

# Lectotypification of five names in *Alstonia* (Apocynaceae)

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**Abstract:** Lectotypes have been designated for *Alstonia neriifolia* D.Don, *Alstonia sebusii* (Van Heurck & Müll. Arg.) Monach., *Alstonia spectabilis* R.Br., *Alstonia rostrata* C.E.C.Fisch., and *Alstonia venenata* R.Br.

**Keywords:** Nomenclature, original material, Rauvolfioideae, India.

## Introduction

The genus *Alstonia* R.Br. (1810) (Apocynaceae: Rauvolfioideae) comprises 44 species mainly distributed throughout the tropical and subtropical regions of the world (POWO, 2024; WFO, 2024) and extends their distribution in the tropical areas of India, Malaysia, the Western Pacific and Africa (Mabberley, 2017). Ten taxa (8 species, 2 varieties) are reported from India (Datta, 2020; Datta & Nayar, 2021). As part of a Taxonomy of Rauvolfioideae (Apocynaceae) in India (Sreeja, 2024), the genus *Alstonia* in India was revised with the help of collections from different parts of India. During identification, a detailed analysis of the literature (Monachino, 1949; Forster, 1992; Datta & Nayar, 2021) revealed that the five names *Alstonia neriifolia* D.Don, *Alstonia sebusii* (Van Heurck & Müll.-Arg.) Monach., *Alstonia spectabilis* R.Br., *Alstonia rostrata* C.E.C.Fisch. and *Alstonia venenata* R.Br. requires typification as the original material was not precisely pointed out. Authentic specimens, especially types deposited in different herbaria, were thoroughly studied to determine the unequivocally agreed specimens.

The specimens by Griffith deposited at BM, E, K

and collections by Roxburgh deposited at BM, E and P were consulted virtually; the collections MH and CAL were also consulted in person (Thiers, 2024). The online databases such as JSTOR Global Plants (<https://plants.jstor.org>), GBIF (<https://www.gbif.org/>) were also referred to for the source of original material. The lectotypes for the five names in *Alstonia* are proposed here for unambiguous use, as per the provisions in Art. 9.3 & 9.4 of the International Code of Nomenclature for Algae, Fungi and Plants (Turland *et al.*, 2025).

***Alstonia neriifolia*** D.Don, Fl. Nepal. 131. 1825. *Lectotype* (designated here): NEPAL, *s.loc.*, *s.d.*, Wall. Numer. List no. 1646.1 (K [K001113702, digital image!]).

Fig. 1

*Notes:* The species was described based on the collections from Nepal (Napalidae, Kathmandu Valley). We traced three collections of *Alstonia neriifolia* by Wallich at K. Of these, one sheet left of the top is labelled with "Nepalia" (Wallich Handwriting) as per protologue and label Wall. Numer. List no. 1646.1 (K001113702). The remaining two sheets at K are bearing the Wall. Numer. List no. 1646.2 (HBC collections: K001113703 & K001113704). The sheet K001113702, bearing three twigs exactly matching the original description and a handwritten label by Wallich, N., with "Napalidae, HBC and 1821" is selected here as the lectotype, and the other two sheets are considered as syntypes. We searched online for type specimens at BM, where most of David Don's collections are housed. However, the curator confirmed that none corresponding to this name are available.

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***Alstonia sebusii*** (Van Heurck & Müll.Arg.) Monach., Pacific Sci. 3: 157. 1949. *Blaberopus sebusii* Van Heurck & Müll.Arg., Bot. Descript. Pl. Nov. Herb. Van Heurckiani 2: 188. 1871. *Lectotype* (designated here): INDIA, *s.loc., s.d., Griffith* 2343 (AWH [AWH12133420 digital image! now at BR]). *Isolectotype* BM [BM000021874 digital image!], E [E00288593 digital image!], K [K000857323, digital image!]). **Fig. 2**

*Notes:* Van Heurck & Müller Argoviensis (1871) described *Blaberopus sebusii* based on specimens collected by Griffith (n. 2343). In our search for the original material, we were able to locate four specimens labelled as Griffith n. 2343 (AWH12133420, K000857323, BM000021874 and E00288593). The herbarium sheet AWH12133420 is more complete with stem, leaves, flowers and fruits and is chosen here as the lectotype, whereas the remaining duplicates are isolectotypes. It may be stated that Van Heurck,

H. F. & Müller Argoviensis, Johannes examined specimens now transferred to BR from AWH.

***Alstonia spectabilis*** R.Br., Asclepiadeae: 64. 1810. *Lectotype* (designated here): INDONESIA, Timor, Ceopang, April 1803, *R. Brown s.n.* (BM [BM000021868 digital image!]). *Residual syntype:* INDONESIA, Timor, Ceopang, April 1803, *R. Brown s.n.* ([E01197960, digital image!]). **Fig. 3**

*Notes:* Monachino (1949) and Forster (1992) in their work mentioned BM specimens as the type for *Alstonia spectabilis*. However, we could locate another original material at E. Forster (1992) did not examine the E specimen and considered the BM specimen as a 'holotype'. Since more than one specimen is available, the BM specimen is hereby designated as the lectotype rather than correcting the holotype as the lectotype as per Art. 9.4 of the ICN.



**Fig. 1.** Lectotype of *Alstonia neriifolia* D. Don ((K [K001113702]). © copyright of the Board of Trustees of the Royal Botanic Gardens, Kew. (reproduced with permission).



**Fig. 2.** Lectotype of *Alstonia sebusii* (Van Heurck & Müll.-Arg.) Monach.: Griffith collection at BR, formerly at AWH (AWH [AWH12133420]). © copyright of the Meise Botanic Garden, Belgium (reproduced with permission).

***Alstonia rostrata*** C.E.C. Fisch., Bull. Misc. Inform. Kew: 315. 1929. *Lectotype* (designated here): Burma [MYANMAR], Thaton, Yatheyaung, 2500 ft, 26.03.1928, C.E. Parkinson 6563 (K [K000852985 digital image!]). *Residual syntypes*: Burma, Mergui, Victoria Point, P. Chin per C.E. Parkinson 6297 (K [K000852986, K000852987 digital images!]; *ibid.*, Sukoe per C.E. Parkinson 7684 (K [K000852988 digital image!]))

Fig. 4

*Notes*: Fischer (1929) described *Alstonia rostrata* based on a gathering by C.E. Parkinson from Thaton [6563 (K000852985)], Victoria Point (Kawthaung), Mergui, [6297 (K000852986 & K000852987)] and Sukoe [7684 (K000852988)] all from Burma (Myanmar). Fischer, while describing this species, mentioned two type specimens, one with flowering material, C.E. Parkinson 6563

(K000852985) and the other with fruiting material, C.E. Parkinson 7684 (K000852988). From the four specimens at K, the flowering specimen, K000852985, is designated here as the lectotype as it agrees well with the protologue. The P. Chin per C. E. Parkinson collection number was mentioned as '6536' (printing error) in place of 6563 as pointed out by Monachino (1949)! It may be stated that Monachino, in his revisionary work in 1949, made a new combination of *Alstonia glaucescens* (K. Schum.) Monach. by stating *Winchia glaucescens* K. Schum. (1895) is the earliest available specific epithet. However, there is a controversy surrounding the acceptance of this specific epithet, as it is considered nomen superfluous by some authors. Due to this nomenclatural confusion, the legitimacy of "glaucescens" remains unclear. Recent authors, including Middleton (2007) and Datta & Nayar (2021), recognise *A. rostrata* as a distinct species



**Fig. 3.** Lectotype of *Alstonia spectabilis* R.Br. (BM [BM000021868]). © British Museum of Natural History, London (reproduced with permission).



**Fig. 4.** Lectotype of *Alstonia rostrata* C.E.C. Fisch. (K [K000852985]). © The Board of Trustees of the Royal Botanic Gardens, Kew (reproduced with permission).

based on clear morphological differences such as leaf arrangement and corolla structure. A specimen corresponding to the name *Alstonia rostrata* could not be located either at CAL or DD herbaria, even though the majority of C.E. Parkinson's collections are known to be deposited at DD.

***Alstonia venenata*** R.Br., Asclepiadeae: 64. 1810. *Lectotype* (designated here): INDIA, *s.loc.*, *s.d.*, Roxburgh *s.n.* (BM [BM001217046 digital image!]). *Residual syntypes*: INDIA, *s.loc.*, *s.d.*, Roxburgh *s.n.* (BM [BM001217047, BM000021877 digital images!], E (E00057961, E00057960 digital images!), P [P04227534 digital image!]). **Fig. 5**

Notes: In the course of locating original material of *Alstonia venenata*, we identified three specimens at BM (Bengal. Hor. Dr. Roxburgh BM000021877; India Orientalis Roxburgh, BM001217046; Roxburgh, BM001217047), while two specimens at

E (Roxburgh, E00057961; Roxburgh, E00057960), and P has a single collection (Roxburgh, India, P04227534, digital image!), all attributed to Roxburgh and considered as original material. As Robert Brown is known to have worked primarily with specimens deposited at BM, it is probable that only the BM specimens were directly examined by him. Hence, only these are considered for lectotypification. Among the three BM sheets, BM001217046 is selected here as the lectotype, as it is the most complete and best-preserved specimen, and matches the diagnostic features described in the protologue. The remaining specimens, although original material, exhibit varying conditions and lack certain morphological details mentioned by R. Brown, and are thus excluded from lectotype consideration. The rationale for this lectotypification rests on both the historical association of R. Brown with BM and the conformity of BM001217046 with the protologue.

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**Fig. 5.** Lectotype of *Alstonia venenata* R.Br. (BM001217046). © British Museum of Natural History, London (reproduced with permission).

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