

A New Species of *Polyalthia* (Annonaceae) from Sabah

I.M. TURNER

Research Associate, Singapore Botanic Gardens, and
Royal Botanic Gardens, Kew

Abstract

Polyalthia lasioclada I.M. Turner, *sp. nov.* is described. It is a small tree known from the Mount Kinabalu area of Sabah.

When looking through some Annonaceae specimens recently collected from the Kinabalu Park area of Sabah, I realised several were the same thing as an odd specimen I had tentatively placed in *Polyalthia microtus* Miq. The leaves drying greyish with auriculate bases and orange-red corollas clearly pointed to membership of the informal '*Polyalthia insignis* species-group' of Johnson and Murray (1999). The unusual feature of the specimens was the villose twigs reminiscent of *Polyalthia borneensis* Merr. and *P. bullata* King rather than typical *P. microtus*. The availability of more collections confirmed that there were some consistent differences in flower and fruit form that separated the shaggy-twigged plant and therefore I here describe it as a new species.

Polyalthia lasioclada I.M. Turner, *sp. nov.*

Polyalthiae microtus ramulis petiolisque villosis, sepalis minoribus, monocarpis globosis vix cylindricis, in sicco aureobrunneis laevibus vix brunneis verruculosisque differt. –**Typus:** Malaysia. Borneo, Sabah, Ranau District, west of Kg Takutan, 2500 ft, 25 May 1973, G. Shea & Aban, SAN 77174 (holotype, SING; isotypes, K, L). **Plate 1.**

Small tree. **Twigs** drying dark grey or grey-brown with shallow longitudinal grooves and some cracking, youngest parts brown or reddish brown densely covered with long (3-4 mm) more or less straight golden brown hairs. **Leaves** chartaceous to subcoriaceous, drying grey or grey-brown above, brown beneath, glabrous except for long straight hairs on midrib below, densest near base, midrib and lateral nerves immersed above, prominent beneath, lamina elliptic to elliptic-obovate, 4.5-20 × 1.5-7.7 cm, apex acute to shortly acuminate, base auriculate, lateral veins 15-19 pairs, angled or arching forward, looping distinctly via a distinct intramarginal, tertiary venation reticulate. Petioles 1-

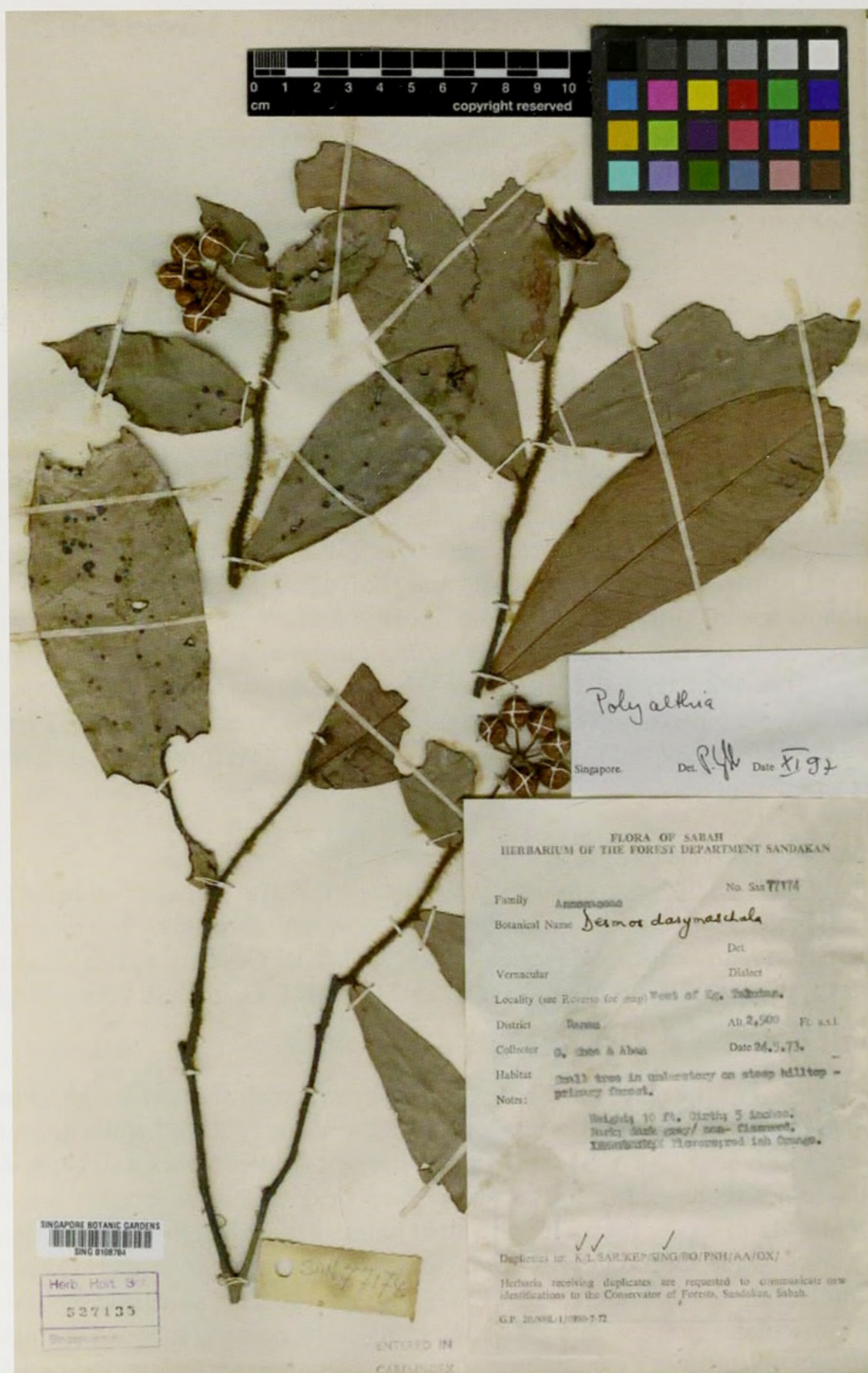


Plate 1. Photograph of the holotype of *Polyalthia lasioclada* I.M. Turner, sp. nov.

5 mm long, 1-3 mm thick, densely villose. Inflorescences single-flowered, intranodal. **Flowers** with pedicel 12-24 mm long, less than 1 mm wide, drying red brown with scattered pale hairs, faintly wrinkled longitudinally, sepals ovate or triangular 1-2 × 2-3 mm, drying brown with pale hairs externally, glabrous within, petals lanceolate 15-30 mm long, orange-red, outer slightly wider than inner, 5 vs 3-4 mm, drying dark brown or almost black, outside slightly wrinkled longitudinally, minutely pimpled near the base with sparsely scattered short white hairs, inside smoother with hairs confined to the apex. stamens many *ca* 2 mm long, connective apex truncate, carpels *ca* 12, *ca* 1.5 mm long, densely pale hairs. **Fruits** with pedicel *ca* 18 mm long, 1 mm wide, drying reddish brown, monocarps *ca* 12, globose, 8-10 mm diameter, apex apiculate, drying golden brown, sparsely adpressed pale hairy, drying relatively smooth, stipe 5-8 mm long, 1 mm thick. **Seeds** 1-2, drying pale brown.

Specimens seen: MALAYSIA. **Sabah**, Kota Marudi District, Kampung Monggis, 4 batu dari pusat Kampung Monggis Utara, 9 Apr 1996, *Matamin Rumutom* 186 (K); Kampung Kawasan Taman 100 m dari Sungai Mokodon, 8 Mar 1996, *Daim Andau* 344 (K); Kampung Kawasan Taman, Jalan ke Palu Agayo, 16 May 1995, *Kinsum Bakia* 441 (K); Ranau District, Kampung Nalumad 2 batu from Kg Nalumad, 3 Oct 1998, *Daim Andau* 1020 (K); Ranau District, Kampung Nalumad 5 batu dari Kg Nalumad, 9 Oct 1996, *Daim Andau* 855 (K).

Notes: The chosen specific epithet is derived from Greek (*lasios* = shaggy, woolly, *clados* = branch, shoot) and reflects the characteristic villose twigs of the species.

Polyalthia lasioclada is similar to the widespread and rather variable *Polyalthia microtus*, particularly in flower form. The sepals of *P. lasioclada* are generally smaller than those of *P. microtus* (1-2 × 2-3 mm versus 4-6 × 4-6 mm). The monocarps of *P. lasioclada* are dry globose, relatively smooth and a golden brown, whereas those of *P. microtus* are more cylindrical, dry with the surface minutely warty and dark brown.

The villose twigs of *Polyalthia lasioclada* are similar to those of *P. borneensis* and *P. bullata*. However these species both have cream to yellow flowers with short villose pedicels rather than the orange-red corollas and relatively long, sparsely hairy pedicels of *P. lasioclada*. The many-nerved leaves of *P. bullata* (25-40 pairs) are unlikely to be confused with *P. lasioclada* (15-19 pairs).

Acknowledgements

Many thanks to Dr J.F. Veldkamp (L) for translating the Latin diagnosis. Support for this reasearch from the Arnold Arboretum, Forest Research Institute Malaysia, Singapore Botanic Gardens and Royal Botanic Gardens Kew is gratefully acknowledged.

References

- Johnson, D. M. and N.A. Murray. 1999. Four new species of *Polyalthia* from Borneo and their relationship to *Polyalthia insignis*. *Contributions from the University of Michigan Herbarium* **22**: 95-104.



Turner, I. M. 2010. "A new species of *Polyalthia* (Annonaceae) from Sabah." *The Gardens' bulletin, Singapore* 62, 173–176.

View This Item Online: <https://www.biodiversitylibrary.org/item/148249>

Permalink: <https://www.biodiversitylibrary.org/partpdf/150310>

Holding Institution

Harvard University Botany Libraries

Sponsored by

BHL-SIL-FEDLINK

Copyright & Reuse

Copyright Status: In copyright. Digitized with the permission of the rights holder.

License: <http://creativecommons.org/licenses/by-nc-sa/3.0/>

Rights: <https://biodiversitylibrary.org/permissions>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.