

Article



http://dx.doi.org/10.11646/zootaxa.3608.5.7 http://zoobank.org/urn:lsid:zoobank.org:pub:51879195-F141-4FFF-9AA9-9394FD650EC7

A new species of *Pseudopaludicola* Miranda-Ribeiro (Leiuperinae: Leptodactylidae: Anura) from the Cerrado of southeastern Brazil

FELIPE SILVA DE ANDRADE¹ & THIAGO RIBEIRO DE CARVALHO^{1, 2, 3}

¹Laboratório de Taxonomia, Ecologia Comportamental e Sistemática de Anuros Neotropicais. Faculdade de Ciências Integradas do Pontal, Universidade Federal de Uberlândia (UFU), Rua 20 n 1.600 - Bairro Tupã, 38.304-402, Ituiutaba, MG, Brasil

²Programa de Pós-Graduação em Biologia Comparada, Universidade de São Paulo, Departamento de Biologia/FFCLRP. Avenida dos Bandeirantes, 3900, 14040-901, Ribeirão Preto, São Paulo, Brasil

Abstract

A new species of *Pseudopaludicola* is described from the Cerrado of southeastern Brazil. *Pseudopaludicola facureae* **sp. nov.** is diagnosed from the *P. pusilla* species group by the absence of either T-shaped terminal phalanges or toe tips expanded, and distinguished from almost all recognized taxa currently assigned to *Pseudopaludicola* (except *P. canga*, *P. giarettai*, and *P. hyleaustralis*) by possessing a non-pulsed advertisement call. However, the advertisement call of the new species consists of the emission of well-defined call series, whereas the advertisement call of *P. giarettai* is long (117–187 ms) and with an isolated emission pattern; respecting to *P. canga*, the new species emits very long notes series (up to 53 notes/advertisement call), compared to the short call series of *P. canga* (up to 9 notes/advertisement call); considering *P. hyleaustralis*, the new species has a shorter note duration (15–35 ms), higher note rate per minute (480–1860), and higher dominant frequency (4076–5108).

Key words: Amphibia, Pseudopaludicola facureae sp. nov., Advertisement call, State of Minas Gerais, taxonomy

Introduction

The genus Pseudopaludicola Miranda-Ribeiro comprises 15 species (Frost 2011; Carvalho 2012; Pansonato et al. 2012) that occur throughout South America (Lynch 1989; Toledo 2010). Pseudopaludicola is treated as a monophyletic grouping, supported by distinctive morphological features: hypertrophied antebrachial tubercle (Lynch 1989) and osteological features (Lobo 1995). Lynch (1989) recognized two groups in the genus: the P. falcipes and P. pusilla species groups. Lobo (1995) recovered only the latter (P. pusilla group) as a monophyletic grouping, which included four taxa: P. boliviana Parker, P. ceratophyes Rivero and Serna, 1984, P. llanera Lynch, 1989, and P. pusilla (Ruthven, 1916), all sharing the presence of T-shaped terminal phalanges. Pseudopaludicola canga Giaretta and Kokubum, 2003 was assigned to the P. pusilla group in the original description, based on the presence of T-shaped terminal phalanges. However, Cardozo and Suárez (2012) stated that this character is in fact absent in P. canga, assessed by an osteological study of the species. The genus encompasses eleven species additionally to the four species of the P. pusilla group currently unassigned to any recognized monophyletic grouping, assembled by the absence of T-shaped terminal phalanges and any other distinctive shared characters: P. canga, P. falcipes (Hensel, 1867), P. giarettai Carvalho, 2012, P. hyleaustralis Pansonato, Morais, Ávila, Kawashita-Ribeiro, Strüssmann and Marrtins, 2012, P. mineira Lobo, 1994, P. murundu Toledo, Siqueira, Duarte, Veiga-Menoncello, Recco-Pimentel and Haddad, 2010, P. mystacalis (Cope, 1887), P. riopiedadensis (Mercadal de Barrio and Barrio, 1994), P. saltica (Cope, 1887), P. serrana Toledo, 2010, and P. ternetzi Miranda-Ribeiro, having no distinctive shared derivations, and considered paraphyletic (Lynch, 1989; Lobo, 1995).

A *Pseudopaludicola* species referred to as *Pseudopaludicola* aff. *canga* from the Municipality of Uberlândia (Giaretta & Facure 2009; Duarte *et al.* 2010) was evaluated based on morphological and bioacoustic approaches in

³Corresponding author. E-mail: thiago_decarvalho@yahoo.com.br