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Tadpole of *Hylodes fredi* (Anura; Hylodidae), a frog endemic to an Atlantic Forest island (Ilha Grande, Rio de Janeiro State), Brazil

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The species of the genus *Hylodes* Fitzinger live on banks of small rivers and streams which run on rough terrain in eastern Brazil (Silva & Benmaman 2008). *Hylodes fredi* Canedo and Pombal 2007 is a recently described species endemic to Ilha Grande (Canedo and Pombal, 2007), an island covered by Atlantic Rainforest in the south of Rio de Janeiro State, Brazil. In this study, we present the description of the tadpole of *H. fredi*.

Tadpoles of *Hylodes fredi* were visually searched and sampled with a hand sieve in a stream in the southern portion of the state reserve Parque Estadual da Ilha Grande (23º11'27''S, 44º12'36''W). Fourteen tadpoles at stage 25 (Gosner 1960) and a tadpole at stage 42 (Gosner 1960) were collected in September 2009 (MNRJ 68308), fixed in 5% formalin and were deposited at Museu Nacional, Rio de Janeiro (MNRJ). The tadpoles were identified based on one tadpole on stage 42 collected at the same stream of the others and in the fact that *H. fredi* is the only adult form of Hylodidae that we identified at the stream in three years of monthly visits. Measurements were taken under a stereomicroscope using a digital caliper (to the nearest 0.1 mm). Morphometric variables and terminology follow Altig and McDiarmid (1999). The developmental stages follow Gosner (1960), the dental formula and the measurements follow Altig (1970).

Description of the tadpole: Measurements of the 14 tadpoles at stage 25 and one tadpole at stage 42 are presented in Table 1. The following description is based just on the 14 tadpoles at stage 25. Tadpoles had a maximum size of 75.3 mm. Body robust, elongated and elliptical in dorsal and in lateral view (Figure 1). Body length about 31.1 ± 1.4% of total length. In ventral view there was a depression anterior to the coiled intestine. Snout rounded in dorsal and lateral view. Nostrils elliptical and directed dorsolaterally. Distance between the snout and nostrils accounted for 13.2 ± 1.5% of body length. Dorsal-laterally eyes with eye diameter accounting for 6.9 ± 0.9% of body length. Interorbital distance about 5.9 ± 7.8% greater than the internarial distance. The distance between the eyes and nostrils accounted for 42.3 ± 5.3% of the distance between eyes and snout. Spiracle sinistral, short, situated at midbody and with inner wall free from body. Tail length accounts for 71.2 ± 1.9% of total length. Tail approximately the same height as the body. Tail end is relatively thin and sharp. The caudal musculature accounted for 57.1 ± 5.6% of the height of the tail. The dorsal fin represented 30.4 ± 5.3% and ventral fin represented 19.8 ± 3.6 % of the height of the tail. Caudal fins not arched with the dorsal fin starting after the start of the tail. Vent tube long and dexterous attached to the ventral fin.

Oral disc: The oral disc is anterior-ventral, not emarginated, with its width accounted for 47.1% of body width. Marginal papillae bordering the entire oral disc interrupted on a large area on the anterior labium. Submarginal papillae present at the lateral-medium position. Labial tooth rows formula 2(2)/3(1). The labial teeth are small and all the chains have high numbers. Serrated jaws sheath, being the lower one V-shaped and the upper one ranging from the U-shaped and parenthesis.

Tadpole Color: In life, body and caudal musculature ranging between gray and brown, shaded with brown blotches and caudal fins opaque. Ventrally, the body has the same color as dorsally, with a slight transparency which allows to recognize the intestine through the skin. In preservative, color pattern remains the same, but becomes slightly opaque.

Habits and occurrence: The *Hylodes fredi* larvae are found in the backwaters of forest streams, at clear water, bedrock and in areas of shallow water (Rocha *et al*. 2009), where adult males were observed in calling activity during almost throughout the year. Tadpoles occur in the shallow rivulets during all months of the year, at different body sizes and weights, indicating a possible slow development of the larvae, continuous recruitment and an extensive reproduction of adults.

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