



## *Ilex malayana*, a replacement name for *Ilex macrophylla* Wall. ex Hook.f., and its lectotypification (Aquifoliaceae)

ALIAA ATHIRAH ADAM MALEK<sup>1\*</sup>, KANCHANA PRUESAPAN<sup>2</sup> & RICHARD T. CORLETT<sup>3</sup>

<sup>1</sup>Herbarium, Forest Research Institute Malaysia, Kepong, 52109, Selangor, Malaysia

✉ [aliaathirah@frim.gov.my](mailto:aliaathirah@frim.gov.my); <https://orcid.org/0000-0003-2491-4539>

<sup>2</sup>Bangkok Herbarium, Plant Varieties Protection Office, Department of Agriculture, Bangkok, 10900, Thailand

✉ [kpruesapan@gmail.com](mailto:kpruesapan@gmail.com); <https://orcid.org/0000-0002-4931-1972>

<sup>3</sup>Royal Botanic Gardens Kew, Richmond, Surrey TW9 3AE, United Kingdom

✉ [corlett@xtbg.org.cn](mailto:corlett@xtbg.org.cn); <https://orcid.org/0000-0002-2508-9465>

\*Correspondence author: ✉ [aliaathirah@frim.gov.my](mailto:aliaathirah@frim.gov.my)

*Ilex macrophylla* Wall. ex Hooker (1875: 604) was described in the first volume of the *Flora of British India*, but this epithet had already been used by Blume for an East Asian species, *I. macrophylla* Blume (1827: 1150), subsequently synonymized with *I. latifolia* Thunb. in J.A. Murray (1784: 168). This epithet was also used independently by Heer (1869: 481) for a Paleocene fossil from Greenland, with this name recently replaced by *I. polarica* Doweld (2019: 184). Hooker's name therefore is a later illegitimate homonym and needs to be replaced. Manen *et al.* (2010) synonymized *I. macrophylla* Wall. ex Hook.f. with *I. wallichii* Hooker (1875: 605), but these are distinct species, easily distinguishable in the field and herbarium (Table 1). Moreover, the samples previously determined as *I. macrophylla* Wall. ex Hook.f. (from Singapore) and *I. wallichii* (from Sarawak) do not pair together in their molecular phylogenies.

Hooker (1875) accepted the name Wallich used for this taxon in his Catalogue as validly published, but Wallich provided no description, so under modern rules Wallich's designation is an invalid *nomen nudum*. Steudel (1840) lists *I. macrophylla* Wall. as a synonym of his *I. wallichii* Steud., but he provides no description of this, so he did not validate this name either. When Hooker validly published this name, he did not designate a type, so any specimens cited in his protologue can be considered as syntypes and as potential lectotypes. All the duplicates of *Wallich 4331* are clearly part of the same gathering and probably collected from the same plant, since all have immature fruits at the same stage. We therefore followed the clear intent of the author by designating the duplicate of *Wallich 4331* which was part of Hooker's herbarium in Kew as the lectotype. We have also designated lectotypes for the varieties recognized by Loesener (1901) among the specimens cited in the protologue, chosen to fit the descriptions.

*Ilex malayana* A.M.Aliaa-Athirah, Pruesapan & R.T.Corlett, *nom. nov.*

≡ *Ilex macrophylla* Wall. ex Hook.f. (1875: 604), *nom. illeg.*, non Blume (1827: 1150).

**Type**.—MALAYSIA. Penang, 1822, *Wallich s.n.* [*Wallich Cat. 4331*] (**lectotype, designated here**: K [K000669559!]; isoelectotypes K [K000669560!], K-W [K001038717!], GH [GH00049574 image!], G [G00032416, G00032417 and G00032418 images!]).

= *Ilex macrophylla* var. *ovata* Loes., Nova Acta Acad. Caes. Leop.-Carol. German. Nat. Cur. 1: 85 (1901). **Type**.—MALAYSIA. Penang, Griffith 2006 (**lectotype, designated here**: K [K000669561!]).

= *Ilex macrophylla* var. *angustata* Loes., Nova Acta Acad. Caes. Leop.-Carol. German. Nat. Cur. 1: 85. (1901). **Type**.—MALAYSIA. Malacca, Griffith 1977 (**lectotype, designated here**: K [K000669558!]).

**Etymology**.—The specific epithet *malayana* is derived from Malaya and was chosen to reflect the known species distribution in modern Peninsula Malaysia and surrounding areas.

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**TABLE 1.** Comparison of *Ilex malayana* and *I. wallichii*.

Item	<i>Ilex malayana</i>	<i>Ilex wallichii</i>
Distribution	Southern Thailand, Peninsular Malaysia, Singapore and Borneo (Kuching only)	Indochina, Thailand, Peninsular Malaysia and Borneo
Habitat	Grows on a variety of soils	Mostly on peat soil, sandstone and heath forest
Elevation range	0–150 m	0–700 m
Young twigs	Pubescent, drying dark brown	Glabrous, brown to light greyish to silver
Leaves	8–21 × 4–8 cm, subcoriaceous	4–12 × 2.5–6 cm, more coriaceous
Midrib	Pubescent to glabrescent	Glabrous
Lateral venation	Prominent below, widely spaced and curved ascending	Subprominent to ±obscure below, narrowly spaced and straight ascending
Primary pedicel of inflorescence	Pubescent	Glabrous
Stigma	Capitate	Thickly discoid
Fruit diameter	4–5 cm	6–10 cm
Fruit shape	Subglobose and/or slightly ribbed when dried, stigma prominent	Depressed globose and ±quadrangular furrowed when dried, stigma not prominent
Pyrene number	6	10–13

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