



On the generic identity of *Odontophrynus moratoi* Jim & Caramaschi, 1980 (Anura, Cycloramphidae)

RENATA CECÍLIA AMARO¹, DANTE PAVAN² & MIGUEL TREFAUT RODRIGUES³

Departamento de Zoologia, Instituto de Biociências, Universidade de São Paulo, São Paulo, SP, 05508–090, Brazil.

E-mails: ¹amarorc@gmail.com, ²dtpavan@yahoo.com.br, ³mturodri@usp.br

Abstract

The generic identity of *Odontophrynus moratoi* is controversial since the original description due to the presence of intermediate morphological features between the genera *Odontophrynus* and *Proceratophrys*. Herein we performed molecular analyses of three genes (16S, *cyt b* and Rag-1) and recovered *O. moratoi* deeply imbedded inside a clade containing only *Proceratophrys* species, appearing as the sister group of *Proceratophrys concavitympanum*. Therefore, this study formally transfers the species *O. moratoi* to the genus *Proceratophrys* [*Proceratophrys moratoi* (Jim & Caramaschi 1980) comb. nov].

Keywords: *Odontophrynus moratoi*, *Proceratophrys moratoi*, nomenclature, new combination, molecular systematics, 16S, *cyt b*, Rag-1

Introduction

Odontophrynus moratoi was described on the basis of a series of adult specimens obtained at Botucatu, state of São Paulo, Brazil (Jim & Caramaschi 1980). Generic allocation was justified by the presence of several characters, mainly osteological, shared with *Odontophrynus* (no contact between nasals and frontoparietals, zygomatic portion of squamosal not contacting the maxilla, and frontoparietals without exostosis). However, the authors called the attention to the presence in this species of a set of characters associated with the genus *Proceratophrys*, but absent in *Odontophrynus* (e.g. rugosity of the dorsal surface of the fingers and toes, lack of dorsal and tibial glands, presence of tubercles on the thenar surfaces of hands and feet). They also admitted that the presence in *O. moratoi* of a moderately long squamosal, but still failing to contact the maxilla, represented an intermediate condition between *Odontophrynus* and *Proceratophrys*. However, the general pattern of most osteological features lead them to allocate the species into *Odontophrynus* (Jim & Caramaschi 1980). After the original description the species was only reported from Itirapina, state of São Paulo, at approximately 100 km northwest from the type-locality (Brasileiro *et al.* 2008). The species is presently considered as “Critically Endangered” in the Global Amphibian Assessment database (IUCN 2006) due to evidence of a possible drastic population decline, and also included in a recently published list of endangered Brazilian fauna (Haddad 2008).

Nonetheless, accordingly to the intermediate features already observed in adults, the tadpole description of *O. moratoi* revealed more morphological resemblances to *Proceratophrys* than *Odontophrynus* (Rossa-Feres & Jim 1996). Despite the doubtful position among these genera suggested by different sets of morphological characters, Rossa-Feres and Jim (1996) maintained the species in *Odontophrynus*. Although this position was preferred in order to avoid taxonomic reformulations in the absence of a phylogenetic framework, it was suggested that further studies including genetic data should be helpful to evaluate the possibility of a generic reallocation (Jim & Caramaschi 1980; Rossa-Feres & Jim 1996).