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Studies on *Schismatoglottideae* (*Araceae*) of Borneo LVI – Two new species of *Schismatoglottis* for the Nervosa Grade

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Abstract: *Schismatoglottis amosyui* S. Y. Wong, S. L. Low & P. C. Boyce, sp. nov. and *S. pocong* S. Y. Wong, S. L. Low & P. C. Boyce, sp. nov. are described and illustrated as taxonomically novel species belonging to the Nervosa Grade, a paraphyletic grade defined, uniquely for *Schismatoglottideae*, by aromatic vegetative tissues.

Key words: Araceae, Schismatoglottideae, Schismatoglottis, Indonesia, Borneo, Kalimantan Utara, Sarawak, new species, polyphyletic, sandstones

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Introduction

Phylogenetic analyses by the second author (Low 2016) recovered a grade (sensu Huxley 1959) equivalent to a combined Schismatoglottis Nervosa Complex (Wong 2010; Ting & al. 2012), S. Multinervia Complex (Boyce & Wong 2015; Wong & Boyce 2011), S. patentinervia Engl. (sensu Hay & Yuzammi 2000), and three morphologically similar but ostensibly taxonomically isolated species [S. antu S. Y. Wong & P. C. Boyce (2015), S. camera-lucida P. C. Boyce & S. Y. Wong (2014), and S. gui P. C. Boyce & S. Y. Wong (2014)]. Despite shared morphological characteristics, notably the occurrence of aromatic vegetative tissues otherwise absent from Schismatoglottis species, repeated molecular analyses failed to recover these combined taxa as a monophyletic unit, although they consistently formed a paraphyletic cluster, which for the sake of convenience we are referring to as the S. Nervosa Grade (Fig. 1).

Species of the Nervosa Grade (Fig. 2) are small to medium-sized compact to sprawling mesophytes with resin-aromatic vegetative tissues (probably terpenoids), leaf blades with conspicuously tessellate secondary venation, petioles commonly longitudinally ribbed and/ or scabrid, and erect inflorescences in which the lower persistent part has pronouncedly thickened walls, and with the spathe limb either white, wide-spreading, and soon deliquescing at the onset of staminate anthesis, or more or less uniformly green, hardly opening, and persisting until post anthesis before partially rotting. Many species in the Nervosa Grade propagate spontaneously from whole or fragmentary leaves, and several species produce viviparous plantlets on still-active leaves, either along the length of the abaxial midrib (Schismatoglottis amosyui, sp. nov., S. ulusarikeiensis S. Y. Wong), or from the leaf blade tip (S. hayi S. Y. Wong & P. C. Boyce, S. *puberulipes* Alderw.). Most species are locally endemic and almost all are geologically obligated. The Nervosa

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