellow, curved upwards forming one-sided racemes on the ultimate panicle branches; branches shortly crisped-pubescent as are the bracts, the ovary and the floral segments. Pedicel c. 1 mm, glabrous. Ovary terete, tubular, c. 3 by 1.25—1.50 mm. Calyx lobes acute oblong, hardly 1 mm long. Corolla lobes broad-ovate, acute, c. 2 by 1.5 mm, some with 2 or more minute basal colleter-like appendages (glands?). Styles 3, on the margin of the ovary top, split halfway into 2 thick, recurved stigmatic arms, incl. these hardly 1 mm high, grooved inside, grooves continued over the ovary tip meeting centrally. Fruits in rich, large panicles, glabrous or practically so, tubular-cup-shaped, 0.25—0.5 cm stalked, 1.5—2 by 0.75—0.8 cm; rim c. 1—1.5 mm high. Seeds flat, pear-shaped, 4—5 by 3—3.5 mm, unequal-sided, with irregular radial crests and warts; wing exceedingly delicate, hyaline, oblique, 6.5—8.5 by 3.5—4.5 mm, early caducous.

Type: ♂ ex Timor Cult. Hort. Bog. II. O. X. 6 (BO, L); ♀ ditto XVIII. A. 45a (BO, L).

Distribution: ? South Celebes and Lesser Sunda Islands (Island of Semau; throughout Timor), often on limestone rocks, from the lowland to the hills.

Fig. 1. *Neosomitra podagrifolia* Steen. — a. Apex of young ♂ flowering stem, × 2/3, b-c. ♂ flower, × 6, d. ♀ flower, × 6, e-g. fruits, nat. size, h. seed, surface view, × 4, i. apical view, wing removed, × 4 (♂ after Cult. Hort. Bog. II. O. X. 6, ♀ ditto XVIII. A. 45a).



This species is allied to several others in the genus which was revised by Cogniaux¹⁾ and by Hutchinson²⁾, by the spiny stems and swollen stem-bases. *N. balansae* from Indo-China possesses similar leaves and flowers, but has capitate-glandular hairs in the inflorescence and longer pedicels. *N. pubigera*, from Burma and Malaya, has a short staminal column but long filaments, longer, gland-tipped, hairy pedicels, and a densely puberulous fruit, *N. schefferiana* from Celebes and New Guinea is described as 3-foliolate, with densely villous petioles and petiolules, and a hairy leaf-undersurface.

As the plant is used medicinally in Timor I was curious to know whether any special constituent could be traced. Dr R. Hegnauer, professor of pharmacognosy at Leyden University, was so kind to have this examined by one of his students, Mrs Tjia-Lo Gwat Nio on a portion of the thickened stem-base of the old plant cultivated in the Botanic Gardens, Leyden, kindly put at our disposal by the Curator, Mr H. Veendorp. The results are the following: fresh-weight 200 g, dry weight 30 g, water content 85 %. Alcaloids, tannines, saponines, flavonoid compounds and cyanogenic glucosides absent. The main constituent is an extremely bitter resin, with strong haemolytic action, and giving precipitations with several alealic reagentia. The bitter value (dilution in which it can just be tasted) is 25.000 by comparison of quinine chloride 100.000. No crystalline compounds could be extracted from the impure resinous fraction.

57. *Exocarpus latifolia* in Borneo (Santal.)

Hitherto the localities of *Exocarpus latifolia* R. Br. seemed to be restricted to Eastern Malaysia, though some localities in Palawan and Jolo Island (Sulu group) and E. Java showed that this species is not absent from the Sunda shelf area. Mr G. H. S. Wood and Mr J. Wyatt-Smith have now found it in North Borneo: Lahad Dat Distr., central ridge on Takawan Island, 120 m alt., Sept. 25, 1954 (*San* 4268).

¹⁾ Pflanzenreich Heft 66: 11—18. 1916.

²⁾ Ann. Bot. n.s. 6: 97—102. 1942.