



Redescription of the tadpole of *Leptodactylus rhodomystax* (Anura: Leptodactylidae) with natural history notes

DOMINGOS J. RODRIGUES^{1*}; MARCELO MENIN^{2**} & ALBERTINA P. LIMA¹

¹Coordenação de Pesquisas em Ecologia, Instituto Nacional de Pesquisas da Amazônia, Av. André Araújo 2936, 69011-970, Manaus, AM, Brazil

²Laboratório de Zoologia, Departamento de Biologia, Instituto de Ciências Biológicas, Universidade Federal do Amazonas, Av. General Rodrigo Otávio Jordão Ramos 3000, 69077-000, Manaus, Amazonas, Brazil

*Present address: Instituto Universitário do Norte Matogrossense, Universidade Federal do Mato Grosso, Av. Alexandre Ferronato 1200, Setor Industrial, 78550-000, Sinop, MT, Brazil

**Corresponding author: menin@ufam.edu.br

Abstract

The tadpole of *Leptodactylus rhodomystax* is described based on individuals in several stages of development. We compare them with other tadpoles of the *Leptodactylus pentadactylus* group and three other sympatric species with similar morphology and color patterns. We also provide comments on spawning sites, clutch size, and the distribution of tadpoles in ponds located in a 64 km² study area. The tadpole of *L. rhodomystax* differs from all species of the *L. pentadactylus* group (except *L. flavopictus*) in total length and in having uniform black color. It differs in relation to the LTRF (2(2)/3) of all species except *L. lithonaetes* and *L. rhodonotus*. *Leptodactylus rhodomystax* is generally only found in the western watershed of our study area. Foam nests were deposited between shrubs, roots, and fallen tree trunks near temporary ponds. Tadpoles were free-swimming, benthic, and found in the leaf litter of ponds between January and May. The tadpoles are intra- and inter-specific predators of anuran eggs and tadpoles.

Key words: central Amazonia, clutches, *Hypsiboas geographicus*, *Leptodactylus pentadactylus* group, *Leptodactylus petersii*, *Leptodactylus riveroi*, *Leptodactylus rhodomystax*, reproduction site, tadpole morphology

Introduction

The *Leptodactylus pentadactylus* species group was defined by Heyer (1969) and subsequent revisions have detected and described cryptic species (Heyer 2005). Species of the *L. pentadactylus* group are medium to large-sized frogs with distributions in tropical forest (both Amazonian and Atlantic), cerrado, and caatinga habitats of Central and South America (Frost 2007). There are 19 currently recognized species (Heyer 2005; Frost 2007), however, the larvae of only eight species have been formally described: *Leptodactylus fallax* Müller, 1926, *L. flavopictus* Lutz, 1926, *L. labyrinthicus* (Spix, 1824), *L. lithonaetes* Heyer, 1995, *L. rhodonotus* (Günther, 1869), *L. rugosus* Noble, 1923, *L. savagei* Heyer, 2005, and *L. syphax* Bokermann, 1969 (Bokermann 1957; Vizotto 1967; Heyer 1970, 1979, 1995; Davies *et al.* 2000; Eterovick & Sazima 2000).

The tadpole of *L. rhodomystax* Boulenger, 1884 has been mentioned briefly in two articles, but has not yet been formally described. Duellman (1978) presented a description of one specimen in Gosner's stage 25 from Santa Cecilia, Ecuador; and Hero (1990) described a few external features (*e.g.* LTRF and body coloration) of *L. rhodomystax* larvae for an identification key of tadpoles of the Brazilian central Amazon. These descriptions do not provide several characteristics necessary for identification.