

## Flora of Singapore precursors, 18: Change of rank for two species in Polygalaceae and Cornaceae

W.J.J.O. de Wilde & B.E.E. Duyfjes

Naturalis Biodiversity Center, section Botany, P.O. Box 9517,  
2300 RA Leiden, The Netherlands  
b.dewilde-duyfjes@naturalis.nl

**ABSTRACT.** *Alangium hirsutum* Bloemb. (Cornaceae) and *Xanthophyllum amoenum* Chodat (Polygalaceae) are reduced to varieties of *Alangium longiflorum* Merr. and *Xanthophyllum stipitatum* A.W.Benn. respectively.

**Keywords.** *Alangium*, variety, *Xanthophyllum*

### Introduction

As the taxonomic revisions of Cornaceae and Polygalaceae for the *Flora of Singapore* and the *Flora of Peninsular Malaysia* near completion, it has been decided that two species, namely *Alangium hirsutum* Bloemb. (Cornaceae) and *Xanthophyllum amoenum* Chodat (Polygalaceae), are insufficiently distinct from related species to warrant recognition at the rank of species but should be recognised as varieties.

### Cornaceae

*Alangium longiflorum* Merr. var. *hirsutum* (Bloemb.) W.J.de Wilde & Duyfjes, **stat. & comb. nov.** – *Alangium hirsutum* Bloemb., Blumea 1: 254 (1935); Bloembergen, Bull. Jard. Bot. Buitenzorg, sér. 3, 16: 161 (1939); de Wilde & Duyfjes, Thai Forest Bull., Bot. 44: 80, fig. 5e–f (2016). – TYPE: Indonesia, West Kalimantan, Amai Ambit, 1893–1894, *Hallier 3238* (holotype BO; isotype L [L0009819]).

*Distribution.* Peninsular Malaysia, Singapore, Sumatra, Borneo.

*Notes.* Bloembergen (1935, 1939) recognised *Alangium longiflorum* Merr. and *A. hirsutum* as closely allied species which could be distinguished in the length of the flowers and fruit, and in the hairiness of the leaves. However, even combined they show only as much variation as other species in the genus and, consequently, warrant recognition only at the rank of variety.

## Polygalaceae

*Xanthophyllum stipitatum* A.W.Benn. var. *amoenum* (Chodat) W.J.de Wilde & Duyfjes, **stat. & comb. nov.** – *Xanthophyllum amoenum* Chodat, Bull. Herb. Boissier 4: 259 (1896); van der Meijden, Leiden Bot. Ser. 7: 141 (1982); Ng, Tree Fl. Malaya 1: 356 (1972); van der Meijden, Fl. Males., ser. 1, 10: 533 (1988); Chong et al., Checkl. Vasc. Pl. Fl. Singapore 90, 171, 213 (2009); Ng, Malayan Forest Rec. 52: 198, 391, 392 (2014). – TYPE: Borneo, Kuching, 16 January 1893, *Haviland 2112* (lectotype K [K000592495], designated by van der Meijden, Leiden Bot. Ser. 7: 141 (1982); isolectotypes A [00027044], BM [BM000571365, BM000571366], G [G00440470], P [P02577971], SAR).

*Distribution.* Peninsular Malaysia, Singapore, Sumatra, Borneo.

*Notes.* Ng (1972) and van der Meijden (1982, 1988) recognised *Xanthophyllum amoenum* and *X. stipitatum* A.W.Benn. as two distinct but closely related species. Ng distinguished *Xanthophyllum stipitatum* from *X. amoenum* in having consistently smaller leaves, whereas van der Meijden segregated the two species based on the length of the petals, hairiness of the ovary and style, number of leaf glands and thickness of the pericarp. When considering these characters for all available material, including those from outside Singapore, we can only conclude that *Xanthophyllum amoenum* should be included as a variety within *Xanthophyllum stipitatum*.

## References

- Bloembergen, S. (1935). The genus *Alangium* in the Netherlands Indies. *Blumea* 1: 254.
- Bloembergen, S. (1939). A revision of the genus *Alangium*. *Bull. Jard. Bot. Buitenzorg*, sér. 3, 16: 161–162.
- Ng, F.S.P. (1972). Polygalaceae. In: Whitmore, T.C. (ed) *Tree Flora Malaya*, vol. 1, pp. 356, 363. Kuala Lumpur: Longman Malaysia.
- Van der Meijden, R. (1982). Systematics and Evolution of *Xanthophyllum* (Polygalaceae). *Leiden Bot. Ser. 7*: 141–144.
- Van der Meijden, R. (1988). Polygalaceae. In: van Steenis, C.G.G.J. & de Wilde, W.J.J.O. (eds) *Flora Malesiana*, ser. 1, Seed Plants, vol. 10, pp. 533, 535. Dordrecht: Kluwer.