Studies on Schismatoglottideae (Araceae) of Borneo XXXIV – The Fruits of *Schottariella mirifica*

Peter C. Boyce
Honorary Research Fellow
Institute of Biodiversity and Environmental Conservation (IBEC)
Universiti Malaysia Sarawak
94300 Kota Samarahan
Sarawak, Malaysia
phymatarum@gmail.com

Wong Sin Yeng
Department of Plant Science & Environmental Ecology
Faculty of Resource Science & Technology
Universiti Malaysia Sarawak
94300 Kota Samarahan
Sarawak, Malaysia
sywong@frst.unimas.my

ABSTRACT

The fruits of *Schottariella mirifica* P.C. Boyce & S.Y. Wong are described and illustrated for the first time and shown to be dehiscent berries, the second recorded example of this fruit type for tribe Schismatoglottideae, and the third for the family Araceae. The berries of *Schottariella mirifica* dehisce basally with the shed portion of the berry containing 3–5 comparatively large seeds, each fully enclosed in a fleshy white aril.

INTRODUCTION

Schottariella mirifica P.C.Boyce & S.Y.Wong (Boyce & Wong, 2008, 2009, 2012a) is a recently described species of obligate rheophytes known from four localities on the Kanowit and Ai river catchments of western Sarawak, Malaysian Borneo.

When *Schottariella* was described (Boyce & Wong 2008, 2009) complete mature infructescences were unknown, although subsequently these were found and described (Boyce & Wong 2012). Recently plants in cultivation in Kuching have

Figure 1. Mature infructescence of *Schottariella mirifica* P.C.Boyce & S.Y.Wong

Figure 2. Dehisced fruits of *Schottariella mirifica*. See text for explanations.

Figure 3. Seeds of *Schottariella mirifica*. **A.** the seed has the aril in place; **B.** the seed has the aril removed.

produced infructescences that developed to full maturity (ripe fruits), revealing that the berries ripen to glossy medium green (**Figure 1)** at which stage the pericarp of each berry is basally circumscissile with the distal margins reflexing (**Figure 2A**, **B**), with the upper three quarters of the berry shedding still enclosing the 3–5 seeds (**Figure 2C**, **D**).

The seeds of *Schottariella mirifica* are pyriform, ca 3 mm long and ca 2 mm wide, and each completely enclosed in a fleshy white aril ca 0.5 mm thick (**Figure 3A**). Each seed has a conspicuous hyaline extension at the chalazal end (**Figure 2E, arrow**), the function of which is not clear although it may serve a similar purpose as the micropylar appendage of many Schismatoglottideae by assisting to anchor the seeds prior to germination (Wong, 2013). Removal of the aril reveals seeds to be ellipsoid, ca 1.5 mm long and 1 mm wide (**Figure 3B**).

CONCLUSIONS

The dehiscent berries reported here for *Schottariella mirifica* is the third such record for the family Araceae, and the second record for tribe Schismatoglottideae (sensu Wong et al., 2010), the other being *Bakoa nakamotoi* S.Y.Wong (Boyce & Wong, 2012b). Dehiscent berries were first recorded for the Araceae in *Lagenandra* Dalzell (tribe Cryptocoryneae) – see Mayo et al., 1997, p. 195.

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