

On the identity of *Guatteria costata* Hook. f. & Thomson (Annonaceae)

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Summary. Examination of the type from Burma of *Guatteria costata* in the East India Company herbarium at Kew shows that it belongs in *Trivalvaria* and provides an earlier name for *T. dubia* (Kurz) J. Sinclair. A new combination is proposed. A further synonym, *Polyalthia montana* Ridl., is lectotypified.

Key Words. Annonaceae, Burma, *Trivalvaria*, Wallich.

During his visit to Burma in 1827 Dr Nathaniel Wallich collected a species of Annonaceae which was referred to in 'A numerical list of dried specimens of plants in the East India Company's Museum ...' (Wallich 1828 – 1849) as number 6480 *Uvaria costata*. As with the vast majority of new names appearing in this monumental compilation, the species was not validly published by Wallich. It was not properly validated until Hooker & Thomson published *Guatteria costata* in their *Flora Indica* (Hooker & Thomson 1855). The species was based entirely on specimens they saw in the Herbarium of the Honourable East India Company (often referred to more simply as the Wallich Herbarium), then housed at the Linnean Society in London, which Hooker & Thomson noted were very poor. This probably explains why the species was not included by Alphonse de Candolle who described Wallich's novelties in Annonaceae from Burma in his *Memoire* (de Candolle 1832). Alphonse de Candolle visited London in 1830 in order to assist Wallich name and sort the herbarium material (de Candolle & Radcliffe-Smith 1981) and as the specialist on the family he is likely to have seen the limited material of *Uvaria costata*. In the *Flora of British India*, Hooker & Thomson (1872) transferred *Guatteria costata* to *Polyalthia* section *Trivalvaria*. As van Heusden (1997) noted in her monograph of the genus, the species clearly belongs in *Trivalvaria* but she was not able to resolve its true identity from a photograph of the type.

Access to the type specimen in the Wallich Herbarium at Kew permits resolution of the problem. The specimen, comprising a single leafy shoot, is not completely sterile, but has the remains of one flower attached. The corolla is absent but the pedicel and

abaxial surface of what remains of the sepals are densely covered with long pale hairs. This precludes the plant being *Trivalvaria argentea* (Hook. f. & Thomson) J. Sinclair which is sparsely pubescent in these parts. The only other species of *Trivalvaria* recorded from Burma is *T. dubia* (Kurz) J. Sinclair. I find no reason to doubt the specific identity of the Wallich collection as the same as that of other specimens from Burma referred to *T. dubia*. The only other possibility is *Trivalvaria macrophylla* (Blume) Miq. which can have densely pubescent floral parts. But *T. macrophylla* has yet to be recorded north of the southernmost parts of Peninsular Thailand, almost 10 degrees of latitude further south than the type location of *Guatteria costata*.

As *Guatteria costata* Hook. f. & Thomson was published 19 years before *Polyalthia dubia* Kurz it has priority and a new combination in *Trivalvaria* is proposed here.

***Trivalvaria costata* (Hook. f. & Thomson) I. M. Turner comb. nov.**

Uvaria costata Wall., *Numer. List* (1832) no. 6480, nom. nud.; *Guatteria costata* Hook. f. & Thomson, *Fl. Indica* 143 (1855); *Polyalthia costata* (Hook. f. & Thomson) Hook. f. & Thomson (1872: 67); *Ellipeia costata* (Hook. f. & Thomson) King (1892: 26). Type: Burma, Needaun (Nidaun), 28 Jan. 1827, N. Wallich 1280 [Wallich Herbarium no. 6480] (holotype K-W). *Polyalthia dubia* Kurz [1870: 29, nom. nud.] (1874: 53), **synon. nov.** *Polyalthia dubia* var. *glabriuscula* Kurz (1874: 53), **nom. illegit.**; *Popowia kurzii* King (1892: 96), **nom. illegit.**; *Trivalvaria dubia* (Kurz) J. Sinclair (1955: 47). Type: Andaman Islands, South Andaman, Circular Bay at Port Mouat, Kurz s.n. (lectotype K, selected by van Heusden (1997)).

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Polyalthia dubia var. *falconeri* Kurz (1874: 53). Type: Burma, Moulmein, 1849, *H. Falconer* 545 (holotype CAL; isotype K).

Ellipeia pumila King (1892: 27). *Popowia pumila* (King) Ridl. (1922: 78). *Trivalvaria pumila* (King) J. Sinclair (1955: 48). Type: Malay Peninsula, Perak, *Scortechini* 198b (lectotype CAL, selected by van Heusden (1997); isoelectotypes K, SING).

Polyalthia nemoralis Aug. DC. (1904: 1069). Type: Vietnam, Tuphab, Mt Bavi, Dec. 1888, *Balansa* 4190 (lectotype G, selected by van Heusden (1997); isoelectotype P).

Polyalthia montana Ridl. (1913: 288). Type: Malay Peninsula, Selangor, Menuang Gasing, Ulu Langat, Feb. 1912, *C. B. Kloss* s.n. (lectotype K, selected here; isoelectotype BM).

Polyalthia oligogyna Merr. & Chun (1934: 27). Type: China, Hainan, Lingshui, Poting, 24 April 1932, *S. P. Ko* 52172 (holotype NY; isotype A).

Note on the typification of *Polyalthia montana* Ridl.

Sinclair (1955) first suggested that *Polyalthia montana* Ridl. represented a species of *Trivalvaria* but noted that there was no specimen in the likely herbaria (viz. BM, CAL, K, SING) that was obviously the type. He indicated (p. 323) that the *C. B. Kloss* specimen from the type locality labelled *Polyalthia parviflora* in the Kew herbarium could be the type. This specimen is *Trivalvaria costata* and accords to the description of *Polyalthia montana*. My supposition is that, to some extent, Ridley confused the plant from Menuang Gasing with his *Polyalthia parviflora* and named it as such when he wrote out the specimen label. The two taxa show some superficial similarities. In the original publication on Kloss's expedition to Menuang Gasing (Ridley 1913) only *P. montana* was reported. But in his *Flora of the Malay Peninsula* (Ridley 1922), both *P. montana* and *P. parviflora* are reported as Kloss specimens from Menuang Gasing. It seems very unlikely that any Kloss specimens from Menuang Gasing were labelled as *P. montana* by Ridley, so I propose the Kloss

'*parviflora*' specimen in the Kew herbarium as lectotype of this name.

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