MISCELLANEOUS BOTANICAL NOTES XIII *

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93. A NEW COMBINATION IN DACRYODES (BURSERACEAE).

Dacryodes nervosa (H. J. Lam) Leenhouts, nov. comb. — Santiria nervosa H. J. Lam, Ann. Jard. Bot. Btzg 42 (1932) 206; Leenh., Fl. Males. I, 5 (1956) 233.

Though the fruits were unknown, this species was included in Santiria, probably on account of the stellate hairs, in the Burseraceae furthermore known then only from Santiria conferta 1). Only recently a fruiting specimen came at hand from Sarawak, Borneo (Sarawak For. Dep. 13389), and the fruits mark it to be typical Dacryodes. As it is not identical with any known species of the latter genus, a new combination had to be made.

The description of the infructescences and fruits reads as follows:

Infructescences up to about 5 cm long, rusty tomentose, with a few fruits. Fruits ellipsoid, c. $1\frac{1}{2}$ by 0.9 cm (not yet fully mature).

The species is at first sight distinguishable from all other Malaysian species of *Dacryodes* by the partly stellate indumentum.

94. REDUCTION OF DACRYODES PAPUANA HUSSON TO SCUTINANTHE BREVISEPALA LEENH. (BURSERACEAE).

Mr F. H. Hildebrand, Leyden, drew my attention to the fact that herbarium specimens from western New Guinea, identified by me as Scutinanthe brevisepala, were indistinguishable from the type of Dacryodes papuana. This type specimen (Brass & Versteegh 13535, collected near Bernhard Camp, Idenburg River, W. New Guinea) bears fruits only; the calyces of the infructescence are all damaged, so that it is not well possible to count whether they are 3-merous like in Dacryodes, or 5-merous as in Scutinanthe. Comparison of this specimen with Scutinanthe of New Guinea, of which flowering as well as fruiting material was available, soon revealed that the two are conspecific. And as the flowers are 5-merous it was clear that Dacryodes papuana had to be reduced to Scutinanthe. With this, Dacryodes lost his only one species in New Guinea. (Husson & Lam, Blumea 7, 1952, 168, made mention of a second species which they included with some doubt in Dacryodes without naming it; the specimen on which this had been based, Clemens 1837, should be re-examined).

The second problem was whether to include the New Guinea specimens in Scutinanthe brevisepala or to base a new species on them. Especially the leaves are very different from those of the type specimen from Sumatra, as well in shape as in size. The scantiness of the material, the fact that the Celebes specimen is more or less intermediate between the extremes, and the agreement in the essential flowercharacters turned the scale towards the first solution.

^{*} Notes XII appeared in Blumea 12, 1963, 13-17.

¹⁾ D. Normand makes mention of three African species of Dacryodes with stellate hairs on the leaves (Comptes Rendues IVe Réunion AETFAT, 1962, 292 and t. 1—3).

As a result of the inclusion of this new material, the description and distribution of Scutinanthe brevisepala, as given in the Flora Malesiana have both to be emendated as follows:

Scutinanthe brevisepala Leenh., Blumea 7 (1952) 162, f. 1; Fl. Males. I, 5 (1956) 247, f. 17; Nova Guinea, n.s. 8 (1957) 176, f. 1 c; Fl. Males. I, 5 (1958) 567, f. 6 c. — Dacryodes papuana Husson, Blumea 7 (1952) 167, f. 1; Kalkman, Blumea 7 (1954) 513; Leenh., Fl. Males. I, 5 (1956) 228.

Tree, c. 25—35 m, up to 55 cm in diam., sometimes up to 3 m high buttressed. Branchlets 3—7 mm thick, lenticellate or not, tips scabrous to slightly hairy. Leaves 1—5-jugate, glabrous. Leaflets lanceolate to broad-elliptic or subovate, $5-6\frac{1}{2}(-18)$ by $1\frac{3}{4}-2\frac{3}{4}(-10)$ cm, coriaceous or pergamentaceous to chartaceous; base broadly cuneate to subcordate, mostly slightly oblique; apex more or less abruptly, obtusely acuminate; nerves 4-8(-10) pairs (angle c. 60°), curved, not distinctly joined. Inflorescences axillary on short axillary shoots, the vegetative terminal bud of which usually develops lateron, narrowly paniculate, 3-13 cm long. Flowers 4 mm long, scabrous, the cupular receptacle 2 mm high. Sepals $\frac{1}{2}$ —2 mm high. Ovary in 0° flowers sometimes densely tomentose, in 0° flowers glabrous, 0° 3-celled. Fruits slightly oblique, ovoid to ellipsoid, constricted or shortly stalked at the base, pointed at the apex, 0° by 0° cm, glabrous. Seed 1.

Distribution: S. Burma (King I.), Sumatra (Indragiri, one collection), SE. Celebes (two collections), and New Guinea (a few collections, mainly from the western part). Primary forests up to 650 m. Flowers have been collected in Apr. and Nov., fruits in Febr. and Apr.

95. CONNAROPSIS RUBESCENS RIDL. (OXAL.) REDUCED TO ROUREA MINOR (GAERTN.) LEENH. (CONNARACEAE).

Mr L. L. Forman, Kew, called my attention to the type of Roureopsis rubescens Ridl. (Hamid CF. 5170, from Pahang, Mal. Pen.; why RIDLEY, J. Bot. 62, 1924, 295, cited Foxworthy as the collector is not clear to me) which is preserved in the Herbarium, Royal Botanic Gardens, Kew. It appeared that this plant is a Connaracea, and that Ridley's name had to be reduced to Rourea minor (Gaertn.) Leenh. (Fl. Mal. I, 5, 1958, 514), an assumption made already by Mr Forman. It is possible that R. Knuth was already aware of this, or at least doubted Ridley's classification of this plant, as he did not mention Ridley's name in his monograph of the Oxalidaceae (Knuth, Pflanzenreich Heft 95, 1930).

Specimens of Rourea (if not in fruit) are not rarely identified as belonging to Sarcotheca (= Connaropsis), though generally the habit is distinctly different. The main differences are:

Sarcotheca: —

Inflorescences long, slender, narrowly paniculate, lateral branches short, densely set with short-pedicelled flowers. Leaves as a rule unifoliolate, rarely pinnate.

Flowers: pistil 1, with 5 styles.

Fruit: a berry, 5-celled, more-seeded.

Rourea: -

Inflorescences fascicled, mostly short, laxly paniculate, pedicels relatively long.

Leaves as a rule pinnate, rarely unifoliolate.

Flowers: pistils 5, mutually free.

Fruit: a legume-like capsule, 1-celled, 1-seeded.

96. REDUCTION OF ROUREA OVALE (SCHELLENB.) LEENH. (CONNARACEAE).

Santaloides ovale Schellenb. (Bot. Jahrb. 59, 1924, Beibl. 131, p. 29) was based upon two collections, viz. Beccari PB. 2531 and 2899, both from Borneo (Sarawak: Mattang). These two specimens were the only ones known to me when I published my revision of the Malaysian Connaraceae (Fl. Mal. I, 5, 1958), and thus, like Schellenberg, I could only give a description of the flowers and immature fruits. As to the latter I wrote (p. 520): "As far as can be judged from the young fruits, the dehiscence points to sect. Afrosantaloides. If this would appear not to be true, the species will have to be compared again with R. minor." For as to the vegetative parts and the flowers it fell completely within the (very wide) range of variability of the latter.

Last year I received another specimen from Sarawak (Bujang S. 13423, from Kuching Distr., Gunong Selang) which was an excellent match for Beccari PB. 2899. In this specimen the fruits were nearly ripe; they showed no trace of the basal dehiscence of sect. Afrosantaloides, but a ventral suture like the nearly mature fruits in sect. Palliatus. These fruits were thus identical to those of some large-fruited specimens of Rourea minor from Borneo. It appeared that the only specific character of Rourea ovale originated from a wrong interpretation. Further comparison with Rourea minor (Gaertn.) Leenh. showed, that Rourea ovale had to be reduced to that species.

97. DICHAPETALUM GRANDIFOLIUM RIDL. (DICHAPETALACEAE).

When I compiled the revision of the Dichapetalaceae for the Flora Malesiana (1957), D. grandifolium Ridl. was known to me only in two specimens, both 3 flowering. The one was the type, Haviland 2192 (K), from Sarawak; the other one, Puasa NBFD. 1424 from North Borneo, matched this quite well as to the flowers and inflorescences, though the leaves were slightly different. The type specimen showed in its vegetative parts as well as in its inflorescences a distinct resemblance to D. papuanum, known to me from the Moluccas, New Guinea, the Solomon Is, and North Queensland. In spite of the wide and for lowland species unusual disjunction, I was of the opinion that for the time being D. grandifolium could best be included in D. papuanum, and I made a separate subspecies of it, ssp. borneense Leenh. (1956). I expressed my doubts in the following words (1957, p. 310): "The taxonomical position of D. grandifolium remains somewhat uncertain. Vegetatively it is very close to D. papuanum; the inflorescences are only slightly coarser, the flowers are much larger, but otherwise similar. Fruiting material is desirable to settle its status."

Last year, Mr L. L. Forman, Kew, sent me a fruiting specimen of a Dichapetalum from North Borneo (W. Meijer SAN. 20446) with a note in which he asked me whether this could be D. grandifolium. The fruits were unusually large and different from anything I knew in this genus. Comparison with the two specimens cited above showed that the leaves closely resemble those of Puasa NBFD. 1424; the fruit is widely different from that of D. papuanum, however. As the fruits give the best characters in Dichapetalum, I decided to reestablish D. grandifolium, in spite of the resemblance of its flowers with those of D. papuanum.

I may add the following citation and description of this species:

Dichapetalum grandifolium Ridl., Kew Bull. (1930) 373. — D. papuanum (Becc.) Boerl. ssp. borneense Leenh., Reinw. 4 (1956) 81; Fl. Males. I, 5 (1957) 310.

Liana, dioecious. Branchlets glabrous, purplebrown, later on greyish. Petioles ½—1 cm long, glabrous. Leaves elliptic to oblong, 13—25 by 6—12 cm, chartaceous, glabrous;

glands few, small, scattered all over the lower surface of the leaf; base acute, slightly decurrent; apex more or less abruptly acuminate, acumen short and broad, blunt to acute, mucronulate; nerves 7—10 pairs, curved, most of them distinctly looped and joined. Inflorescences (\bigcirc unknown) 1—4 cm long, distinctly stalked, repeatedly branched, with several flowers. Flowers (\bigcirc) \bigcirc mm long. Petals obovate, halfway incised, glabrous. Disk-lobes c. \bigcirc mm, 2-lobed, glabrous. Pistilloid densely tomentose. Infructescences small, shortstalked, with 1—2 fruits. Fruits 2—3-lobed, c. 3 cm long, \bigcirc cm wide, smooth, shortly and densely fulvous-tomentose, with distinct, narrow sutures.

Distribution: Borneo (Sarawak and North Borneo); in primary forests at low alt. Flowers have been collected in July and Nov., fruits in Nov.

Note. Possibly nearest related to *D. papuanum* which it distincly resembles especially vegetatively and in the flowers (apart from the larger dimensions). Well characterized by the exceptionally large fruits.

In the key to the Malaysian species (Fl. Mal. I, 5, 1957, p. 307) it can be inserted as follows:

15 b.

15 b1. Fruits 3 cm long D. grandifolium

15 b¹. Fruits up to c. $1\frac{1}{2}$ cm long.

17.