





Inclusion of Metabriggsia into Hemiboea (Gesneriaceae)

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Abstract

Based on molecular data and morphology, *Metabriggsia* is reduced to synonymy with *Hemiboea* and its two species transferred to that genus.

Key words: fruit morphology, Lamiales, molecular systematics, ovary morphology

Introduction

In the Old World Gesneriaceae, particularly among the Chinese representatives, a high number of small or monotypic genera have been described, some representing presumed relatives of well-established genera (often earmarked by the prefixes *Meta-*, *Para-*, or *Pseudo-*), some being rather isolated phylogenetically (Möller *et al.* 2011a). One of these small genera is *Metabriggsia*. It was described by Wang (1983a), based on two new species (*M. ovalifolia*, *M. purpureotincta*) from the northwestern part of Guangxi province in South China. Wang (1983a: 1) related the new genus to two genera, *Briggsia* Craib (1920: 236) and *Didymocarpus* Wallich (1819: 378): "Corollae forma *Briggsiae* Craib similis, a qua staminibus duobus anticis solum fertilibus, placenta parietali unica recedit. A *Didymocarpo* Wall. antheris basifixis apice cohaerentibus, loculis parallelis apice haud confluentibus, placenta parietali unica facile differt". The name *Metabriggsia* readily suggests a close affinity with *Briggsia*, but *Metabriggsia* differs from *Briggsia* by the presence of two fertile stamens (vs. four in *Briggsia*) and by only one carpel being fertile. As *Didymocarpus* has principally diandrous flowers, the difference with that genus is mainly in the carpel fertility.

What is difficult to understand is why Wang (1983a) did not discuss an affinity with *Hemiboea*, which agrees in both characters with *Metabriggsia*. Since then, Wang may have changed his view as *Metabriggsia* does not appear in close association with *Briggsia* or *Didymocarpus*, but immediately precedes *Hemiboea* in the "*Flora Reipublicae Popularis Sinicae*" (Wang *et al.* 1990, in Chinese) and "Flora of China" (Wang *et al.* 1998, in English). The molecular study of Möller *et al.* (2011a) provides evidence that the two species of *Metabriggsia* are not only closely related to each other, but are nested (in different places) in *Hemiboea*. The characters used for generic separation, therefore, have to be critically examined and discussed. As will be shown here, the carpel characters were evidently based on misinterpretations. In our opinion, the two *Metabriggsia* species fit perfectly into *Hemiboea* and should be transferred to that genus.