



## The tadpole of *Leptodactylus cupreus* Caramaschi, Feio & São Pedro, 2008 (Anura, Leptodactylidae)

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*Leptodactylus cupreus* Caramaschi, Feio & São Pedro is allocated in the *L. fuscus* species group, within the *L. mystaceus* species complex (*sensu* Heyer 1978 and Heyer *et al.* 1996; Caramaschi *et al.* 2008), that is formed by medium sized frogs distributed throughout the Amazon Basin, Atlantic Forest, Gran Chaco and Cerrados of South America (de Sá *et al.* 2005). This species complex includes *L. mystaceus* (Spix), *L. elenae* Heyer, *L. notoakites* Heyer, *L. spixi* Heyer, and *L. didymus* Heyer, García-Lopez & Cardoso. The tadpoles of *L. didymus* and *L. cupreus* are still unknown. Herein we describe the tadpole of *L. cupreus* and compare it with other species of the *L. mystaceus* complex for which tadpole descriptions are available.

At the type locality of *L. cupreus*, a temporary pond called “Lagoa das Bromélias” (20°53’ S and 42°31’ W), in the Parque Estadual da Serra do Brigadeiro, municipality of Ervália, Minas Gerais State, Southeast of Brazil, on 21 October 2009, few males of *L. cupreus* were found calling under the herbaceous vegetation that covered the dried pond.

Tadpoles were collected on 18 November 2009, when the pond was full. The tadpoles were preserved immediately after collection in 10% formalin. Some of them were kept alive *ex situ* until complete metamorphosis to confirm species identification, and the juveniles present the typical copper coloration that differs this species from others species of *Leptodactylus* (Fig. 1E) (Caramaschi *et al.* 2008). Furthermore, the area where the pond is located has been surveyed since 2005, and *L. cupreus* is the only species of this genus that has been reported for this area (Feio *et al.* 2008). The characterization was based on a series of seven tadpoles in the stages 39–40 (Gosner 1960). Abbreviations of the measurements (in mm) are: total length (TL), body length (BL), maximum body height (BH), maximum body width (BW), tail length (TAL), maximum tail height (TH), tail musculature height (TMH), maximum height of dorsal fin (DF), maximum height of ventral fin (VF), eye diameter (ED), interorbital distance (IOD), internarial distance (IND), eye-narial distance (EN), snout-narial distance (SN), eye-snout distance (ES) and oral disc width (ODW). The measurements TL, BL, BH, BW, TAL and TH were taken with digital calipers and the remaining measurements were obtained using a stereomicroscope with millimetric ocular. Measurements and terminology followed Altig & McDiarmid (1999), except for IOD, IND, EN, SN and ES, which were taken from the inner edge of the eyes and of the nostrils. Voucher specimens were deposited at the herpetological collection of the Museu de Zoologia João Moojen, Universidade Federal de Viçosa, State of Minas Gerais, Brazil (MZUFV Lot134.)

**Description of tadpoles:** Body depressed (BH/BW =  $0.88 \pm 0.07$ ); body length about one third of total length (BL/TL =  $0.35 \pm 0.02$ ); body oval in dorsal view and elliptic in lateral view; widest at middle third of body (Fig. 1A and 1B). Snout rounded in dorsal and lateral views. Nostrils circular without projections on marginal rim, dorsally located with opening dorsolaterally directed; closer to the tip of the snout than to eyes (SN/EN =  $0.72 \pm 0.10$ ). Eyes large, dorsally positioned, dorsolaterally directed. Spiracle single, sinistral, located at middle third of body, posterodorsally directed; its inner wall is fused to body without free extremity and longer than external wall. Vent tube long and wide, medial, with web between tube and fin (Fig. 1C). Tail higher than body height (TH/BH =  $1.08 \pm 0.10$ ). Dorsal fin slightly convex, originating behind the tail-body junction, gradually increasing for two-third of the tail length, and gradually diminishing after that toward the tip. Ventral fin nearly parallel to tail musculature. Tail musculature well developed reaching a pointed tail tip. Lateral line system visible. Oral disc anteroventral, not emarginated (Fig. 1D). A single row of alternated marginal papillae with a wide gap on anterior labium. Some individuals present one or two lateral submarginal papillae. Upper jaw sheath arc-shaped and lower jaw sheath V-shaped. Jaw sheaths narrow, keratinized, and serrate. Labial tooth row formula 2(2)/3(1). The P-1 row is slightly interrupted medially, and the P-2 and P-3 rows have the same size. Measurements of tadpoles are given in Table 1.

**Color in preservative:** The body is dorsally dark brown and ventrally grayish, permitting partial intestine tube visualization (Fig. 1C); spiracle extremity whitish; iris black; caudal musculature is cream with dark spots irregularly