



## On the generic and specific identity of the holotype of *Rana hymenopus* Boulenger 1920 (Amphibia: Anura: Pyxicephalidae)

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### Abstract

The proposal by Tarrant *et al.* (2008) to refer the holotype of *Rana hymenopus* Boulenger 1920 to *Amietia fuscigula* is rejected. The holotype has been re-examined and, using external morphological and osteological characters, found to be generically and specifically distinct from *A. fuscigula*. We refer the holotype to the genus *Strongylopus* Tschudi as a valid species, *S. hymenopus*. The provenance of this specimen is established as South Africa, presented to the British Museum by Sir Andrew Smith, accessioned in 1858, and currently recognised in the Natural History Museum, London as Boulenger's *Rana hymenopus* holotype. Some consequences of retrieving the name *hymenopus* from the synonymy of *A. fuscigula* are noted.

**Key words:** *Strongylopus*, *Amietia*, anuran osteology, South African pyxicephalids, Boulenger

### Introduction

In their review of the systematics of South African Drakensberg frogs *Amietia vertebralis* (Hewitt, 1927) and *Strongylopus hymenopus* (Boulenger, 1920), Tarrant *et al.* (2008) address three issues: the identity of what they take to be *S. hymenopus*, their re-identification of the holotype of *S. hymenopus* as *Amietia fuscigula* (Duméril & Bibron, 1841) and the identity and separation of *Amietia umbraculata* (Bush, 1952) from *Amietia vertebralis*. In this paper we deliberately limit ourselves to their proposal that “*Rana hymenopus* (Boulenger, 1920) should be considered a junior synonym of *Amietia fuscigula*.” (Tarrant *et al.* 2008 p. 46). This proposal has wide implications in assessing the relationships between the genera *Amietia* (presently comprising African species previously included in *Rana*, *Afrana* and *Amietia*) and *Strongylopus* (formerly also included in *Rana*). Tarrant *et al.* (2008) question the provenance of Boulenger's *R. hymenopus* holotype. In order to answer this question we will review documentation available in the Natural History Museum, London.

The results of this investigation are especially important as the holotype of *Rana hymenopus* appears to be a basal member of the genus *Strongylopus*, as suggested by Boulenger (1919, 1920) and Channing (1979). The reinstatement of Boulenger's *Rana hymenopus* holotype as *Strongylopus hymenopus* opens the question: if the name *hymenopus* cannot be tucked away in synonymy as proposed by Tarrant *et al.*, (2008), then to what population or populations of frogs should it apply?

### The history and provenance of Boulenger's *Rana hymenopus* holotype

The Tarrant *et al.* (2008) account of the “Taxonomic history of *Strongylopus hymenopus*” (p. 35) contains some errors and is incomplete. The registration number of Boulenger's *Rana hymenopus* holotype is cited as “BM 1978.28” (p. 35) and as “BM 1978.2.28” (caption under Figure 2). Neither is correct; they are clearly a mixture of 1947.2.28.65, the correct registration number for Boulenger's *Rana hymenopus* holotype, and the registration number for another specimen of *S. hymenopus* in the NHMUK collection, 1978.1235, from the Drakensberg Sani Pass.