

New Species and Varieties of *Symplocos* (Symplocaceae) from Borneo

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Abstract

A new species of *Symplocos*, *S. buxifolioides* K.G.Pearce and two varieties, *S. iliaspaiensis* Noot. var. *pedunculata* K.G.Pearce and *S. laeteviridis* Stapf var. *alabensis* K.G.Pearce are described from Borneo.

Introduction

In his account of the Symplocaceae for the Flora Malesiana region, Nooteboom (1975, 1977, 1984, 1986, 1989) recognised 30 species with 19 varieties of the genus *Symplocos* Jacq. in Borneo. In the process of revising and preparing the manuscript for the Tree Flora of Sabah and Sarawak, one new species, *Symplocos buxifolioides*, and two varieties, *S. iliaspaiensis* var. *pedunculata* and *S. laeteviridis* var. *alabensis* are recognised. Descriptions and brief notes on the geographical distribution and morphological characters distinguishing these new taxa from those of previously known are given.

1. *Symplocos buxifolioides* K.G.Pearce, *sp. nov.*

Symplocos buxifoliae Stapf similis a qua differt ramulis distincte modo gallice et anglice 'zigzag' et margine foliae revoluta praeter interdum ad apicem et e basi foliorum non altae obscure denticulatae. **Typus:** Chew & Corner RSNB 5882, Borneo, Sabah, Mt. Kinabalu, Mesilau (holo SING; iso SAN).

Tree to 10 m tall, 10 cm diam. **Twigs** weakly, irregularly curved, *smaller ones distinctly zig-zag with nodes closely set*, slender, up to 4 mm diam., dark brown to black; young parts longitudinally ridged and sparsely appressed long-pilose; *older parts becoming horizontally cracked, glabrescent, without prominently raised leaf scars*. **Leaves** spirally arranged, coriaceous, glabrous above, hairy to virtually glabrous below, drying olive-brown above, yellow-green below; *blade broadly ovate-elliptic*, 2.5–4.5 x 1–3

cm, base shortly attenuate, *margin revolute except sometimes at apex, shallowly, obscurely toothed from near base, apex acute, shortly apiculate*; midrib narrowly channelled above; *lateral veins (6–)7–8 pairs*, joining to form an intramarginal vein; intercostal venation reticulate, raised above and prominent below; petiole 3.5–5 mm long, sharply flanged to base. **Inflorescences** racemous, borne in the axils of upper leaves and below on leafless twigs; *axis 2–5(–9) mm long*, shortly, moderately dense appressed–pilose; bracts early caducous. **Flowers** 1–3; pedicels to 0.5 mm long; calyx tube *c.* 0.3 mm long, lobes broadly ovate, chartaceous, ciliate almost to apex, moderately dense to sparsely appressed–hairy, *c.* 1 mm long; corolla white, glabrous, 3.5–4 mm long; ovary sparsely to densely appressed hairy, 1.5 mm high. **Fruits** solitary on a pedicel to 9 mm long, ovoid to curved ellipsoid, 1–1.5 x 0.5–0.7 cm, hardly to shallowly ridged, sparsely appressed–pilose to glabrescent, drying yellowish brown, with persistent and erect calyx lobes.

Distribution: Endemic in Borneo. Known only from Mt. Kinabalu, Sabah.

Ecology: Upper montane forest at 2400–3660 m altitude.

Other specimens examined: SABAH. Mt. Kinabalu: *Hotta 3840* (SAN), *Chew & Corner RSNB 5911* (SAN), *Mikil & Aban SAN 46593* (SAN) and *Aban et al. SAN 54254* (SAN).

Notes: *Symplocos buxifolioides* is similar to *S. buxifolia* Stapf but differs from the latter in its slender twigs, which are distinctly and shortly zig–zag between the closely set nodes; young parts of the twigs sparsely appressed pilose; broadly ovate–elliptic leaves (not obovate–elliptic as in *S. buxifolia*) with revolute and closely, obscurely denticulate margin from near the base, acute to shortly apiculate apex (not obtuse to rounded), and 6–8 pairs of lateral veins (not 4–6); inflorescences borne on leafless twigs as well as in the axils of upper leaves; calyx tube *c.* 0.3 mm long, ciliate almost to the apex (not sometimes ciliate at base), and moderately densely to sparsely appressed–hairy (not glabrous); and sparsely to densely appressed–hairy ovary (not glabrous). This species is named for its close morphological similarity to *S. buxifolia*.

2. *Symplocos iliaspaiensis* Noot. var. *pedunculata* K.G.Pearce, *var. nov.*

A var. *iliapaiense* differt racemis base ramosis ad 6.5 cm longis floribus (fere) sessilibus ad 2 mm pedicellatis. **Typus:** *Fedilis SAN 95642*, Borneo, Sabah, Kalabakan district (holo SAN; iso K, KEP, L, SAR, SING).

Tree to 13 m tall. **Leaves** 7.5–20 x 2.5–6 cm, base cuneate, apex with acumen to 1.4 cm long. Racemes *basally branched, to 6.5 cm long*. **Flowers** *virtually sessile or*

with short pedicel to 2 mm long.

Distribution: Endemic in Borneo. Sabah (Kalabakan, Sandakan and Tawau districts) and Brunei Darussalam.

Ecology: In primary and logged-over mixed dipterocarp forest at altitudes to 80 m, on flat or undulating lands and ridges.

Other specimens examined: SABAH. Sandakan district, *Sigin* SAN 56798 (KEP, SAR, SING), *Leopold & Kodoh* SAN 81396 (SAN, SAR), *Leopold & Kodoh* SAN 81424 (SAN, SAR); Lahad Datu *Sinanggul* SAN 56991 (SAN, SAR); Kinabatangan *Meijer* SAN 136314 (SAN), Pensiangan district *Goh* SAN 141166 (KEP, SAN). BRUNEI: Belait Wong WKM 1079 (SAN).

Notes: This new variety may reach 13 m tall (not 3.3 m tall as in the typical variety). It is vegetatively very similar to var. *iliaspaiensis* but can be distinguished by its basally branched raceme or unbranched spike or fascicle of racemes 1.5 to 6.5 cm long bearing virtually sessile to shortly pedicellate (to 2 mm long) flowers. In contrast, var. *iliaspaiensis* has fascicles of sessile flowers with the axis entirely absent. This variety is named for its pedunculate inflorescences.

3. *Symplocos laeteviridis* Stapf var. *alabensis* K.G.Pearce, *var. nov.*

Symplocos laeteviridis Stapf var. *mjöbergii* (Merr.) Noot. similis praeter ramunculos graciliores cum paginis infernis foliorum omnino glabros, foliis olivaceis, parvioribus, lanceolatis, ad 6.3 cm longis et 2.2 cm latis. **Typus:** *Madani & Majawat* SAN 119252. Borneo, Sabah, Penampang district, Gunung Alab (holo SAN, iso KEP).

Glabrous treelet to 2 m tall. **Twigs** slender, glabrous. **Leaves** drying olive green; blade glabrous below, lanceolate, to 6.3 x 2.2 cm, base cordate; lateral veins 10 pairs; petiole c. 1 mm long.

Distribution: Endemic in Borneo. Sabah, known only from Gunung Alab (the type specimen and *Kamaruddin* KMS 1431 (SAN, UKMS).

Notes: The new variety is similar to *Symplocos laeteviridis* Stapf var. *mjöbergii* (Merr.) Noot. except that the twigs and lower leaf surface are entirely glabrous and it has more slender twigs and smaller (to 6.3 x 2.2 cm) lanceolate leaves that dry olive green. It is named for the locality where it was collected.

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