



A survey of the internal oral morphology in larvae of the genus *Hylodes* Fitzinger, 1826 (Amphibia, Anura, Hylodidae)

LUIZ NORBERTO WEBER¹ & ULISSES CARAMASCHI²

¹Departamento de Biologia, Universidade Federal do Maranhão, Campus Universitário do Bacanga, Av. dos Portugueses, s/n, 65080-040 São Luís, Maranhão, Brasil. E-mail: luiznorbertow@gmail.com

²Universidade Federal do Rio de Janeiro, Museu Nacional, Departamento de Vertebrados. Quinta da Boa Vista, São Cristóvão, 20940-040 Rio de Janeiro, RJ, Brasil. E-mail: ulisses@acd.ufjr.br

Abstract

From the 24 species allocated in the genus *Hylodes*, 16 have their tadpoles described, which five have information on the oral anatomy. Herein, the internal oral morphology of the tadpoles of *H. dactylocinus*, *H. heyeri*, *H. aff. lateristrigatus*, *H. magalhaesi*, *H. meridionalis*, *H. phyllodes*, *H. sazimai*, and *H. uai* is described, along with comparisons among all species in the genus with previously known oral morphology.

Key words: tadpoles, internal oral anatomy

Introduction

The genus *Hylodes* Fitzinger consists of small to medium-sized diurnal frogs that inhabit lotic streams most of than in Atlantic forests from Brazil, in the State of Espírito Santo south through Rio de Janeiro and São Paulo to Rio Grande do Sul (Frost 2011), with exception for *Hylodes otavioi* Sazima and Bokermann, inhabitant of the rocky fields from the riparian forests at the Serra do Cipó (Sazima & Bokermann 1982).

The genus is currently composed by 24 species, of the all species of the genus, only 16 species have their larvae described (Lutz 1930; Bokermann 1963; Sazima & Bokermann 1982; Heyer *et al.* 1990; Haddad & Pombal 1995; Nascimento *et al.* 2001; Pavan *et al.* 2001; Pombal *et al.* 2002; Haddad *et al.* 2003; Wogel *et al.* 2004; Costa *et al.* 2009; Costa *et al.* 2010a; Costa *et al.* 2010b; Laia *et al.* 2010; Pirani *et al.* 2011; Bilate *et al.* 2012; Gomes *et al.* 2012). Only five species of *Hylodes* has the internal oral morphology of the larvae described: *Hylodes nasus* (Wassersug and Heyer 1988; treated as *Hylodes cf. asperus* in error according to Costa *et al.* 2010a), *H. asper* (Costa *et al.* 2010a); *H. charadranaetes* (Costa *et al.* 2010b), *H. ornatus* Bilate *et al.* 2012), and *H. magalhaesi* (Gomes *et al.* 2012). Additionally, data about internal oral morphology in other larvae from the family Hylodidae are available among closely related genus *Crossodatylyus* Duméril & Bibron (Weber and Caramaschi 2006) and *Megaelosia* Miranda-Ribeiro (Weber and Caramaschi 2009).

Herein, we describe the internal oral morphology in larvae of eight species of the genus *Hylodes* and compare them to other species of the genus with internal oral morphology previously described in literature.

Materials and methods

Tadpoles analyzed are housed in collections at: Museu Nacional, Rio de Janeiro (MNRJ) and Museu de Zoologia, Universidade de São Paulo (MZUSP). To avoid mistakes in species identity, we used some tadpoles used in original descriptions or compare those specimens previously identified to the original descriptions (except *H. magalhaesi*, collected by one of us (UC) and *H. meridionalis*, previously identified in the MZUSP). Additional