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A new species of *Pseudoeurycea* from the cloud forest in Veracruz, México

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Abstract

We describe a new species of *Pseudoeurycea* from the cloud forests of Huatusco in the state of Veracruz, México. This species belongs to the *P. cephalica* complex. *Pseudoeurycea cafetalera* **sp. nov.** is sister to the clade formed by *P. cephalica* and *P. quetzalanensis*. The new species is diagnosed by a stout body, long stout legs, short digits, somewhat webbed hands and feet, a distinctive coloration and by divergent mitochondrial DNA sequences.

Key words: Caudata, México, new species, Plethodontidae, taxonomy

Introduction

The genus *Pseudoeurycea* is the most diverse clade of plethodontid salamanders in México. Most species have a generalized morphology and occur in terrestrial microhabitas in pine or pine-oak forests, above 2000 meters elevation. Of the 48 recognized species of *Pseudoeurycea*, only a few (*P. lineola*, *P. nigromaculata, P. praecellens, P. scandens* and *P. quetzalanensis*) occur in cloud forests between 1000 and 2000 meters elevation; only 4 more are known to occur lower than 1000 meters in tropical lowland or deciduous forest (*P. maxima, P. orchileucos, P. orchimelas*, and *P. werleri*). *Pseudoeurycea orchileucos* is the only species of *Pseudoeurycea* that is found near sea level in tropical forest; all others occur above 700 m.

The *Pseudoeurycea cephalica* group is formed by 4 described species: the widespread *P. cephalica,* which occurs in high elevation forests of the Trans-Mexican Volcanic Belt and Sierra Madre Oriental (Fig. 1); the terrestrial *P. galeanae* from northern México in the state of Nuevo León; the cave-dwelling *P. scandens*, which occurs in the northern state of Tamaulipas, and the terrestrial or semiarboreal *P. quetzalanensis* from the cloud forest in the Sierra Madre Oriental. *Pseudoeurycea cephalica sensu stricto* occurs in the highlands of central México (Uribe-Peña *et al.* 1999), and two subspecies have been described (*P. c. rubrimembris*, and *P. c. manni*) from the state of Hidalgo. Current field work and unpublished data have shown that there might be up to 5 new species in the *P. cephalica* complex, but insufficient material from type localities of the subspecies has kept us from doing a detailed taxonomic study of the entire group.

In order to evaluate salamander population declines, we began a multiyear period resurvey of the salamander fauna in the state of Veracruz, México. While trying to find the possibly extinct *P. praecellens* in the cloud forests of Veracruz, we came across a series of medium sized, stout *Pseudoeurycea* that cannot be referred to any known species. In this paper we describe the new species from Veracruz and discuss its phylogenetic relationships by reanalyzing the molecular data published by Parra-Olea (2002) and Wiens *et al.* (2007) with the addition of previously unpublished sequences for 6 species (*P. cephalica*, *P. aurantia*, *P. quetzalanensis*, *P. ruficauda*, *P. cafetalera* **sp. nov.**, and *Thorius magnipes*).

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