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Forsyth-Major 348: four collections, two names, all referring to Mimulopsis madagascariensis (Acanthaceae)

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Introduction

Dr Charles Immanuel Forsyth-Major (1843-1923) was a British medical doctor and scientist. In 1886, he abandoned his medical practice to devote himself entirely to scientific research (Dorr, 1997). He travelled to Madagascar between 1894 and 1896 to primarily gather a paleontological collection of mammals for the British Museum of National History in London (Jenkins & Carleton, 2005, including a comprehensive survey of his collection localities). He also collected c. 900 botanical specimens between Oct. 1894 and Apr. 1895 on the highlands of Madagascar around Antsirabe and Ambositra in the eastern-central region of Madagascar (Dorr, 1997). These plant collections were deposited primarily at the British Museum Herbarium (BM) at the Royal Botanic Gardens, Kew (K), and at Berlin (B). From correspondence archived at the Conservatoire et Jardin botaniques de la Ville de Genève, it appears that a set of duplicates was also sent to W. Barbey at the Boissier herbarium by Dr Woodward from BM in 1895, while Forsyth-Major was still in Madagascar. Following his return to Europe numerous collections were again sent to the Boissier herbarium. It was arranged that the Boissier herbarium would further distribute Forsyth-Major's duplicates. The collections were arranged in duplicate sets and it seems that the first set was dispatched to the Candolle herbarium (also in Geneva), and possibly also a second set to the Smithsonian Institution (US). Both the Boissier and the Candolle herbaria are now incorporated in the collections of the Conservatoire et Jardin botaniques in Geneva (G). Undistributed duplicates sets have recently been discovered at G with a label reading "Plantes de Madagascar récoltées en 1895 par le docteur C.-J. Forsyth-Major […] Distribuées en 1900 par l'herbier Boissier".

Among Forsyth-Major's botanical collections, an individual collection number often comprises a set of specimens of the same species (at least from his point of view), sometimes bearing different collection dates and which clearly represent different gatherings.

The aim of this note is to clarify one of these collection sets: *Forsyth-Major 348,* which includes material collected on Dec. 19th, 21th & 26th, 1894 and January 1st, 1895 all in "Ambohimitombo forest (Tanala)". This locality is located East of Betsileo region; ca. 20°40'S 47°24'E (Jenkins & Carleton, 2005). Lindau (1897: 315) described *Strobilanthes isoglossoides* Lindau based on the Dec. 19th gathering, which was later transferred to the genus *Mimulopsis* Schweinf. More than a decade later, *M. forsythii* S. Moore was described, based on the Dec. 26th gathering (Moore, 1906: 217). Although being based on the same collection number these two names cannot be considered as homotypic synonyms because the collection dates of the holotypes confirm that they represent two different gatherings. However, we consider both specimens to be conspecific and correctly determined as *M. madagascariensis* (Baker) Benoist, a species that was initially described as *Echinacanthus madagascariensis* Baker in 1883, eleven years before the Forsyth-Major gatherings were made. Generic delimitation in *Acanthaceae* is notoriously difficult, as witnessed by the various generic transfers to which the two names have been subjected, so we provide brief notes below on the differences between the genera in question.

Nomenclature

Mimulopsis madagascariensis (Baker) Benoist, Cat. Pl. Madag., Acanth.: 16. 1939.

≡ *Echinacanthus madagascariensis* Baker in J. Linn. Soc., Bot. 20: 218. 1883.

Typus: Madagascar. Central, 10.1882, *Baron 1531* (holo-: K [K000394138]!; iso-: P [P00435427]!)

= *Strobilanthes isoglossoides* Lindau in Bot. Jahrb. Syst. 24: 315. 1897. ≡ *Mimulopsis isoglossoides* (Lindau) Bremek. in Bot. Jahrb. Syst. 73: 144. 1943. **Typus: Madagascar:** Ambohimitombo forest (Tanala), 1350-1440 m, 19.XII.1894, *Forsyth-Major 348 (19.12. 1894)* (holo-: B [B100359724]!; iso-: K!, G [G00096806, G00096807]!, P!, MO!, US!).

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= *Mimulopsis forsythii* S. Moore in J. Bot. 44: 217. 1906. **Typus: Madagascar.** Ambohimitombo forest (Tanala), 1350-1440 m, 26.12.1894, *Forsyth-Major 348 (26.12.1894)* (holo-: BM [BM000931014]!; iso-: K!, G [G00096808, G00096809]!, P!, MO!).

Observations. – Mimulopsis madagascariensis is characterized by its yellow, campanulate corolla, and the anther locule which bears a basal spur. The type material of *M. forsythii* and *Strobilanthes isoglossoides* presents exactly this floral morphology, and in all other ways conforms to *Mimulopsis madagascariensis.* These names should be therefore considered as synonyms of *M. madagascariensis*.

Mimulopsis Schweinf. is a genus of 16 currently known species from tropical Africa (nine species) and Madagascar (seven species). A recent evaluation of the genus in Madagascar reveals that probably seven additional species are still to be described (Ravolomanana & al., *pers. comm.)*. Two Malagasy *Mimulopsis* species, *M. lyalliana* (Nees) Baron and *M. madagascariensis* (Baker) Benoist, were originally described in *Echinacanthus* Nees.

Echinacanthus is now regarded as restricted to four Asian species (Bhutan, Nepal and India) and differs from *Mimulopsis* by having both pairs of anther cells spurred instead of one (Wood, 1994). The two Malagasy species originally described in this genus have only one pair of anther cells spurred and were later transferred to *Mimulopsis.*

The delimitation of *Strobilanthes* Blume is rather problematic, and, as discussed above, one of the Malagasy species originally referred to *Strobilanthes* is correctly placed in *Mimulopsis. Strobilanthes* is the second largest genus of *Acanthaceae* with ca. 250 species (Carine & Scotland, 2002) distributed in tropical and subtropical regions of Asia. It has been defined traditionally as having a tubular corolla with five subequal lobes, two or more ovules in each cell and 2 to 4 seeds in their capsules, and anthers that are always muticous, but this definition is not satisfactory since it includes certain clearly discordant elements. A new concept of the genus was adopted by Wood & al. (2003) who recognized a number of monophyletic groups within *Strobilanthes* s.l. that are well supported by molecular data (Moylan & al., 2004) and have some morphological and geographic coherence (Carine & Scotland, 2002). The ten species of *Strobilanthes* accepted by Benoist (1967) in the "Flora of Madagascar" should be excluded and will be formally transferred to *Acanthopale* C. B. Clarke in a forthcoming publication (Phillipson & Callmander, *pers. comm.).*

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