The tadpole of *Hylodes meridionalis* (Mertens, 1927), a lotic stream anura from the Atlantic Rainforest of Brazil

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The genus *Hylodes* Fitzinger, 1826, comprises 25 species (Sá et al. 2015), of small to medium-sized diurnal frogs, that habit lotic stream habitats of the Atlantic Rainforest domain. Only 17 species of *Hylodes* genus had its larvae described so far (Costa et al. 2010; Sá et al. 2015). Regarding the osteology, only one species has its chondrocranium described (Bilate et al. 2012). Herein we describe the tadpole of *H. meridionalis* and its osteology.

Tadpoles of *H. meridionalis* were collected in a torrent stream at November 2011 and March 2012 in Praia Grande, state of Santa Catarina, south Brazil (29º 11’40” S, 49º 58’ 40” W). Fifteen tadpoles were anesthetized, fixed and preserved in 5% formaline. Nomenclature and measurements follow Altig & McDiarmid (1999). Measurements were taken with a caliper to the nearest 0.1 mm. Two specimens in stage 32, were dissected and stained for description of the chondrocranium. The terminology used here follows Haas (1995). The development stages follow Gosner (1960). The tadpoles analyzed for this study (MNRJ 87596) are currently housed at the amphibian collection of the Museu Nacional, Rio de Janeiro. One of us (MW) have worked at the study area for one year and the only Hylodidae species observed in the area was *H. meridionalis*. Furthermore, two tadpoles in advanced stages of development (Gosner, 1960) were reared to froglets in order to allow specific identification.

**Description of the tadpole.** The description was accomplished using tadpoles in stage 29 (Fig 1 A, B and C). The body is robust, elliptical in dorsal and lateral views, body height 78.3% of body width, body length corresponds to 35.5% of total length; snout rounded in dorsal and lateral views. Eyes of moderate size (compared to tadpoles of other *Hylodes*), positioned dorsally and directed dorsolaterally, not visible in ventral view, with diameter 6.7% of body length. Nostrils dorsally oriented, semicircular in lateral view with a triangular projection medially in its internal margin, which gives them a reniform aspect in dorsal view, inter-nostril distance 91.4% of inter-orbital distance, eye-nostril distance corresponds to 88.4% of nostril-snout distance, distance between nostril and snout 20.5% of body length. Spiracle sinistral, short, tubular-shaped, visible in dorsal view, with the inner wall with a slight ridge, spiracle posterolaterally oriented, its opening is elliptical and located approximately at mid-body. Tail higher than the body, body height correspond to 88% of tail height and tail length representing about 66.3% of the total length; tail has robust musculature and ends in a pointed tip; dorsal fins originates before body-tail junction and ventral fins originates in the body-tail junction; dorsal fin is arched and slightly wider than the ventral fin, which is relatively straight. Anal tube longer than wide, attached to the ventral fin and dextral. Four points of neuromasts accumulation were present ventrally and two points laterally just anteriorly to the spiracle.

Oral disc is ventral (Fig. 1 D and E), not emarginated with one lateral fold on each side of the oral disc. Its width corresponds to 51.3% of body width. Bordering to two rows of marginal papillae anteriorly, one laterally and posterally interrupted by a large gap at the anterior labium. On the maxilla, one grouping of submarginal papillae appears laterally to A1 and another to A2, and posteriorly, one row of marginal papillae appears laterally to P1 and P3. Labial tooth row formula 2(2)/3(1). Jaw sheaths well developed and completely serrated, the upper one being V–shaped and lower one U–shaped.

**Tadpole coloration.** In preservative, the body is dark brown, with dark brown spots, ventral and lateral region lighter than the dorsum. The tail is brown with dark brown spots on muscles and fins. The bright regions of fins are slightly translucent.