

PETER C. BOYCE¹ & WONG SIN YENG²

Studies on *Schismatoglottideae* (*Araceae*) of Borneo XXVII – New species of *Aridarum*, and notes on the *Aridarum* Rostratum Complex

Abstract

Boyce P. C. & Wong S. Y.: Studies on *Schismatoglottideae* (*Araceae*) of Borneo XXVII – New species of *Aridarum*, and notes on the *Aridarum* Rostratum Complex. – Willdenowia 43: 91–99. June 2013. – Online ISSN 1868-6397; © 2013 BGBM Berlin-Dahlem.

Stable URL: <http://dx.doi.org/10.3372/wi.43.43110>

Two taxonomically novel *Aridarum* species are described from Kalimantan Barat, Indonesian Borneo: *A. hippocrepis* P. C. Boyce & S. Y. Wong and *A. unicum* P. C. Boyce & S. Y. Wong. Together with *A. rostratum* Bogner & A. Hay (also Kalimantan Barat) these form a morphologically distinct group of unistaminate *Aridarum* species, here informally dubbed the *Aridarum* Rostratum Complex, differing from those of the (also unistaminate) Burtii Complex by the inflorescence pendent on an arching to pendent wiry peduncle, by staminate flowers lacking a distally expanded connective, the presence of horseshoe-shaped interstice staminodes that expand laterally post pistillate anthesis and prior to staminate anthesis, by the spathe limb hardly opening at pistillate anthesis and deliquescing acropically during staminate anthesis, and by the narrowly campanuliform (not salverform) persistent lower spathe. The Rostratum Complex is further differentiated by leaf blades lacking the adaxially conspicuously raised primary lateral veins that are a characteristic of the Burtii Complex. Recognition of these two new species takes the genus *Aridarum* to 14 accepted species. An emended species description of *A. rostratum* is presented and a key to species of the Rostratum Complex is provided. All species are illustrated from living plants, and a comparative plate of the spadices of the three species assigned to the Rostratum Complex is also provided.

Additional key words: Indonesia, Kalimantan Barat, rheophytic, granite, sandstone

Introduction

In proposing the *Aridarum* Burtii Complex, Wong & al. (2012) called attention to another group of unistaminate *Aridarum* species centred on *A. rostratum* Bogner & A. Hay (Bogner & Hay 2000) and appearing to constitute yet another group morphologically distinct to the Burtii Complex. Subsequently, further plants obviously similar to, although clearly differentiated from *A. rostratum* have come to light such that we now feel justified in describing these as novelties, and proposing a further informal taxonomic group – the *Aridarum* Rostratum Complex. In addition to describing new species,

we have had the opportunity also to examine several living collections of *A. rostratum* which has enabled a modified and more comprehensive species description than was previously possible from the single known preserved collection.

Results and Discussion

Aridarum hippocrepis P. C. Boyce & S. Y. Wong, **sp. nov.**
Holotype: Indonesian Borneo, Kalimantan Barat, Kabupaten Sekadau, Kecamatan Nanga Taman, 4 Apr 2012, K. Nakamoto AR-3842 (BO!; isotype: SAR!).

¹ Pusat Pengajian Sains Kajihayat [School of Biological Sciences], Universiti Sains Malaysia 11800 USM, Pulau Pinang, Malaysia.

² Department of Plant Science and Environmental Ecology, Faculty of Resource Science and Technology, Universiti Malaysia Sarawak, 94300 Samarahan, Sarawak, Malaysia.

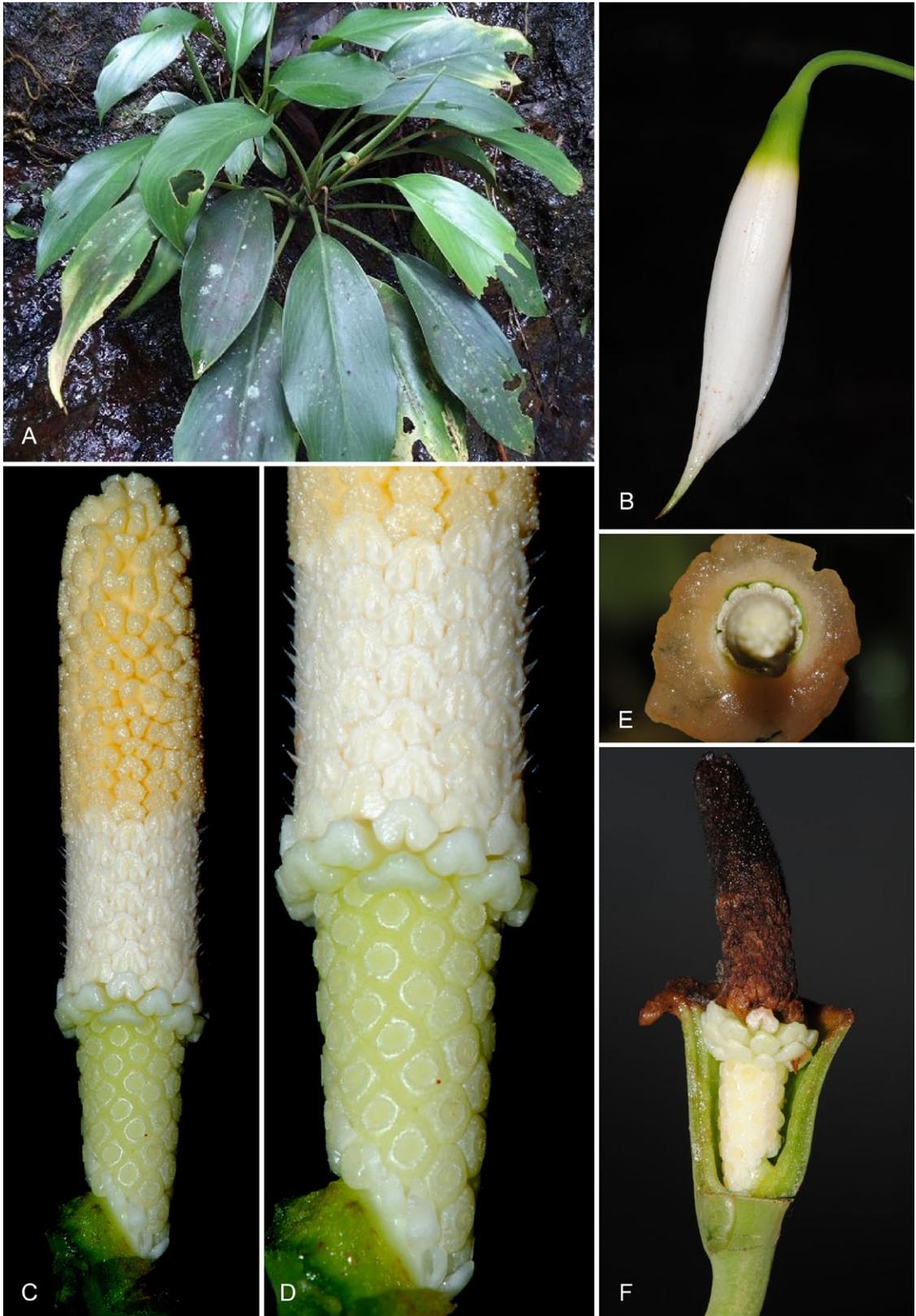


Fig. 1. *Aridarum hippocrepis* – A: plant in habitat; B: inflorescence at early pistillate anthesis; C: spadix (spathe artificially removed) at onset of staminate anthesis; D: detail of fertile zones of spadix, onset of staminate anthesis; note that the interstaminal staminodes are beginning to expand laterally; E: inflorescence during staminate anthesis, with the ragged liquefying portions of the spathe limb still adhering to the lower spathe, and the laterally expanded staminodes clearly visible blocking the entrance of the persistent lower spathe; F: inflorescence post anthesis, the lower spathe artificially removed; note that the spent parts of the spadix have withered, and that the interstaminal staminodes are beginning to turn green. – Photographs all from *K. Nakamoto AR-3910*; A by *K. Nakamoto*; B–F by *P. C. Boyce*.