

Accepted Manuscript

Title: Heterochronic changes during embryonic development of neotropical foam nesting frogs (genus *Leptodactylus*)

Author: Jimena R. Grosso Diego Baldo Florencia Vera Candioti



PII: S0044-5231(16)30108-5
DOI: <http://dx.doi.org/doi:10.1016/j.jcz.2016.10.005>
Reference: JCZ 25428

To appear in:

Received date: 23-3-2016
Revised date: 7-10-2016
Accepted date: 10-10-2016

Please cite this article as: Grosso, Jimena R., Baldo, Diego, Candioti, Florencia Vera, Heterochronic changes during embryonic development of neotropical foam nesting frogs (genus *Leptodactylus*). *Zoologischer Anzeiger - A Journal of Comparative Zoology* <http://dx.doi.org/10.1016/j.jcz.2016.10.005>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

TITLE: Heterochronic changes during embryonic development of neotropical foam nesting frogs
(genus *Leptodactylus*)

AUTHORS: Jimena R. Grosso^{1,2}, Diego Baldo³, Florencia Vera Candioti¹

¹Unidad Ejecutora Lillo (UEL, CONICET-FML), San Miguel de Tucumán, Tucumán, Argentina.

²Corresponding author. E-mail: jime.grosso@gmail.com

³Instituto de Biología Subtropical (IBS, CONICET-UNaM), Laboratorio de Genética Evolutiva, Facultad de Ciencias Exactas, Universidad Nacional de Misiones, Posadas, Misiones, Argentina.

Abstract

At least five different reproductive modes were reported in the neotropical frog genus *Leptodactylus*, all of them involving the building of foam nests. We analyzed the early ontogeny of five species of the *L. fuscus* group building terrestrial chambers where eggs are deposited, and of two species of the *L. latrans* group constructing a floating nest over the surface of lentic waters. The ontogenetic period described herein includes the occurrence of exclusively embryonic structures and the initial stages of development of larval features. In a likely relation to ecological aspects of oviposition and developmental mode, embryos of these two groups differ in several features. Embryos of the *L. fuscus* group were mainly pigmentless, were large sized with an extensive yolk provision, showed a dorsal kyphosis and lacked adhesive glands. Conversely, embryos of the *L. latrans* group were darkly pigmented, lacked a dorsal curvature, were comparatively smaller and less yolked, and showed adhesive glands in a peculiar type D

Download English Version:

<https://daneshyari.com/en/article/5586434>

Download Persian Version:

<https://daneshyari.com/article/5586434>

[Daneshyari.com](https://daneshyari.com)