

Flora of Singapore precursors 39: Notes on Podocarpaceae in Singapore

D.J. Middleton

Singapore Botanic Gardens, National Parks Board,
1 Cluny Road, Singapore 259569, Singapore
david_middleton@nparks.gov.sg

ABSTRACT. The nomenclature and typification of the species of Podocarpaceae in Singapore are discussed.

Keywords. Lectotype, *Nageia*, *Podocarpus*

Introduction

There are two species of Podocarpaceae native to Singapore, *Nageia wallichiana* (C.Presl) Kuntze and *Podocarpus polystachyus* R.Br. ex Endl. (Lindsay et al., 2022). The taxonomy of these two species is uncontroversial but the nomenclature and typification of the names require some clarification before publication of the *Flora of Singapore* account.

The names are presented here under the accepted name of each taxon. For each, only the protologue and a reference to its citation in Lindsay et al. (2022), where relevant, is given. Further details on each name's publication history as relevant to Singapore can be found in Lindsay et al. (2022).

Typifications and nomenclatural notes

Nageia wallichiana (C.Presl) Kuntze, Revis. Gen. Pl. 2: 800 (1891); Lindsay et al., Gard. Bull. Singapore 74(suppl. 1): 115 (2022). – *Podocarpus latifolius* Wall., Pl. Asiat. Rar. 1: 26 (1830), nom. illeg. hom. – *Podocarpus wallichianus* C.Presl, Abh. Königl. Böhm. Ges. Wiss. ser. 5, 3: 540 (1845). – *Nageia latifolia* Gordon & Glend., Pinetum 138 (1858), nom. illeg. superfl. – *Decussocarpus wallichianus* (C.Presl) de Laub., J. Arnold Arbor. 50: 349 (1969). – TYPE: [India], Pundua, *Da Silva* s.n. [EIC 6050] (lectotype K-W [K000553406], designated by Khurajam & Wiersema (2022: 229); islectotypes A [A00022519], BR [BR0000013469092], CAL [CAL0000074778, CAL0000074779, CAL0000074780], E [E00127472], P [P00748865, P00748866]).

Podocarpus blumei Endl., Syn. Conif. 208 (1847). – *Podocarpus latifolius* Blume, Enum. Pl. Javae 1: 89 (1827), nom. illeg. hom. – *Podocarpus agathifolius* Blume, Rumphia 3: 217 (1849), nom. illeg. superfl. – *Nageia blumei* (Endl.) Gordon & Glend.,

Pinetum 135 (1858). – TYPE: [Indonesia], Java, Blume s.n. (lectotype L [L0050820], designated by De Laubenfels (1969: 350)).

Notes. *Nageia wallichiana* (C.Presl) Kuntze was first published with the name *Podocarpus latifolius* by Wallich (1830). This is a later homonym of *Podocarpus latifolius* (Thunb.) R.Br. ex Mirb. and hence illegitimate. A replacement name, *Podocarpus wallichianus* C.Presl, was later published by Presl (1845). Farjon (2010a) reported the type was ‘Not located’ but the name has now been lectotypified by Khuraijam & Wiersema (2022).

Ridley (1925) included this species under the name *Podocarpus blumei* Endl. *Podocarpus blumei* was first published as *Podocarpus latifolius* Blume, which, as with the homonym *Podocarpus latifolius* Wall., is also an illegitimate later homonym of *Podocarpus latifolius* (Thunb.) R.Br. ex Mirb. *Podocarpus blumei* Endl. is a replacement name and predates Blume’s own replacement name of *Podocarpus agathifolius* Blume which is, therefore, superfluous. Farjon (2010a) listed the type as ‘Not located’. However, De Laubenfels (1969: 350), in the list of specimens cited for *Nageia wallichiana*, included this information for one specimen: ‘Without loc., Blume s.n. ♀ (L-lectotype, *Podocarpus latifolius* Blume)’. There are a number of specimens in L that match this general information but De Laubenfels clearly marked one of them, L0050820, as the lectotype.

Podocarpus polystachyus R.Br. ex Endl., Syn. Conif. 215 (1847); Lindsay et al., Gard. Bull. Singapore 74(suppl. 1): 116 (2022). – TYPE: Singapore, October 1822, Wallich 6052B (lectotype K-W [K000552940], designated by Farjon (2010b: 882); isolectotype BM [BM000959898]).

Notes. In the protologue of *Podocarpus polystachyus* R.Br. ex Endl., Endlicher (1847) cites several synonyms. One of these, *Podocarpus macrophylla* Wall. is a nomen nudum and hence has no bearing on the correct name. The second is *Podocarpus polystachyus* R.Br. which is also a nomen nudum but the basis of Endlicher’s validation of the name. The third, the validly published earlier name *Podocarpus nerifolius* D.Don, is qualified with ‘pro parte excl. synon.’ As it is not made clear that the type of *Podocarpus nerifolius* is excluded from *P. polystachyus*, the possibility exists, taking the typification in isolation, that *Podocarpus polystachyus* R.Br. ex Endl. could be an illegitimate superfluous name. However, Endlicher (1847) also treats *Podocarpus nerifolius* as a separate species, thereby implicitly excluding the type of *P. nerifolius* from *P. polystachyus* (see Turland et al., 2018, Art. 52.2).

Gray (1958: 470) gave the type of *Podocarpus polystachyus* R.Br. ex Endl. as being a Christopher Smith specimen housed in BM and collected in July 1796 from Barn Island, which is today called Pulau Senang, in Singapore. This specimen is quite possibly original material but is not cited in the protologue. As a syntype cited in the protologue is still extant (Wallich 6052B) and as syntypes have priority over uncited specimens, this was not an effective lectotypification (see Turland et al., 2018, Art.

9.12, Ex. 12). Later, Farjon (2010b) lectotypified *Podocarpus polystachyus* with the specimen *Wallich 6052B* (K-W), collected in Singapore in 1822.

ACKNOWLEDGEMENTS. I thank Ian Turner and John McNeill for their help and advice.

References

- De Laubenfels, D.J. (1969). A revision of the Malesian and Pacific rainforest conifers, I. Podocarpaceae, in part. *J. Arnold Arbor.* 50: 315–369.
- Endlicher, S.L. (1847). *Synopsis Coniferarum*. Sankt-Gallen: Scheitlin & Zollikofer.
- Farjon, A. (2010a). Podocarpaceae. In: Kiew, R., Chung, R.C.K., Saw, L.G., Soepadmo, E. & Boyce, P.C. (ed.) *Flora of Peninsular Malaysia*, ser. II, vol. 1, pp. 171–201. Kuala Lumpur: Forest Research Institute Malaysia.
- Farjon, A. (2010b). *A Handbook of the World's Conifers*. Leiden: Brill.
- Gray, N.E. (1958). A taxonomic revision of *Podocarpus*, XI: The South Pacific species of section *Podocarpus*, subsection B. *J. Arnold Arbor.* 39: 424–477.
- Khuraimam, J.S. & Wiersema, J.H. (2022). Typification of three names of Asian conifers. *Phytotaxa* 550(3): 295–300.
- Lindsay, S. Middleton, D.J. Ho, B.C., Chong, K.Y., Turner, I.M., Ali Ibrahim, Alonso-García, M., Ang, W.F., Ashton, P.S., Athen, P. et al. (2022). Flora of Singapore: Checklist and bibliography. *Gard. Bull. Singapore* 74(Suppl. 1): 3–860.
- Presl, C. (1845). Observationes boanicae. *Abh. Königl. Böhm. Ges. Wiss.* ser. 5, 3: 437–551.
- Ridley, H.N. (1925). *Flora of the Malay Peninsula*, vol. 5. London: L. Reeve & Co.
- Turland, N.J., Wiersema, J.H., Barrie, F.R., Greuter, W., Hawksworth, D.L., Herendeen, P.S., Knapp, S., Kusber, W.-H., Li, D.-Z., Marhold, K. et al. (ed.) (2018). *International Code of Nomenclature for Algae, Fungi, and Plants (Shenzhen Code)* adopted by the Nineteenth International Botanical Congress Shenzhen, China, July 2017. Regnum Vegetabile 159. Glashütten: Koeltz Botanical Books.
- Wallich, N. (1830). *Plantaes Asiaticae Rariores*. London: Treuttel & Würtz.

