



The tadpole of *Melanophryniscus cambaraensis* Braun & Braun, 1979 (Anura: Bufonidae)

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The genus *Melanophryniscus* comprises 24 species, occurring in northern Argentina, southern Bolivia, southern Brazil, Paraguay, and Uruguay (Frost, 2009). The genus belongs to the family Bufonidae; it is probably monophyletic (Graybeal & Cannatella, 1995), and was considered a sister taxon of all other bufonids by Frost *et al.* (2006). *Melanophryniscus cambaraensis* was described in 1979 by Braun and Braun, and belongs to the *M. tumifrons* group (Cruz & Caramaschi, 2003). The species is endemic to the southeastern Araucaria Forest, southern Brazil, with records from Cambará do Sul (type locality; Braun & Braun, 1979), and neighbor areas in the municipality of São Francisco de Paula (Kwet & Di-Bernardo, 1999). The tadpole of *M. cambaraensis* is undescribed so far. Herein, we describe its external morphology, and compare it briefly with the tadpole of *M. orejasmirandai* Prigioni and Langone, the only previously described tadpole in the *Melanophryniscus tumifrons* group.

Eggs were collected in the municipality of São Francisco de Paula, Rio Grande do Sul, Brazil (29°25'22.4''S; 50°23'11.2''W), on 13 July 2009. After observations of mating and spawning, an egg mass of *M. cambaraensis* was collected and placed in an aquarium (23 x 29 x 45 cm), where the tadpoles were raised. Tadpoles were collected on days 6, 14, and 21 after hatching and fixed in 10% formalin. Specimens were housed in the herpetological collection of the Universidade Federal de Santa Maria (ZUFISM0520 - ZUFISM0523). External measurements were made to the nearest 0.01 mm, using a stereomicroscope, and the tadpoles were staged according to Gosner (1960). The terminology for describing external features follows Altig & McDiarmid (1999).

Tadpole description. The description is based on 16 tadpoles in Gosner stages 30, 33, 34, 36, and 37. Body oval in dorsal view, depressed, about 1/3 of total length (Fig. 1A and B). Maximum body width located just behind the eyes. Snout truncated in dorsal view and rounded in lateral profile. Nostrils round, dorsolateral, closer to eyes than to snout; internarial distance approximately 61% of interorbital distance; nostrils visible in dorsal, lateral, and frontal views. Eyes dorsal, directed laterally. Spiracle sinistral, spiracular open placed in posterior third of the body, directed posteriorly, visible in dorsal and lateral views. Vent tube dextral, conical, right wall displaced dorsally and anteriorly. Tail about 64% of total length, tail maximum height not reaching the maximum body height. Tail muscle not reaching end of tail, myosepts not clearly defined. Dorsal fin origin slightly anterior to body-tail junction. Tail tip rounded.

Oral disc emarginate, anteroventral, width 46% of body width (Fig. 1C). Large rostral and mental gaps. One single row of marginal papillae laterally; scattered submarginal papillae present. Labial tooth row formula (LTRF) 2/3. Jaw sheaths keratinized, upper jaw sheath arch-shaped, lower jaw sheath V-shaped, both wider than high and finely serrate. In preserved specimens, dorsum brown and venter translucent. Tail muscle black to brownish, with some unpigmented areas. Tail fins transparent with some straight brown lines vertically.

Measurements in mm (N = 16; mean ± sd): body length = 6.7 ± 0.5; body maximum height = 3.4 ± 0.3; body maximum width = 4.3 ± 0.3; tail length = 11.8 ± 1.0; tail maximum height = 3.2 ± 0.3; eye diameter = 0.7 ± 0.1; interorbital distance = 1.8 ± 0.3; internarial distance = 1.1 ± 0.1; oral disc width 2.0 ± 0.2.

The tadpole of *Melanophryniscus cambaraensis* and the tadpole of *M. orejasmirandai* are the only ones known of the *M. tumifrons* group. These larvae can be easily distinguished by the LTRF: *M. cambaraensis* shows LTRF 2/3, whereas *M. orejasmirandai* shows LTRF 2/3(1) (Prigione & Langone, 1990). The presence of submarginal papillae was not reported for the tadpole of *M. orejasmirandai*, but they are present in *M. cambaraensis*.

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