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## Studies on *Schismatoglottideae* (Araceae) of Borneo XXI – Two new species of the *Schismatoglottis* Calyptrata Group: *Schismatoglottis heterodoxa* and *S. ranchanensis*

### Abstract

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Two new species of the *Schismatoglottis* Calyptrata Group are described from Malaysian Borneo. One, *S. heterodoxa*, is the second rheophytic species ever recorded for the Calyptrata Group. The other, *S. ranchanensis*, is lithophytic, a rather rare life form for that group. A key to the Bornean rheophytic and lithophytic species of the Calyptrata Group is given and both novelties are illustrated.

Additional key words: aroids, lithophyte, rheophyte, taxonomy, Malaysia, Indonesia

### Introduction

Recent field work has revealed that the *Schismatoglottis* Calyptrata Group (species sharing hapaxanthic shoot modules, a fully attached and persistent petiolar sheath, and a caducous spathe limb, Hay & Yuzammi 2000) contains numerous taxonomic novelties. Among these, two species, one rheophyte and one lithophyte, are particularly interesting as, to date, the described species of the Calyptrata Group are almost exclusively mesophytes. The rheophytic novelty is here described as *Schismatoglottis heterodoxa* S. Y. Wong and the lithophyte as *S. ranchanensis* S. Y. Wong. *S. ranchanensis* is most similar in overall appearance to *S. viridissima* A. Hay, an obligate lithophyte from W Sarawak (Hay & Yuzammi 2000), but differs in several crucial morphological spadix characteristics. By comparison, although by its hapaxanthic shoots it clearly fits most conveniently into the Calyp-

trata Group, putative relationships of *S. heterodoxa* are not at all obvious. It differs very substantially from the only other known rheophytic species of the Calyptrata Group, *S. ahmadii* A. Hay (Hay & Yuzammi 2000), and does not closely resemble any other described species from Borneo.

### Results and Discussion

#### *Schismatoglottis heterodoxa* S. Y. Wong, **sp. nov.**

Holotype: Malaysian Borneo, Sarawak, Bintulu Division, Bukit Satiam, 2°59'13.3"N, 112°55'57.5"E, c. 120 m asl, 14.7.2006, P. C. Boyce & al. AR-1899 (SAR!)

*Schismatoglottis heterodoxa* is distinguished from *S. ahmadii*, the only other described rheophytic species of the *Schismatoglottis* Calyptrata Group, by the cylindrical

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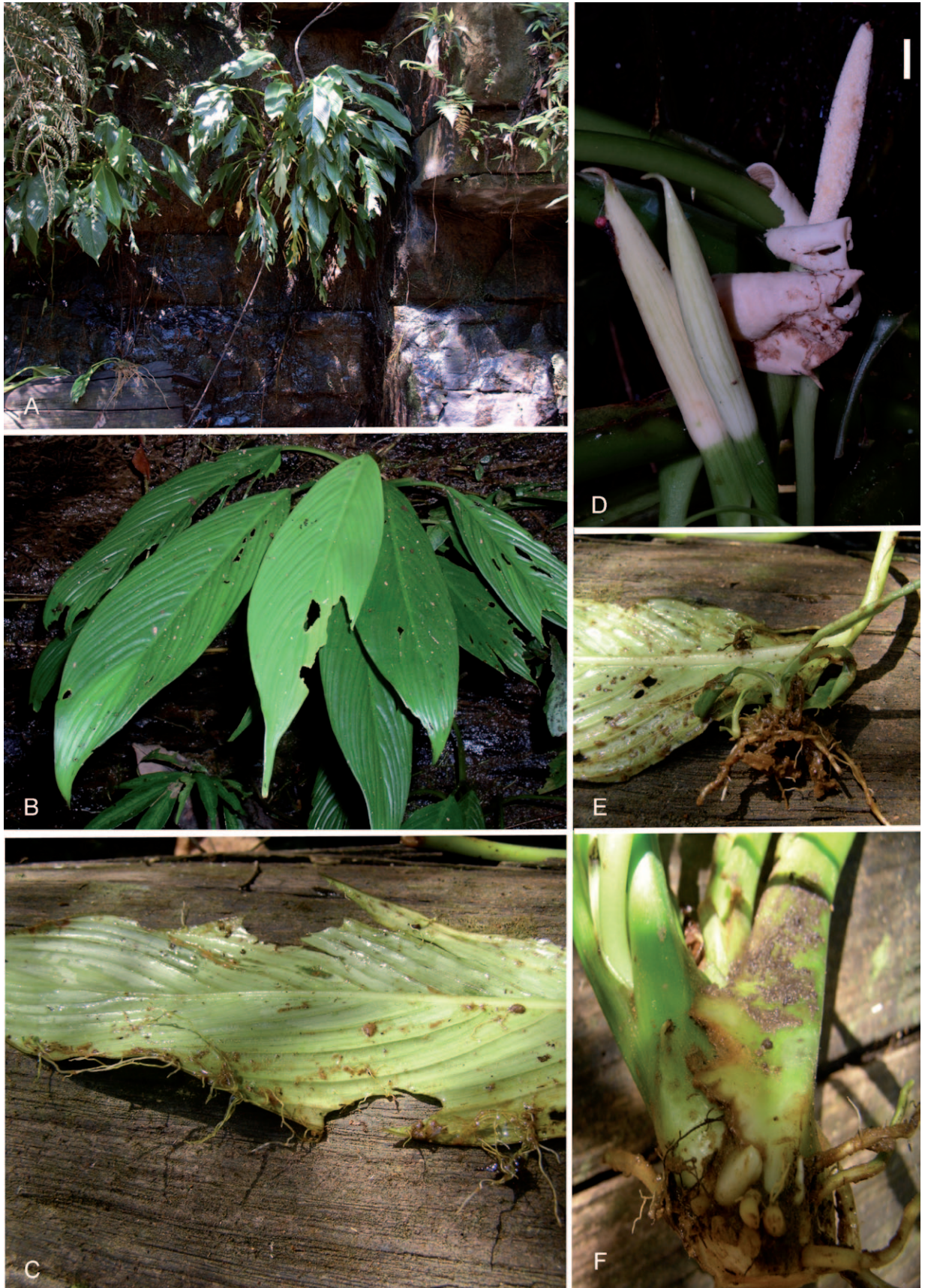


Fig. 1. *Schismatoglottis heterodoxa* – A: plant in habitat; note the rheophytic growth on wet shale; B: leaf blades; C, E: plantlets along the margins of the water-damaged leaf blade; D: flowering module; note the 2–3 inflorescences per module; F: new growth at the base of an already flowered shoot (i.e. modules hapaxanthic). – Photographs from P. C. Boyce & al. AR-1899; scale bar: D = 1 cm.