



A new species of *Proceratophrys* Miranda-Ribeiro (Amphibia: Anura: Cycloramphidae) from central Brazil

LUCAS BORGES MARTINS^{1,2,3} & ARIOVALDO ANTONIO GIARETTA¹

¹Laboratório de Taxonomia, Sistemática e Ecologia de Anuros Neotropicais, Universidade Federal de Uberlândia, Faculdade de Ciências Integradas do Pontal - FACIP . 38302-000, Ituiutaba, Minas Gerais, Brazil

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, Brazil

³Corresponding author. E-mail: lucasborgesmartins@hotmail.com

Abstract

A new species of the *Proceratophrys cristiceps* group is described from central Brazil based on adult morphology and advertisement call. *Proceratophrys vielliardi* **sp. nov.** is mainly diagnosed by its medium size, lack of tubercular sagittal crests from eyelids to coccyx and a multi-noted advertisement call. This is the second species of *Proceratophrys* described from central Brazil.

Key words: Cerrado, Lissamphibia, Odontophrynini, State of Goiás, taxonomy, vocalization

Introduction

As presently defined, the genus *Proceratophrys* Miranda-Ribeiro comprises 22 species (Prado & Pombal 2008; Cruz & Napoli 2010; Frost 2011) distributed throughout Brazil, northeastern Argentina and Paraguay (Frost 2011); it is likely a monophyletic taxon, with *Odontophrynus* Reinhardt and Lütken as its sister group (Frost *et al.* 2006; Amaro *et al.* 2009). Most species of *Proceratophrys* have been placed into one out of the three following phenetic groups:

The *Proceratophrys boiei* species group includes species with long horn-like palpebral appendages, distributed mainly throughout coastal Brazilian Atlantic Forest (reviewed in Prado & Pombal 2008); it comprises *P. appendiculata* (Günther), *P. boiei* (Wied-Neuwied), *P. laticeps* Izecksohn and Peixoto, *P. melanopogon* (Miranda-Ribeiro), *P. moehringi* Weygoldt and Peixoto, *P. paviotii* Cruz, Prado and Izecksohn, *P. phyllostoma* Izecksohn, Cruz and Peixoto, *P. renalis* (Miranda-Ribeiro), *P. sanctaritae* Cruz and Napoli, *P. subguttata* Izecksohn, Cruz and Peixoto and *P. tupinamba* Prado and Pombal. *Proceratophrys rondonae* Prado and Pombal, also included within this group, presents instead of a long horn-like, a short multi-cuspidate palpebral appendage, and occurs in the Amazon Rainforest. *Proceratophrys schirchi* (Miranda-Ribeiro) presents palpebral appendages, but this species is not associated to any group due to its distinct morphological pattern (Prado & Pombal 2008).

The *Proceratophrys bigibbosa* species group includes *Proceratophrys avelinoi* Mercadal de Barrio and Barrio, *P. brauni* Kwet and Faivovich, *P. bigibbosa* (Peters) and *P. palustris* Giaretta and Sazima; these species present postocular swellings and are distributed throughout southern Brazil and adjacent countries, except *P. palustris*, considered a relictual species in southeastern Brazil (reviewed in Kwet & Faivovich 2001).

The *Proceratophrys cristiceps* species group is suggested to subsume species lacking palpebral appendages and postocular swellings and inhabiting mainly seasonally dry open environments (Cerrado and Caatinga domains) of Brazil (Giaretta *et al.* 2000). It presently comprises *Proceratophrys concavitympanum* Giaretta, Bernarde and Kokubum, *P. cristiceps* (Müller), *P. cururu* Eterovick and Sazima, *P. moratoi* (Jim and Caramaschi) and *P. goyana* (Miranda-Ribeiro), the latter being the only species of this genus reported to occur in central Brazil (Brandão & Araújo 2001; Bastos *et al.* 2003; Giaretta *et al.* 2008; Frost 2011).