

Article



A new species of *Oreophrynella* (Anura: Bufonidae) from the Pantepui region of Guyana, with notes on *O. macconnelli* Boulenger, 1900

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Abstract

Oreophrynella seegobini **sp. nov.** is described from 2088 m elevation on Maringma tepui in the Pakaraima Mountains of Guyana, at the Guyana-Brazil border. The new species is mainly distinguished from known congeners by small size, indistinct frontoparietal crests, prominent postorbital crests, prominent suborbital crests, well-developed webbing on hand and foot, dorsal skin minutely spiculate with scattered medium to large elevated tubercles, ventral skin anteriorly rugose with few flat granules, posteriorly tuberculate, blackish brown dorsal colour, and dark brownish orange ventral colour. Data on four specimens of *O. macconnelli* collected on the southeast slope of the tepui are provided.

Key words: Oreophrynella seegobini sp. nov., endemism, Guiana Shield, taxonomy, tepuis

Introduction

The upland and highland genus *Oreophrynella* currently contains eight species endemic to tepuis and tepui slopes in the Guiana Shield highlands (see Lathrop & MacCulloch 2007 for an updated distribution map of the species of *Oreophrynella*). The type species for the genus, *O. quelchii*, was originally described in the preoccupied genus *Oreophryne* Boettger, 1895 by Boulenger (1895a) and subsequently assigned to the genus *Oreophrynella* (Boulenger 1895b). *Oreophrynella* species occur between *ca.* 1067–2600 m elevation and are readily distinguished from all other bufonids by their small size, thick skin between digits, and opposable toes.

According to Graybeal and Cannatella (1995), the genus is monophyletic; it has been considered the sister taxon of *Atelopus* + *Dendrophryniscus* + *Melanophryniscus* by McDiarmid (1971) and of *Dendrophryniscus* by Cannatella (1985). The genus was discussed by Señaris *et al.* (1994), who suggested relationships with *Metaphryniscus* and *Osornophryne*, the latter plus *Atelopus* considered as the sister taxon of remaining bufonids by Frost *et al.* (2006). Ruiz-Carranza and Hernández-Camacho (1976) discussed striking phenetic similarities with *Osornophryne*, which according to them are due to evolutionary convergence. Based on morphology, Graybeal (1997) presented a tree suggesting *Oreophrynella* most closely allied with African and Asian non-*Bufo* taxa (*Didynamipus* and *Pelophryne*, respectively). Combining morphological and molecular data [obtained from *O. dendronastes* (as *Oreophrynella sp*)], Pramuk (2006) presented a tree suggesting *Oreophrynella* most closely allied to *Atelopus* and *Dendrophryniscus*.

Most *Oreophrynella* species were described subsequent to 1990 and our knowledge of these interesting creatures is slowly, but surely increasing as a result of recent collecting efforts in the Pakaraima Mountains of Guyana and Venezuela (Lathrop & MacCulloch 2007, Señaris *et al.* 1994, 2005).

A recent expedition to Maringma tepui, a sandstone flat-topped table mountain located at the Guyana-Brazil border, has uncovered an additional *Oreophrynella* species from the tepui summit that is described below. Four specimens of *O. macconnelli* Boulenger, 1900 were collected on the southeast slope of the tepui and supplementary data on this poorly known taxon are provided.