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A new species of *Bachia* Gray, 1845 (Squamata: Gymnophthalmidae) from the western Brazilian Amazonia

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Abstract

A new species of *Bachia* of the *B. dorbignyi* group, *Bachia scaea* **sp. nov.**, is described from the left bank of the upper Madeira River, at Rondônia state, at the western Brazilian Amazonia. The new species resembles morphologically *B. dorbignyi* and *B. peruana*, and seems to be related with the former species based on molecular data (16S and *c-mos* sequences). Nonetheless the presence of a first temporal separating parietal and supralabial scales and the absence of clawed fingers in the new species, can promptly distinguish it from their close relatives. This description ends with several-decades of stasis in the taxonomy of the *Bachia dorbignyi* group from Amazonian lowlands, and also presents new evidence that supports the Madeira River as a vicariant barrier.

Key words: *Bachia scaea* **sp. nov.**, fossorial habits, Amazon Forest

Introduction

Bachia species of the *B. dorbignyi* group are widely distributed over the western Amazon Forest and the Andean slopes (Dixon 1973). The first described species was the in this group originally placed in the genus *Chalcides* by Duméril and Bibron (1839) (*C. dorbignyi*, from Santa Cruz, Bolivia). Later, Gray (1845) recognized Duméril and Bibron's species as belonging to a distinct genus, and described *Bachia* to accommodate it.

By the end of the XIX century, Cope (1868; 1896) described *Heteroclonium bicolor* and *Ophiognomon trisanale*, both now in the genus *Bachia* (Dixon 1973). During the first decades of the following century four more species were described, by Werner (1901), in the genus *Cophias* (*C. peruanus*), and also by Noble (1920) (*B. intermedia*), Ruthven (1925) (*B. talpa*), and Burt and Burt (1931) (*B. barbouri*). Finally, Dixon (1973) in his revision of the genus *Bachia*, described the last species, *B. huallagana*, and the *B. dorbignyi* group achieved its current content.

Although other *Bachia* groups, such as the *B. bresslaui* one, have experienced a high number of descriptions in recent years (Castrillon & Strussmann 1998; Kizirian & McDiarmid 1998; Rodrigues *et al.* 2007, 2008; Freitas *et al.* 2011), the *B. dorbignyi* group has witnessed a long taxonomic stasis.

This traditional arrangement of *Bachia* in species groups based on morphological features, as defined by Dixon (1973), has been recently challenged, as molecular phylogenetic approaches are showing that they may not represent natural arrangements, as they are not monophyletic (Kohlsdorf & Wagner 2006; Galis *et al.* 2010; Kohlsdorf *et al.* 2010). The species from *B. dorbignyi* group appear in distinct clades along the topology in different molecular studies, however as for the other groups, the monophyly is never recovered (Kohlsdorf &

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