



Three rare and enigmatic South American skinks

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Abstract

Three enigmatic skinks, *Mabuya nigropalmata* Andersson, 1918, *Tiliqua maculata* Gray, 1839, and *Trachylepis* (*Xystrolepis*) *punctata*, Tschudi, 1845, have been reported from widely separated localities on the South American mainland. They remain the three rarest and most poorly known South American skinks and were known only from type material until recently. In this paper, we comment on recent rediscoveries of *M. nigropalmata* in the western Amazon of Peru and Bolivia. Using cytochrome b and 12S DNA sequences, we resolve this species's phylogenetic position within *Mabuya sensu stricto* and demonstrate its specific distinctiveness, especially from the superficially similar species *M. frenata*. In addition, we show that neither *Trachylepis* (*Xystrolepis*) *punctata* nor *Tiliqua maculata* can be placed within *Mabuya*. A suite of morphological characteristics requires the transfer of these two species to the mostly Afro-Malagasy genus *Trachylepis*. To correct the secondary homonymy of Tschudi's name, we propose a replacement name for *T. punctata*. We designate NRM 23258A as the lectotype of *Mabuya nigropalmata* Andersson and MNHN 2932 as the lectotype of *Trachylepis maculata* (Gray) **new combination**. Finally, we propose an identification key to *Mabuya* of the Amazon basin and adjacent regions.

Key words: Scincidae, *Mabuya nigropalmata*, *Trachylepis atlantica*, *Trachylepis maculata* **new combination**, *Trachylepis* (*Xystrolepis*) *punctata*, *Trachylepis tschudii* **new name**, Peru

Introduction

Recent phylogenetic analyses of the pantropical supergroup *Mabuya sensu lato* (Carranza & Arnold 2003, Mausfeld *et al.* 2002) have identified several monophyletic lineages and allowed its breakup into *Chioninia* (Cape Verdian clade), *Eutropis* (Asian clade), *Trachylepis* (Afromalagasy clade, including *Mabuya atlantica*, from Fernando de Noronha island, offshore Brazil) and *Mabuya sensu stricto*, which is restricted to the Neotropics. Prior to the mid 1990s, the systematics of South American *Mabuya* was confusing due to a combination of nomenclatural and taxonomic problems (Ávila-Pires 1995, Mausfeld & Lötters 2001, Miralles 2005). However, a series of recent publications have resolved most persisting problems with this group (Ávila-Pires 1995; Mijares-Urrutia & Arends 1997; Mayer & Lazell 2000; Rodrigues 2000; Massary *et al.* 2001; Miralles 2005, 2006a, 2006b; Miralles *et al.* 2005a, 2005b, 2006, in press, Vrcibradic *et al.* 2006, Whiting *et al.* 2006, Harvey *et al.* 2008).

This paper constitutes one of the last steps in an ongoing taxonomic revision of *Mabuya* begun by the first author many years ago; its aim is essentially to focus on three taxa that could be considered the rarest and most enigmatic South American skinks: (A) *Mabuya nigropalmata* Andersson, 1918, from the western Amazon; (B) *Tiliqua maculata* Gray, 1839, reportedly from Guyana; and (C) *Trachylepis* (*Xystrolepis*) *punctata* Tschudi, 1845, reportedly from Amazonian Peru. All three species have been classified as