



Description of a new species of worm salamander (Caudata, Plethodontidae, *Oedipina*) in the subgenus *Oedopinola* from the central portion of the Cordillera Nombre de Dios, Honduras

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Abstract

We describe a new species of *Oedipina* (subgenus *Oedopinola*) from Parque Nacional Pico Bonito in the central portion of the Cordillera Nombre de Dios in north-central Honduras. The new species was previously assigned to *O. gephyra*, but a combination of molecular analyses and its differences in foot morphology diagnose it from *O. gephyra*.

Key words: *Oedipina*, subgenus *Oedopinola*, *Oedipina petiola* **sp. nov.**, Honduras, Parque Nacional Pico Bonito, morphology, mtDNA, 16S, cytochrome *b*

Resumen

Describimos una nueva especie de *Oedipina* (subgénero *Oedopinola*) del Parque Nacional Pico Bonito en la porción central de la Cordillera Nombre de Dios en el nor-central de Honduras. La nueva especie fue previamente asignada a *O. gephyra*, pero una combinación de análisis moleculares y diferencias en la morfología de los pies la diagnostican aparte de *O. gephyra*.

Introduction

Plethodontid worm salamanders of the genus *Oedipina* Keferstein are among the most challenging neotropical salamanders to study, due to their secretive fossorial habits and the resulting infrequency with which they are encountered (Brame 1968, García-París & Wake 2000, McCranie 2006a, Sunyer *et al.* 2010). The application of molecular phylogenetic analyses to systematic study of *Oedipina* has shown that several populations of these salamanders represent cryptic lineages warranting species-level recognition, and in some cases entire divergent clades were concealed by the relative lack of morphological distinctiveness that is typical of the genus (García-París & Wake 2000; McCranie *et al.* 2008; Sunyer *et al.* 2010, 2011). The new species described herein can now be added to that growing list of cryptic species.

García-París & Wake (2000) provided a phylogenetic analysis of the genus *Oedipina* using two mitochondrial genes (cytochrome *b* and 16S DNA). García-París & Wake (2000) resurrected *Oedopinola* Hilton as a subgenus for a clade containing, among others, *O. gephyra* McCranie, Wilson & Williams, a species previously considered to inhabit two isolated localities in north-central Honduras (Figure 1). *Oedipina gephyra* was described from a locality on the leeward side of Reserva de Vida Silvestre Texíguat in the western portion of the Cordillera Nombre de Dios, Honduras (McCranie *et al.* 1993), and subsequently reported from Parque Nacional Pico Bonito in the central portion of the Cordillera Nombre de Dios (McCranie 1996). A single representative from each of the two populations assigned to *O. gephyra* was included in the phylogenetic analyses of García-París & Wake (2000). Those