



## The tadpole of *Hylodes babax* Heyer, 1982 (Amphibia, Anura, Hylodidae)

RENATA MAGALHÃES PIRANI<sup>1,3</sup>, TIAGO LEITE PEZZUTI<sup>2</sup>,  
ANA PAULA MOTTA<sup>1</sup> & RENATO NEVES FEIO<sup>1</sup>

<sup>1</sup>Museu de Zoologia João Moojen, Departamento de Biologia Animal, Vila Gianetti 32, Universidade Federal de Viçosa, 36570-000, Viçosa, MG, Brazil

<sup>2</sup>Laboratório de Herpetologia, Departamento de Zoologia, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais, 31270-901, Belo Horizonte, MG, Brazil

<sup>3</sup>Corresponding author. E-mail: renatampirani@gmail.com

Frog species from the genus *Hylodes* Fitzinger occur mainly in southeastern Brazil (Frost, 2010). Of the 24 species of genus only 13 species have their tadpoles described (see Discussion below). *Hylodes babax* was known from the type-locality at Caparaó mountain range (Heyer, 1982), and has recently been recorded from two new localities: Parque Estadual da Serra do Brigadeiro, in the Mantiqueira mountain range, and Floresta Estadual do Uaimiú, in the southern Espinhaço mountain range (Pirani *et al.* 2010).

Herein, we describe the tadpole of *H. babax* collected in a permanent stream in Floresta Estadual do Uaimiú (20°29'66" S 43°57'47" W, 1021 m a. s. l.), Municipality of Ouro Preto, Minas Gerais, in the Quadrilátero Ferrífero mountain region, southernmost edge of the Serra do Espinhaço Range, southeastern Brazil. Tadpoles were collected in a stream where only this *Hylodes* species was registered during a one year monitoring study. Also, several adults of *H. babax*, including some calling males, were observed along the same stream where the tadpoles were collected (calls of one male were recorded, which helped to confirm the species identity). We killed tadpoles in 5% lidocaine solution; we prepared and preserved them in 10% formalin. Voucher tadpoles are in the herpetological collection of Museu de Zoologia João Moojen, Universidade Federal de Viçosa (MZUFV), Viçosa, state of Minas Gerais, Brazil. External morphology descriptions, proportions and measurements were based on fourteen tadpoles in stage 25 (Gosner 1960) (MZUFV lot 172). Terminology and measurements follow Altig and McDiarmid (1999): TL (total length), BL (body length), TAL (tail length), MTH (maximum tail height), TMH (tail muscle height), and TMW (tail muscle width), IOD (interorbital distance), IND (internarial distance); Lavilla and Scrocchi (1986): BH (body height), BW (body width), BWN (body width at the narial level), BWE (body width at the eye level), ED (eye diameter), ESD (eye-snout distance), END (eye-nostril distance), NSD (nostril–snout distance), ND (narial diameter), SED (snout-espircular distance), ODW (oral disc width); and Grosjean (2005): DFH (dorsal fin height), VFH (ventral fin height). Tadpoles were photographed with an adjustable platform for supporting them (Schacht & McBrayer 2009), submerged in water. All measurements are performed using the software ImageTool (alpha 3).

**Description:** Body depressed (BH/BW =  $0.79 \pm 0.03$ ); body length one third of total length (BL/TL =  $0.33 \pm 0.02$ ); body oval in dorsal and lateral views (Fig. 1A and 1B); widest at posterior third of body, behind spiracle. In ventral view there is a depression anterior to the coiled intestine (Fig. 1C). Snout rounded in dorsal and lateral views. Nostrils oval with small projections on marginal rim, dorsally located (IND/BWN =  $0.63 \pm 0.03$ ) with opening directed dorsolaterally; closer to the tip of the snout than to eyes (NSD/END =  $0.86 \pm 0.07$ ). Eyes small (ED/BWE =  $0.20 \pm 0.01$ ), dorsally positioned (IOD/BWE =  $0.59 \pm 0.02$ ), directed dorsolaterally. Spiracle lateral and sinistral, located at middle third of body (SED/BL =  $0.52 \pm 0.03$ ), posteriorly directed; its inner wall fused to body with its extremity been free and longer than external wall. Vent tube short, dextral, attached to the ventral fin and with ventral wall longer than dorsal wall. Tail with both fins higher than body height (MTH/BH =  $1.19 \pm 0.09$ ). Dorsal fin originates at tail-body junction at a low slope. Dorsal and ventral fins slightly convexes. Well developed musculature reaching the tip of the pointed tail. Lateral line system visible. A cumuli of neuromasts can be seen on the venter, been one in each side of the abdominal region (Fig. 1C) and, in lateral view, at the end of the first third of body, anteriorly to the spiracle tube (Fig. 1A). Oral disc ventral (Fig. 1D), large (ODW/BW =  $0.36 \pm 0.02$ , disc measured folded), emarginated laterally; a single row of alternated marginal papillae on its dorsal and lateral portions, with a narrow dorsal gap, and a double row on its ventral portion. A few scattered, and some aligned submarginal papillae, on the lateroventral and laterodorsal portions. Jaw