

FIVE NEW COMBINATIONS AND ONE NEW NAME IN RUBIACEAE FROM SOUTH-EAST ASIA

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SUMMARY

Five new combinations and one new name are proposed for six Rubiaceae species from South-East Asia. Four new combinations are proposed in *Cyclophyllum* and one in *Psychotria*; a new name is proposed for one *Psychotria* species.

Key words: *Amaracarpus*, *Canthium*, *Cyclophyllum*, *Plectronia*, *Psychotria*, Rubiaceae, South-East Asia.

INTRODUCTION

Taxonomic studies in the Rubiaceae by Bridson (1987) and Davis & Bridson (2004) enumerate species for which new combinations are needed. Herein we take the opportunity to propose five new combinations and one new name (*nomen novum*), as based on the aforementioned studies, viz. *Cyclophyllum caudatum* (Valeton) A.P. Davis & Ruhsam, *C. longiflorum* (Valeton) A.P. Davis & Ruhsam, *C. novoguineensis* (Miq.) A.P. Davis & Ruhsam, *C. valetonianum* (S. Moore) A.P. Davis & Ruhsam, *Psychotria montisgiluwensis* A.P. Davis & Ruhsam, and *P. montisstellaris* (P. Royen) A.P. Davis & Ruhsam.

NEW COMBINATIONS IN CYCLOPHYLLUM

Cyclophyllum Hook.f. (Vanguerieae Dumort.) is a genus restricted to SE Asia, Australasia and the Pacific (see Bridson 1987: 614, map 1). Bridson (1987: 616) lists eight species of *Canthium* Lam. that should be considered for transfer to *Cyclophyllum*, viz. *Canthium barbatum* (Forst.) Seem., *C. brevipes* Merr. & L.M. Perry, *C. caudatum* (Valeton) S. Moore, *C. coprosmoides* F. Muell., *C. costatum* C.T. White, *C. longiflorum* (Valeton) Merr. & L.M. Perry, *C. sessilifolium* A. Gray, and *C. valetonianum* S. Moore. Five of the above species were later transferred to *Cyclophyllum*, leaving three species (*C. caudatum*, *C. longiflorum*, and *C. valetonianum*), all from New Guinea, potentially requiring new combinations in *Cyclophyllum*. In addition, we have identified another member of the Vanguerieae from New Guinea, *Plectronia novoguineensis* (Miq.) Valeton, which should be placed in *Cyclophyllum*. *Canthium caudatum* and *C. longiflorum* have also been placed in *Plectronia* L., but the use of this generic name has to be restricted to the family Oliniaceae, as *Plectronia* is a generic synonym of

Olinia Thunb. (Ross, 1975: 491; Verdcourt, 1987: 127). *Plectronia* was formerly used in the Rubiaceae as the generic name for a large number of species, mostly belonging to the tribe Vanguerieae and in particular *Canthium*.

There are only two genera of Vanguerieae in New Guinea: *Cyclophyllum* and *Psydrax* Gaertn., although the informal group *Pyrostria* 'group B' was recognised by Bridson (1987). *Pyrostria* 'group B' is a group of taxa that may either constitute a new genus or perhaps a disjunct part of *Pyrostria* (Bridson, pers. comm.). In New Guinea *Pyrostria* 'group B' is confined to the Kepala Burung (Vogelkop Peninsula), in the extreme NW part of the island. A key separating *Cyclophyllum* and *Pyrostria* 'group B' is given by Bridson (1987: 614).

The morphological differences separating *Cyclophyllum* and *Psydrax* are considerable, and they can be easily separated on the basis of easily definable morphological differences (e.g. see Reynolds & Henderson, 1999: 354). According to molecular data provided by Lantz & Bremer (2004: 263) *Cyclophyllum* is convincingly associated with the 'dioecious *Pyrostria* group', and *Psydrax* is a well-supported monophyletic unit.

Canthium does not occur in New Guinea, although several taxa from New Guinea have been placed in the genus. On morphological grounds their placement is erroneous (Bridson, 1987), a fact that is supported by molecular data (Lantz & Bremer, 2004).

We propose that three Rubiaceae species currently placed in *Canthium* and one in *Plectronia* should be transferred to *Cyclophyllum*: *Cyclophyllum caudatum*, *C. longiflorum*, *C. novoguineensis*, and *C. valetonianum*. The two type specimens bearing flowers (for *C. longiflorum* and *C. valetonianum*) have the salient characteristics of *Cyclophyllum* after Bridson (1987: 616): paired bracts absent; inflorescence fasciculate or occasionally with rudimentary inflorescence branches; corolla always hypocrateriform; style widening at apex; flowers hermaphrodite; ovary 2-locular. The two type specimens bearing fruit (*C. caudatum* and *C. novoguineensis*) possess the first two characters listed above and they have the characteristic elongated pedicel of *Cyclophyllum*. Specimens matching *C. caudatum* and *C. novoguineensis* held at the Kew herbarium (K) possess the floral characters of *Cyclophyllum*, as listed above.

Cyclophyllum caudatum* (Valeton) A.P. Davis & Ruhsam, *comb. nov.

Basionym: *Plectronia caudata* Valeton (1911) 478. — *Canthium caudatum* (Valeton) S. Moore (1923) 24. — Type: *Branderhorst 335* (holo ?BO; iso K, L), [Papua Barat], Nova Guinea neerlandica meridionalis, fluv. Noordrivier, pr. Bivak Sebung.

Cyclophyllum longiflorum* (Valeton) A.P. Davis & Ruhsam, *comb. nov.

Basionym: *Plectronia longiflora* Valeton (1927) 56. — *Canthium longiflorum* (Valeton) Merr. & L.M. Perry (1945) 232. — Type: *Schlechter 18959* (holo B†; iso K, L), [Papua New Guinea], 'Kaiser-Wilhelmsland, In den Wäldern bei Toliba', 300 m, 14 July 1908.

Cyclophyllum novoguineensis* (Miq.) A.P. Davis & Ruhsam, *comb. nov.

Basionym: *Coffea ?novoguineensis* Miq. (1869) 259. — *Plectronia novoguineensis* (Miq.) Valeton (1911) 478. — Type: *Zippelius s.n.* (holo ?U; iso L), [Papua Barat], Nova Guinea.

Cyclophyllum valetonianum (S. Moore) A.P. Davis & Ruhsam, *comb. nov.*

Basionym: *Canthium valetonianum* S. Moore (1923) 25. — Type: *Forbes 61* (holo BM; iso L), Papua New Guinea, Sogere [Sogeri], 2500 ft [762 m].

A NEW NAME AND A NEW COMBINATION IN PSYCHOTRIA

In a recent revision of *Amaracarpus* Davis & Bridson (2004) informally placed *Amaracarpus giluwensis* P. Royen and *A. montisstellaris* P. Royen (Van Royen, 1983) in *Psychotria*. With direct reference to the type species, *P. asiatica* L. (see Davis et al., 2001), these two species possess the salient characters of *Psychotria*. Specifically, *A. giluwensis* and *A. montisstellaris* have terminal inflorescences, bifid stipules, 5-merous flowers, yellow or white fruit (Van Royen, 1983: 2686, 2688, 2702; fruit colour in *A. montisstellaris* unknown); the pyrenes have marginal preformed germination slits, a seed coat with an ethanol soluble pigment, and ruminant endosperm (Davis, unpubl. data). These characters are not found in *Amaracarpus* (Davis & Bridson, 2004: 25, 26), or the closely associate *Dolianthus*, which was formerly placed within *Amaracarpus* (see Davis & Bridson, 2001: 421).

One new combination and one new name are proposed.

Psychotria montisgiluwensis A.P. Davis & Ruhsam, *nom. nov.*

Amaracarpus giluwensis P. Royen (1983) 2686. — Type: *Schodde 1869* (holo K; iso L), Papua New Guinea, western summit grasslands of Mt Giluwe, Southern Highlands District, c. 10,000 ft. [3050 m], 16 Aug. 1961.

Note — The new name *P. montisgiluwensis* is proposed because the name *P. giluwensis* is already being used in *Psychotria* (*P. giluwensis* Sohmer).

Psychotria montisstellaris (P. Royen) A.P. Davis & Ruhsam, *comb. nov.*

Basionym: *Amaracarpus montisstellaris* P. Royen (1983) 2701. — Type: *Veldkamp 6319* (holo L), Papua New Guinea, Star Mts, W Sepik, Camp 2, Tel Basin, 3000 m, 5 March 1975.

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