



## Redescription and biogeography of *Mabuya cochabambae* Dunn with comments on Bolivian congeners (Lacertilia: Scincidae)

MICHAEL B. HARVEY<sup>1</sup>, RODRIGO AGUAYO<sup>2</sup> & AURÉLIEN MIRALLES<sup>3,4</sup>

<sup>1</sup>Department of Biological Sciences, Broward Community College, 3501 S.W. Davie Road, Davie, FL 33314, USA.

E-mail: mharvey@broward.edu

<sup>2</sup>Centro de Biodiversidad y Genética, Universidad Mayor de San Simón, apartado 538, Cochabamba Bolivia.

E-mail: phrynopus@gmail.com

<sup>3</sup>Département d'Ecologie et de Gestion de la Biodiversité, FRE 2696 - Adaptation et évolution des systèmes ostéomusculaires, 55 rue Buffon, Muséum National d'Histoire Naturelle, 75005 Paris, France. amiral@mnhn.fr

<sup>4</sup>Laboratoire Populations, Génétique & Evolution, UPR 9034, CNRS, 91198 Gif-sur-Yvette Cedex, France

### Abstract

On the basis of new material, observations in the field, and data from living specimens, we redescribe *Mabuya cochabambae* Dunn and discuss its distribution and biogeography. Morphological and molecular evidence strongly suggests that *M. cochabambae* and *M. dorsivittata* are sister taxa. In addition to *M. cochabambae*, we tabulate morphological data for three other *Mabuya* occurring in Bolivia: *M. dorsivittata* Cope, *M. frenata* (Cope), and *M. guaporicola* Dunn. *Mabuya altamazonica* Miralles et al. and *M. nigropunctata* (Spix) both occur in Bolivia, specimens of the former coming from the western lowlands and of the latter from the eastern lowlands of central Santa Cruz. Finally, we propose a new key to the eight species of *Mabuya* occurring in Bolivia.

**Key words:** Andean dry valleys, Lygosominae, *Mabuya dorsivittata*, *M. frenata*, *M. guaporicola*

### Resumen

En base a especímenes nuevos, observaciones de campo y datos tomados de individuos vivos, describimos *Mabuya cochabambae* Dunn, y discutimos su distribución y biogeografía. La evidencia morfológica y molecular indica que *M. cochabambae* y *M. dorsivittata* son especies estrechamente relacionadas. Además de los datos sobre *M. cochabambae*, presentamos información morfológica sobre otras tres especies de *Mabuya* de Bolivia: *M. dorsivittata* Cope, *M. frenata* (Cope), y *M. guaporicola* Dunn. *Mabuya altamazonica* Miralles et al. y *M. nigropunctata* (Spix) están presentes en Bolivia, la primera en tierras bajas del oeste y la otra, en el extremo este de Santa Cruz. Finalmente, proponemos una clave para las ocho especies de *Mabuya* presentes en Bolivia.

### Introduction

For many years, the systematics of *Mabuya* were in a confused state. An account of the genus provided by Peters & Donoso-Barros (1970) contained few changes from Dunn's (1935) "Notes on American *Mabuyas*." Nonetheless, in recent years, many problems with the systematics of these lizards have been resolved. Once thought to extend across South America, *M. mabouya* is now known to occur only in the Lesser Antilles (Miralles, 2005, 2006). Species once confused with it such as *M. agilis*, *M. bistriata*, and *M. nigropunctata* have been redescribed and revalidated (Avila-Pires, 1995; de Massary et al., 2000; Rebouças-Spieker, 1974).