



# Article

urn:lsid:zoobank.org:pub:95AA1FF8-C454-42F1-AFA6-44545540C469

## Taxonomy of *Epictia munoai* (Orejas-Miranda, 1961) (Squamata: Serpentes: Leptotyphlopidae)

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### Abstract

The wormsnakes Leptotyphlopidae include the smallest and thinnest snakes of the world. This group has historically few taxonomic studies and the descriptions of taxa in general are superficial, frequently preventing an accurate identification. This family includes the genus *Epictia* with many representatives with taxonomic major issues, including *Epictia munoai*. We redescribe and compare *E. munoai* with other related cisandine species in order to evaluate its taxonomic status considering the morphological analysis of specimens. A table with some diagnostic characters of each species is presented. *Epictia munoai* is distinguished from other related species mostly by low number of middorsal and midventral scales, and is distributed in coastal areas in southern Brazil, Uruguay and northeastern Argentina.

**Key words:** Scolecophidia, wormsnakes, Epictini, redescription, geographic variation, Cisandine species

### Introduction

The fossorial and subfossorial/secretive/cryptozoic snakes of the family Leptotyphlopidae are distributed in America, Africa, and Western Asia ranging from Turkey to India (McDiarmid *et al.* 1999), represented by nearly 115 species (Adalsteinsson *et al.* 2009). Snakes from this family could attain 400 mm of total length, being the most miniaturized vertebrates of the World (Kley 2006; Pinto *et al.* 2010). The wormsnakes feed mostly on small arthropods like ants (larvae and pupae) and adults termites (Cundall and Greene 2000; Webb *et al.* 2000; Kley 2006).

Considering the small body size and their fossorial habits, leptotyphlopids are rare in herpetological collections, just as taxonomic and natural history studies (Adalsteinsson *et al.* 2009; Pinto *et al.* 2010; Pinto and Curcio 2011; Pinto and Fernandes 2012). Besides, most taxa are morphologically very similar and original descriptions of many species are often poorly informative, leading to misidentifications (Hahn 1979). Traditionally, morphology and meristic characters, such as contact between supralabial scales, pattern of cephalic shields, and body proportions, are used to diagnose these taxa (Boulenger 1893; Orejas-Miranda 1967; Kley 2006; Pinto *et al.* 2010; Pinto and Curcio 2011; Pinto and Fernandes 2012).

Originally Leptotyphlopidae included one genus *Leptotyphlops* Fitzinger 1843. Peters and Orejas-Miranda (1970) proposed five species groups to *Leptotyphlops*: *albifrons* group – species with small first supralabial not reaching the middle of the eye and not contacting the long supraocular scale; *dulcis* group – species with first supralabial not contacting the small supraocular; *melanotermus* group – 12 midcaudal scales and a large supraocular not contacting first supralabial; *septemstriatus* group – rostral without tapered tip and no supraoculars; *tesselatus* group – first supralabial contacts supraocular. Franco and Pinto (2009) considered *Leptotyphlops albifrons* (Wagler in Spix 1824) a *nomen dubium* based on the poor description and illustrations of the taxon allied to a missing holotype, precluding a diagnosis of the species. However, another study (V. Wallach, in prep.) will add new information on the taxonomic status of *E. albifrons*. Finally, Adalsteinsson *et al.* (2009) performed a phylogenetic