

## **Article**



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# A new species of small tree frog, genus *Dendropsophus* (Anura: Hylidae) from the eastern Amazon lowlands of Ecuador

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#### **Abstract**

We describe a new species of the hylid frog genus *Dendropsophus* from Amazonian Ecuador. The new species, *Dendropsophus shiwiarum* sp. nov., appears to be part of the *D. microcephalus* species group. *Dendropsophus shiwiarum* differs from its congeners by a combination of: (1) tympanic membrane non-differentiated and annulus evident only ventrally, (2) disc of Finger III and Toe IV with pointed tip, (3) dorsal surfaces of digital discs with a conical tubercle as result of projection of distal phalanx, and (4) small size (SVL < 19 mm). The new species is morphologically most similar to *Dendropsophus riveroi*. Examination of the type material of the latter suggests that some Ecuadorian populations reported as *D. riveroi* were misidentified and in fact belong to *D. shiwiarum* sp. nov.

**Key words:** Anura, Hylidae, *Dendropsophus shiwiarum* **sp. nov.**, *Dendropsophus riveroi*, *Dendropsophus microcephalus* group, Upper Amazon Basin, Ecuador

#### Introduction

The "Central Amazonian lowlands of Ecuador" (CAE) is a poorly studied and relatively small area that holds a species-rich amphibian fauna (Ortega-Andrade 2010). Collections from previously unexplored areas in the Amazon Basin usually result in the documentation of significant range extensions and the discovery of new species (Cisneros-Heredia *et al.* 2009; Duellman & Mendelson 1995; Elmer & Cannatella 2008; Funk *et al.* 2011; Guayasamin *et al.* 2006; Ortega-Andrade 2009; Ortega-Andrade & Valencia 2010; Motta *et al.* 2012).

Neotropical species formerly placed in the genus *Hyla* (Family Hylidae), were recently matter of wide phylogenetic analyses (*e.g.* Faivovich *et al.* 2005; Wiens *et al.* 2010; Pyron & Wiens 2011), with at least 40 genera being recognized under subfamily Hylinae Rafinesque 1815 (Frost 2013). Among them, the genus *Dendropsophus* was resurrected to name a clade of small frogs with a putative diploid number of 30 chromosomes (Faivovich *et al.* 2005). Fieldwork in 2007 by the senior author in the Shiwiar territories, in Ecuadorian lowland forests of Pastaza province revealed several species unknown for the area (Ortega-Andrade 2010). Among them, we found an unnamed species of small *Dendropsophus* which we describe herein.

#### Material and methods

Notes on color, ecology, and color photographs of specimens were taken in field. Measurements on call parameters were obtained from two individuals (DHMECN 4431 and QCAZ 48101) recorded in choruses. Recordings were made with Sony microcassette- M−670V (DHMECN 4431) and Olympus<sup>™</sup> LS10 recorders (QCAZ 48101) and

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