



Description of the tadpole of *Leptodactylus pustulatus* Peters, 1870 (Anura: Leptodactylidae)

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Abstract

The external morphology and oral disc of the tadpole of *Leptodactylus pustulatus* Peters, 1870, are described and illustrated for Gosner stage 39. The internal oral anatomy was analyzed with SEM at Gosner stage 36 whereas chondrocranial anatomy is reported for Gosner stage 35. The overall characteristics do not depart from those known for the genus *Leptodactylus* and they particularly agree for those of the *melanonotus* species group. The labial tooth row formula is 2(2)/3. Observations are presented that suggest that *L. pustulatus* engages in larval parental care.

Key words: *Leptodactylus pustulatus*, tadpole, SEM oral anatomy, chondrocranium, natural history

Resumo

São descritas a morfologia externa e o disco oral do girino de *Leptodactylus pustulatus* Peters 1870, no estágio 39 de Gosner. A anatomia oral interna foi analisada ao MEV no estágio 36, enquanto a anatomia do condrocânio é descrita para o estágio 35. As características analisadas não separam a espécie de outras conhecidas do gênero *Leptodactylus* e concordam particularmente com aquelas descritas para espécies do grupo *melanonotus*. A fórmula de fileiras de denticulos labiais é 2(2)/3. São descritas observações que sugerem que *L. pustulatus* apresenta cuidado parental de girinos.

Introduction

Leptodactylus pustulatus is a species within the *melanonotus* species group; it is distributed throughout central Brazil, associated with the flooded terrains of the Araguaia, Tocantins, Xingu, and Parnaíba Rivers. The species has been reported for the Brazilian States of Goiás, Tocantins, Mato Grosso, Pará, Maranhão, Ceará and Piauí occupying Cerrado environments. Cerrado habitats refer to the Brazilian central highlands that cover approximately 23% of Brazil's surface area, second only to the Amazonian rainforest, and corresponding to the most extensive woodland-savanna in South America.

Since its original description little has been published on the biology of this species and the larval stage has not been reported. Herein we: 1) describe and illustrate the larval external morphology and oral disk, 2) report its internal oral anatomy (based on scanning electron microscopy analysis), 3) describe and illustrate the characteristics of the chondrocranial anatomy, and 4) present field observations on the natural history and parental care of the *Leptodactylus pustulatus*.