



Rediscovery of *Pseudophilautus semiruber*, a diminutive shrub frog (Rhacophoridae: *Pseudophilautus*) from Sri Lanka

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Abstract

Ixalus semiruber Annandale, a diminutive (12-mm snout-vent length) frog originally described from the highlands of Sri Lanka in 1913, has not been recorded in the succeeding century and is treated as Data Deficient for conservation purposes. Here we report its rediscovery in Agra-Bopath, a sub-montane forest reserve. *Pseudophilautus semiruber* is distinguished by a combination of the following characters: size 12.0–13.4 mm SVL; canthal edges rounded; tympanum distinct; vomerine ridge absent; supratympanic fold feebly defined; throat, chest, belly and underside of thigh smooth. It is a high-elevation (1,750 m a.s.l.) diurnal species that inhabits heavily-shaded leaf litter.

Key words: Amphibia, conservation, phylogenetics, Rhacophorinae, taxonomy

Introduction

The remarkable radiation of shrub-frogs of the rhacophorid genus *Pseudophilautus* in Sri Lanka has been extensively investigated over the past decade, and 41 new species described as part of an on-going effort to document this fauna (Meegaskumbura *et al.* 2002; Manamendra-Arachchi and Pethiyagoda 2005; Meegaskumbura and Manamendra-Arachchi 2005; Meegaskumbura *et al.* 2007; Meegaskumbura *et al.* 2009; Meegaskumbura & Manamendra-Arachchi 2011). The island's inventory of *Pseudophilautus* now stands at 68 species, of which 50 are extant: 19 species, known only from museum specimens collected in the 19th and early 20th centuries, appear to have disappeared (Manamendra-Arachchi and Pethiyagoda 2005; Meegaskumbura *et al.* 2007; IUCN 2012).

In their review of Sri Lankan *Pseudophilautus*, Manamendra-Arachchi and Pethiyagoda (2005) noted the existence of four nominal species known only from scant original descriptions, their type material having been lost: *Ixalus sarasinorum* Müller, 1887; *Rhacophorus pleurotaenia* Boulenger, 1904; *Ixalus stictomerus* Günther, 1876; and *Ixalus semiruber* Annandale, 1913. In the case of the first three, these authors, “in the interests of ‘nomenclatural parsimony’ (see Bossuyt & Dubois, 2001)” matched ‘new’ species consistent with the original descriptions to these names, so as not to risk creating unnecessary new names.

Annandale's original (1913) description of *Pseudophilautus semiruber*, however, was accompanied by a drawing and the mention that the type specimen had a snout-vent length of 12 mm. This is diminutive by the standards of Sri Lanka *Pseudophilautus*, adults of which range 12.6–61.1 mm SVL. Manamendra-Arachchi and Pethiyagoda (2005) concluded, “We have... not been able to examine this specimen which, though only 12 mm SVL, could in fact be mature and diagnostically useful. Until the holotype can be made available for study, we tentatively retain *Philautus semiruber* in status *incerte sedis*.” The species went on to be assessed as Data Deficient in the IUCN Red List (IUCN, 2012).

Manamendra-Arachchi and Pethiyagoda (2005), however, did not have the opportunity to examine a single mature female *Pseudophilautus*, 13.4 mm SVL, collected in 2005 for molecular analysis by M.M. and Mohamed Bahir at an elevation of 1,750 m in the Agra-Bopath Forest Reserve, adjoining the Wildlife Heritage Trust's then