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New taxa of *Agapetes* (Ericaceae) from Myanmar

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Abstract

A new species and a new variety of the genus *Agapetes* from Kachin State, Myanmar are described and illustrated here. *Agapetes putaoensis sp. nov.* can be easily recognized by its very short peduncles and small cylindric-conical corollas divided more than a half, and *Agapetes wardii* var. *heterotricha var. nov.* differs from the typical variety in having longer pedicels and puberulous pedicels and calyxes sometimes with glandular setae. The distribution map of these two new taxa is also provided.

Key words: Asia, *Agapetes lobbii*, pollen morphology, taxonomy

Introduction

Agapetes D.Don ex G.Don (1834: 862) (Ericaceae) with ca. 100 species, is mainly distributed from the East Himalayas through South-West China and Indochina to South-East Asia (Fang & Stevens 2005). The genus belongs to the subfamily Vaccinioideae Arn., tribe Vaccinieae Rchb. (Stevens *et al.* 2004), but the generic delimitation has not been satisfactorily solved due to the very closely related polyphyletic genus *Vaccinium* Linnaeus (1753: 349) (Stevens, 1985; Kron *et al.* 2002; Stevens *et al.* 2004; Fang & Stevens 2005). *Agapetes* was also considered very close to *Paphia* Seemann (1864: 77), a genus from Malesia and Australia because of their strikingly similar appearance (Sleumer 1939; Stevens 1972), which was previously placed within *Agapetes* as *Agapetes* subg. *Paphia* (Seemann 1864: 77) P.F.Stevens (1972: 20) sect. *Paphia* (Seemann) P.F.Stevens (1972: 20). The genus was later reinstated by Stevens (2004) because molecular and morphological evidence revealed that a broadly defined *Agapetes* (including *Paphia*) could not be maintained. In fact, the molecular analysis showed that *Paphia* was sister to *Dimorphanthera* (F.Muell. ex Drude 1889: 55) F.Muell. (1890: 63), another Malesian genus, and formed a monophyletic group with *Dimorphanthera* rather than with *Agapates* (Kron *et al.* 2002; Stevens 2004). Thus, there is still much work to do to clarify the generic delimitations between these genera in Vaccinieae.

Historically, the study of *Agapetes* in Myanmar was begun by Kurz (1873), who described two new species and reported two species together with some varieties, all placed in *Vaccinium*. Then, Clarke (1881) transferred them to *Agapetes* and added three new species from southern Myanmar. In the subsequent decades, many botanists reported several new species or new records of *Agapetes* from Myanmar (King & Prain 1898; Brandis 1906; Craib 1913; Smith 1915; Knagg 1923; Evans 1927; Merrill 1941; Stevens 1985). Airy Shaw (1935, 1948, 1959, 1960a & 1960b) made the most remarkable contribution to the taxonomy of *Agapetes*, describing almost 20 new *Agapetes* species from Myanmar alone. To date, about 50 *Agapetes* species have been recorded in Myanmar (Kress *et al.* 2003). During recent field work in Kachin State, Myanmar, a new species and a new variety were found and are described and illustrated below.

Taxonomy

1. ***Agapetes putaoensis*** Y.H.Tong & N.H.Xia, *sp. nov.* (Fig. 1)

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Conservation status:—This new variety has only been found twice in a forest on the way from Hkawng Lamhpu Town to Thi Wang Hkung Village, and the habitat destruction is more serious than that of *A. putaoensis*, so it may also turn out to be Vulnerable (IUCN, 2001), but for the present it is best classified as Data Deficient (DD) because more information of its distribution and number of individuals needs to be obtained for accurate assessment.

Paratypes:—MYANMAR. Kachin State: Hkawng Lamhpu, on the way to Thi Wang Hkung, along the ridge, elevation 1680 m, 15 March 2009, *Ayeyarwady Expedition 1283* (CDBI!, IBSC!).

Affinities:—This variety differs from the nominate variety in having longer pedicels (1.2–1.5 cm, not 0.7–0.9 cm), puberulous (not glabrous) pedicels and calyxes sometimes with glandular setae. Both varieties are found in Kachin State. *Agapetes wardii* is included in *Agapetes* sect. *Agapetes* ser. *Longifiles* Airy Shaw (1935: 25) subser. *Cuneatae* Airy Shaw (1959: 502), which is characterised by small leathery leaves with cuneate base and entire margin, fasciculate inflorescences and elongated filaments longer than anthers.

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