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## A new species of salamander (Caudata: Plethodontidae, *Bolitoglossa*) from Sierra Nevada de Mérida, Venezuela

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### Abstract

In this article, a new species of salamander of the genus *Bolitoglossa* (*Eladinea*) from the cloud forest near La Mucuy in Sierra Nevada de Mérida, Venezuelan Andes, is described. *Bolitoglossa mucuyensis* **sp. nov.** differs from all Venezuelan salamanders, except *B. orestes*, by a larger SVL/TL ratio, and from La Culata salamander *B. orestes* by a reduced webbing extension of the front and hind limbs. Additionally, *B. mucuyensis* **sp. nov.** and *B. orestes* diverge 3.12% in terms of the nucleotide sequence of the *16S rRNA* gene, as previously reported, and in 8.1% for the *cytb* gene as shown in this study.

**Key words:** *Bolitoglossa mucuyensis* **sp. nov.**, Venezuelan Andes, cloud forest, La Mucuy, *16S rRNA*, *cytb*

### Resumen

Se describe una nueva especie de salamandra del género *Bolitoglossa* (*Eladinea*) procedente de la selva nublada del sector La Mucuy en la Sierra Nevada de Mérida de los Andes de Venezuela. *Bolitoglossa mucuyensis* **sp. nov.** se distingue de todas las salamandras venezolanas, excepto de *B. orestes*, por presentar una mayor relación SVL/TL, y de la salamandra de La Culata *B. orestes* por una menor extensión de la membrana interdigital en los miembros anteriores y posteriores. Adicionalmente, *B. mucuyensis* **sp. nov.** y *B. orestes* divergen en un 3,12% en términos de la secuencia nucleotídica del gen *16S rRNA* como se ha reportado previamente, y en un 8,1% para el gen *cytb* como lo revela este estudio.

### Introduction

Venezuela is one of the most biodiverse countries of the planet, and for which about 5% of the total species of amphibians of the world have been reported (AmphibiaWeb 2012). According to the same source of information, for the year 2012 there were 349 species recorded in the country including 333 anurans, 11 caecilians, and five salamanders. Furthermore, evaluation of the identity and distribution of the few species of bolitoglossines, and only caudates found in Venezuela, is beginning to change thanks to the recent implementation of molecular analysis tools that might potentially increase the number of the species of salamanders actually present in the country (Fermin *et al.* 2012).

Very few researchers have dedicated time to study the salamanders of Venezuela after their initial scientific descriptions. This situation has created important gaps of knowledge that compromise the efforts to advance our understanding of their natural history, population sizes, ecology and distribution—all aspects of great relevance for the implementation of conservation and protection plans. On the other hand, the taxonomic status of the salamander species described for Venezuela is sometimes dubious due to inconsistencies that have contributed to confusion about the actual identity and distribution of the *Bolitoglossa* (*Eladinea*) species present in the country.