Studies on Homalomeae (Araceae) of Borneo XVII: two new species of granite-restricted Homalomena from NW Sarawak

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Homalomena caput-gorgonis S.Y. Wong and P.C. Boyce and Homalomena succincta S.Y. Wong and P.C. Boyce are described as taxonomic novelties respectively of the Selaburensis and Giamensis complexes from the foothills of Gunung Pueh, northwest Sarawak, where both are restricted to granite. Both species are illustrated from the Type collections. Identification keys to the species of the Giamensis and Selaburensis complexes are presented.

Keywords: Araceae; Homalomena; Malaysian Borneo; Gunung Pueh; granite

Introduction

Botanical investigation of the numerous mountain ranges of Sarawak continues to reveal further examples of geologically obligated, geographically isolated novel taxa. Here we describe two new species of Homalomena, Homalomena caput-gorgonis S.Y. Wong and P.C. Boyce and Homalomena succincta S.Y. Wong and P.C. Boyce, belonging respectively to the Selaburensis and Giamensis complexes, from the granites of Gunung Pueh, in northwest Sarawak.

The Gunung Pueh-Berumput massif straddles the border between Sarawak’s Kuching Division (Sematan and Lundu districts) and Indonesian Kalimantan Barat (Sambas and Bengkayang regencies). Gunung Pueh-Berumput belongs to the same Upper Cretaceous granites and diorite system as Gunung Gading to the east, and the isolated Gunung Melanau in the far north. Despite repeated searches of the more easily accessible, and much-botanized, Gunung Gading, no other populations of these two novel species have been located.

Odoardo Beccari is credited as the first biologist to investigate Gunung Pueh (as “Mt Poe”) during August 1866 (Beccari 1902, p. 161 et seq., & 1904, p. 98 et seq.), and indeed the Type locality “Mt Poe, Sarawak”, is given for several of his Sarawak plants. However, according to Burtt (1964), Beccari’s Gunung Poe is not the same as that named as Gunung Pueh on modern maps, but is actually Gunung Berumput, a more south-easterly peak in the same range.

Geological confirmation for this and all of our field work is much assisted by Hutchison (1989, 2005) and Tate (2001).

Taxonomy

The Seluburensis Complex presently comprises four described species (Baharuddin and Boyce 2010; Ng et al. 2011; Wong et al. 2013; Boyce and Wong forthcoming). Recognition of H. caput-gorgonis requires reworking of the identification presented in Boyce & Wong (in press), as herewith:

Key to species of the Homalomena Selaburensis Complex

1. Petioles and peduncles glossy, smooth ……………. 2
2. Petioles and peduncles matte, often scabridulous …… 3
3. Leaf blades hastate, posterior lobes directed outwards; blade smooth, or only very weakly quilted; peduncle slender, up to 20 cm × 1.5 mm; pistillate zone equalling the staminate zone; spathe interior white at anthesis. Mulu (northeast Sarawak), shales ………………………………….. H. passa
4. Leaf blades sagittate, posterior lobes directed inwards; blade quilted between the primary lateral veins; peduncle rather stout, up to 12.5 cm × 3 mm; pistillate zone about half as long as the staminate zone; spathe interior yellow at anthesis. Maliau Basin (Sabah), sandstones ………………………………….. H. galbana
5. Inflorescence erect at anthesis; spathe 4.5 cm long; leaf blades adaxially semi-glossy, primary veins flush adaxially; petioles green. Western Malaysia, granites …………………………………………………….. H. curvata
6. Inflorescence nodding at anthesis. Borneo……………….. 4
7. Inflorescences up to seven in a simple synflorescence; spathe c.6.5 cm long; leaf blades adaxially highly polished, abaxially matte pale green; petioles deep reddish brown; plants up to 55 cm tall. Southwest Sarawak, limestone …………………………………………………….. H. selaburensis

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