

Typification of the names *Goniothalamus macranthus* (Kurz) Boerl. and *Mezzettia curtisii* King (Annonaceae)

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Typification of the names *Goniothalamus macranthus* (Kurz) Boerl. and *Mezzettia curtisii* King (Annonaceae)

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ABSTRACT

The previous typification of the names *Goniothalamus macranthus* (Kurz) Boerl. and *Mezzettia curtisii* King is discussed here. Suitable lectotype for *G. macranthus* and second-step lectotype for *M. curtisii* are designated.

RÉSUMÉ

Typification des noms *Goniothalamus macranthus* (Kurz) Boerl. et *Mezzettia curtisii* King (Annonaceae). La précédente typification des noms *Goniothalamus macranthus* (Kurz) Boerl. et *Mezzettia curtisii* King est discutée ici. Un lectotype approprié pour *G. macranthus* et un lectotype de deuxième étape pour *M. curtisii* sont désignés.

INTRODUCTION

Annonaceae is one of the largest family of Magnoliales which includes 108 genera (POWO 2025) and *c.* 2400 taxa (Guo *et al.* 2017). While checking type specimens of the family Annonaceae from the Central National Herbarium (CAL) for the treatment of the Annonaceae family in India in the *Flora of India* project, we noted that the following names need formal typification. After careful inspection, we choose a lectotype for *Melodorum macranthum* Kurz (basonym of *Goniothalamus macranthus*) and a second-step lectotype for *Mezzettia curtisii* King. The herbarium acronyms follow Index Herbariorum (<https://sweetgum.nybg.org/science/ih/>).

MATERIAL AND METHODS

ABBREVIATIONS

BM	Natural History Museum, London (herbarium);
CAL	Botanical Survey of India (herbarium);
K	Royal Botanic Gardens, Kew (herbarium);
L	Naturalis Biodiversity Center Leiden (herbarium);
SING	Singapore Botanic Gardens, Singapore (herbarium).

TAXONOMY

Family ANNONACEAE Juss.
Genus *Goniothalamus* (Blume) Hook.f. & Thomson

Goniothalamus macranthus (Kurz) Boerl.
(Fig. 1)

Icones Bogorienses, fascicle II, 1: 137 (Boerlage 1899). — Basonym: *Melodorum macranthum* Kurz, *Journal of the Asiatic Society of Bengal*, part I (Natural History & c.) 41: 291 (Kurz 1872).

TYPE SPECIMENS. — **India** • Andaman & Nicobar Islands, South Andaman; S. Kurz *s.n.*; lectotype: CAL[CAL0000004545!], **here designated** (Fig. 1); isolectotype: CAL (acc. no. 13892).

TYPIIFICATION REMARKS

Willhelm Sulpiz Kurz (1834-1878), Curator of the Herbarium, Royal Botanical Gardens, Calcutta, conducted an expedition to the Andaman Islands from April to July 1866 to collect plant specimens for the preparation of the '*Flora of the Andaman Islands*'. Kurz had first suggested the name *Unona macrantha* Kurz (*nom. nud.*) in his '*Report on the Forests of the Andaman Islands*' (appendix B. I) dated 1867 (report could not be traced) as cited by King (1893) and Merrill (1919). Kurz (1870) again introduced another invalid name *Pyramidanthe macrantha* Kurz (*nom. nud.*) in his report, titled '*Report on the Vegetation of the Andaman Islands*'. Finally, he validly published the name *Melodorum macranthum* Kurz from his collection in '*Andamans*' in *Journal of the Asiatic Society of Bengal*, Part I (Kurz 1872: 291).

Initially, only one specimen (CAL0000004545) was found in the type collections at CAL, which Turner (2018) treated as the holotype, citing it as 'India, Andaman Islands, South

Andaman, S. Kurz *s.n.* (holotype CAL [CAL0000004545])'. However, an annotation by Debika Das (06.10.1966), indicates that this specimen was also considered a lectotype of *Goniothalamus macranthus* (Kurz) Boerl., although it was not validly published. A further search in the general collections at CAL revealed a duplicate specimen (accession number 13892) collected by S. Kurz from South Andaman, with an original label bearing Kurz's handwriting with the name '*Unona macrantha* Kurz' and the name '*Melodorum macranthum* Kurz' on the sheet. According to the protologue, this specimen also qualifies as original material. Therefore, both specimens at CAL (CAL0000004545 and CAL acc. no. 13892) are considered syntypes, necessitating lectotypification. In accordance with Art. 9.12 of ICN (Turland *et al.* 2018), the well-preserved flowering specimen CAL0000004545 (Fig. 1) is hereby designated as the lectotype of *M. macranthum* Kurz.

Genus *Mezzettia* Becc.

Mezzettia curtisii King
(Fig. 2)

Journal of the Asiatic Society of Bengal, Part II (Natural History & c.) 61: 129 (King 1892).

TYPE SPECIMENS. — **Malaysia** • Penang, Government Hill; 1200 ft. alt.; III.1890; C. Curtis 2266; lectotype: CAL[CAL0000025019!], first-step lectotype designated by Van der Heijden & Kessler, *Blumea* 35: 223 (Van der Heijden & Kessler 1990); **second-step lectotype here designated** (Fig. 2); isolectotypes: BM[BM000546402, digital image!], BM000546403, digital image!; CAL[CAL0000025017!]; K[K000574883, digital image!], K000574884, digital image!, K000574885, digital image!], SING.

TYPIIFICATION REMARKS

According to POWO (2025), *Mezzettia curtisii* King is a heterotypic synonym of *M. herveyana* Oliv. (Hooker 1887). George King validly published *M. curtisii* (King 1892: 129) based on Curtis's collections and indicated the type as 'Penang, on Government Hill at 1200 feet; Curtis, No. 2266.' Van der Heijden & Kessler (1990) in their revision of the genus *Mezzettia*, expected the holotype to be housed at CAL and cited type as '*Curtis 2266*, Malaysia, Penang, Government hill, 360 m alt., March 1890 (holo-, CAL, n.v.; iso-, BM, K).' Turner (2011) also considered CAL specimen as holotype. Later, Turner (2015) felt that the CAL specimen is a syntype rather than holotype and he chose one syntype at K and designated it as 'Lectotype: Malaysia, Peninsula Malaysia, Penang, Government Hill, Mar 1890, C. Curtis 2266 (lecto-, K (barcode no. K000574885); isolecto-, BM [x2], CAL [x2] (barcodes no. CAL0000025017 and CAL0000025019), K [x2] (barcodes no. K000574883, K000574884), SING.' It is quite sure that Turner (2015) overlooked the earlier type designation by Van der Heijden & Kessler (1990) and he changed his decision in his next publication (Turner 2018) where he considered the type designation by Van der Heijden & Kessler (1990) as effective lectotypification and cited 'TYPE: Malay Peninsula, Penang, Government Hill, March 1890, C. Curtis 2266 (lecto-,



FIG. 1. — Lectotype specimen of *Goniothalamus macranthus* (Kurz) Boerl. (CAL0000004545), © Botanical Survey of India, Indian Virtual Herbarium.



FIG. 2. — Lectotype specimen of *Mezzettia curtisii* King (CAL0000025019), © Botanical Survey of India, Indian Virtual Herbarium.

CAL, designated by Van der Heijden & Kessler, *Blumea* 35: 223 (1990); isolecto-, BM, K, SING).’

Type designation by Van der Heijden & Kessler (1990) must be accepted as lectotypification because it was effectively published prior to 1st January 2001 and it followed the Art. 7.11 of the ICN (Turland *et al.* 2018). Therefore, the lectotypification of Turner (2015) is ‘Superfluous’. Van der Heijden & Kessler did not see the type material at CAL and did not annotate any specimen as a lectotype. In CAL, we found two original materials (CAL0000025017 and CAL0000025019) bearing the same data with original label that was mentioned by Van der Heijden & Kessler (1990) in their publication. According to Art. 9.17 of the ICN (Turland *et al.* 2018), it was found that a second-step lectotypification is required. After considering Van der Heijden & Kessler (1990) as first-step lectotypification, the specimen CAL0000025019 (Fig. 2) is designated here as the second-step lectotype of *M. curtisii* King.

While searching for images of original materials of *M. curtisii* King on the Global Plants website, we found two type specimens K000574884 and K000574885, which perfectly matches with L.0197402 and L.0197403, respectively (https://plants.jstor.org/search?filter=name&so=ps_group_by_genus_species+asc&Query=Mezzettia+curtisii). Upon close examination of the images, we noticed a scale with the printed text ‘Royal Botanic Garden – Kew’ and ‘ILFORD, CIBACROME COPY’ on both images of L. Additionally, type annotations are present on both images. The images at L are colour copies of the original specimens deposited at K.

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REFERENCES

- BOERLAGE J. G. 1899. — *Icones Bogorienses, Fascicle II*. Librairie et Imprimerie ci-devant E. J. Brill, Leide 1: 79-156.
- GUO X., TANG C. C., THOMAS D. C., COUVREUR T. L. P. & SAUNDERS R. M. K. 2017. — A mega-phylogeny of the Annonaceae: taxonomic placement of five enigmatic genera and support for a new tribe, Phoeniciantheae. *Scientific Reports* 7, 7323: 1-11. <https://doi.org/10.1038/s41598-017-07252-2>
- HOOKE J. D. 1887. — *Hooker’s Icones Plantarum, Ser. III*. William and Norgate, London, Edinburgh 16: t1560. <https://doi.org/10.5962/bhl.title.16059>
- KING G. 1892. — Materials for a flora of the Malay Peninsula. No. IV. *Journal of the Asiatic Society of Bengal. Part II (Natural History & c.)* 61: 1-130.
- KING G. 1993. — The Anonaceae of British India, Part II. *Annals of the Royal Botanic Garden, Calcutta* 4: 1-140.
- KURZ S. 1870. — *Report on the Vegetation of the Andaman Islands*. Office of Superintendent of Government Printing, Calcutta, 29 p.
- KURZ S. 1872. — New Barmese Plants (Part I). *Journal of the Asiatic Society of Bengal. Part I (Natural History & c.)* 41 (4): 291-318.
- MERRILL D. E. 1919. — On the application of the generic name *Melodorum* of Loureiro. *The Philippine Journal of Science, section C, Botany* 15 (2): 125-137. <https://www.biodiversitylibrary.org/page/699340>
- POWO 2025. — *Plants of the World Online*. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet: <https://powo.science.kew.org> (retrieved on 8 January 2025).
- TURLAND N. J., WIERSEMA J. H., BARRIE F. R., GREUTER W., HAWKSWORTH D. L., HERENDEN P. S., KNAPP S., KUSBER W. H., LI D. Z., MARHOLD K., MAY T. W., MCNEILL J., MONRO A. M., PRADO J., PRICE M. J. & SMITH G. F. (eds) 2018. — International code of nomenclature for algae, fungi, and plants (Shenzhen Code) adopted by the nineteenth international botanical congress of Shenzhen, China, July 2017. *Regnum Vegetabile*: 1-254. Glashütten: Koeltz Botanical Books. <https://doi.org/10.12705/Code.2018>
- TURNER I. M. 2011. — A catalogue of the Annonaceae of Borneo. *Phytotaxa* 36: 1-120. <https://doi.org/10.11646/phytotaxa.36.1.1>
- TURNER I. M. 2015. — A conspectus of Indo-Burmese Annonaceae. *Nordic Journal of Botany* 33: 257-299. <https://doi.org/10.1111/njb.00689>
- TURNER I. M. 2018. — Annonaceae of the Asia-Pacific region: names, types and distributions. *Gardens’ Bulletin Singapore* 70 (1): 409-744. [https://doi.org/10.26492/gbs70\(2\).2018-11](https://doi.org/10.26492/gbs70(2).2018-11)
- VAN DER HEIJDEN E. & KESSLER P. J. A. 1990. — Studies on the tribe Saccopetaleae (Annonaceae) – III Revision of the genus *Mezzettia* Beccari. *Blumea* 35: 217-228.

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