



Two new taxa of Melastomataceae Trib. Sonerileae: *Phyllagathis rajah* and *Sonerila metallica* from Batang Ai, Sarawak, Borneo

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ABSTRACT

Recent exploration and field collections in Batang Ai, southwest Sarawak, Borneo, Malaysia, has resulted in the discovery of two new taxa, *Phyllagathis rajah* and *Sonerila metallica* (Melastomataceae). Taxonomic descriptions, detailed photographs, line drawings and a comparison table are provided to distinguish them from morphologically similar species.

INTRODUCTION

Melastomataceae, a pantropical family most diverse in the neotropics, consist of 150–166 genera and 4,570 species (Cellinese 2003, Renner 1993). *Phyllagathis* Blume (1831: 507) and *Sonerila* Roxburgh (1820: 180) are Asian genera in the tribe Sonerileae Triana (1866: 457).

Phyllagathis comprises about 56 species occurring from southern China, Vietnam, Laos, Thailand and western Malasia to Sumatra and Borneo (Cellinese 2002). It was formerly considered to have strictly tetramerous, diplostemonous flowers, but Cellinese (2002, 2003) revised the genus using a wider generic concept and included *Brittenia* Cogniaux (1890: 515), *Cyanandrium* Stapf (1895) and *Enaulophyton* Van Steenis (1932: 196) with pentamerous flowers. *Phyllagathis* was revised completely by Hansen (1993) and Cellinese (2002, 2003) who recognized 27 species in Indochina and China, 10 species in Myanmar, Thailand, the Malaysian peninsular and Sumatra.

In Borneo and Natuna Island, a comprehensive revision of *Phyllagathis* was conducted by Cellinese (2003) who recognized 19 species. Among them, 11 species have tetramerous flowers, while 8 species have pentamerous flowers. Moreover, Cellinese (2002, 2003) also mentioned that the pleiochasium is found in only three species, *P. gymnantha* Korth. (1844: 252), *P. peltata* Stapf ex Ridl. (1946: 38), *P. subacaulis* (Cogn.) Cellin. (2003: 93), all from Borneo and Natuna Island.

In 2013, we collected plants with pentamerous flowers and pleiochasium inflorescences in southwest Sarawak, Borneo, Malaysia (Figure 1). After carefully studying the literature (Hansen 1993, Cellinese 2002, 2003) and images of type specimen (The BR Herbarium Catalogue 2014), we determined that they differed from other species and here describe them as new.

Sonerila is the most diverse and poorly understood genus in the tribe Sonerileae. It has about 175 species distributed from Sri Lanka and India to the Indo-Pacific (Ridley 1946, Renner 1993, Cellinese 1997, Narayanan *et al.* 2013). We collected a species of *Sonerila* on the same field trip in southwest Sarawak in 2013. According to the literatures and comparison with images of type specimens (Kew Herbarium Catalogue 2014), we believe it is most similar to *Sonerila nervulosa* Ridl. (1946: 37), but differs in leaf morphology, pubescence (sparsely setose vs. densely hairy) and with simple hairs versus hairs with a bulbous base. We therefore treat it as new and name it *Sonerila metallica*.

Photographs and comparison tables are also provided to distinguish these two new species from similar congeners.

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