

NOTES ON GEOGRAPHIC DISTRIBUTION

Amphibia, Brachycephalidae, *Eleutherodactylus skydmainos*: First country record, Ecuador

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The herpetofauna from the Amazonian lowlands used to be conceived as very well-known. However, recent studies have demonstrated that we are quite far from knowing the diversity of amphibians and reptiles that inhabit the extensive and heterogeneous Amazonian lowlands (Tuomisto et al. 1995, Caldwell 1996, Duellman 1999, Lynch 2002, 2005, Faivovich et al. 2005, Cisneros-Heredia 2003, 2006, Guayasamin et al. 2006).

Studies carried out between 1998 and 2002 at the Tiputini Biodiversity Station (TBS), Amazonian lowlands of Ecuador, revealed an amazing mega-diversity of amphibians (121 species); including at least 20 described species of *Eleutherodactylus* (Cisneros-Heredia 2003, 2006, Guayasamin et al. 2006). Examination of specimens of the *Eleutherodactylus conspicillatus* group (sensu Lynch and Duellman 1997) collected at TBS revealed the presence of a species previously unreported to Ecuador: *Eleutherodactylus skydmainos* Flores and Rodríguez, 1997.

Eleutherodactylus skydmainos (sensu Padial and De la Riva 2005) was previously known to inhabit the Amazonian lowlands and Andean foothills of Peru, Bolivia, and Brazil (Flores and Rodríguez 1997, Padial et al. 2004, Padial and De la Riva 2005, Rodríguez et al. 2004). Herein I report the first record of *E. skydmainos* for the Republic of Ecuador: DFCH-USFQ W201 (adult male with nuptial pads and vocal slits, Figure 1) and W204 (juvenile), both collected at the Tiputini Biodiversity Station (00°37'5"S, 76°10'19"W, 250 m elev., Figure 2), Province of Orellana, on 06 January 2000 by D. F. Cisneros-Heredia and M. Rodríguez.

Both specimens show, among others, the three diagnostic characters selected by Padial and De la Riva (2005) to diagnose *E. skydmainos*: granular

skin texture of posterior and lateral margins of the belly, a fin-like middorsal tubercle on a bold black spot, and a poorly-elevated interocular fold. Further, they have tarsal folds, a pair of dorsolateral ridges (low in the adult specimen as an artifact of preservation, but conspicuous in life), immaculate venter, and basal toe webbing. The combination of all of these characters clearly separate *E. skydmainos* from the other sympatric species of the *E. conspicillatus* group: *Eleutherodactylus conspicillatus*, *E. malkini*, and *E. peruvianus*.



Figure 1. Dorsal view of *Eleutherodactylus skydmainos* (adult male, DFCH-USFQ W201) collected at the Tiputini Biodiversity Station, province of Orellana, Ecuador; below, a detail of the fin-like middorsal tubercle.

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The nearest locality of *E. skydmainos* to TBS is “Alva, between Chachapoyas and Bagua Grande”, Department of Amazonas, northeastern Peru. Thus, the new record presented herein extends the known distributional range of *E. skydmainos* ca. 600 Km NE airline (Figure 2).

This new record increases the number of species of *Eleutherodactylus* in Ecuador to 139 (Coloma 2005-2006), and to 24 for Amazonian Ecuador (Table 1). However, the species richness of *Eleutherodactylus* occurring in Amazonian Ecuador is still underestimated; several species are undescribed (e.g., there is at least one unnamed canopy-dweller *Eleutherodactylus* sympatric with *E. aureolineatus*, pers. obs.); the taxonomic status of several taxa remains uncertain (e.g. *E. ockendeni*, *E. conspicillatus/peruvianus*), and some species are still expected to be found (e.g., *E. delius* and *E. luscombei* could occur in Ecuador). Thus the diversity of *Eleutherodactylus* in Ecuador is still far from being known.

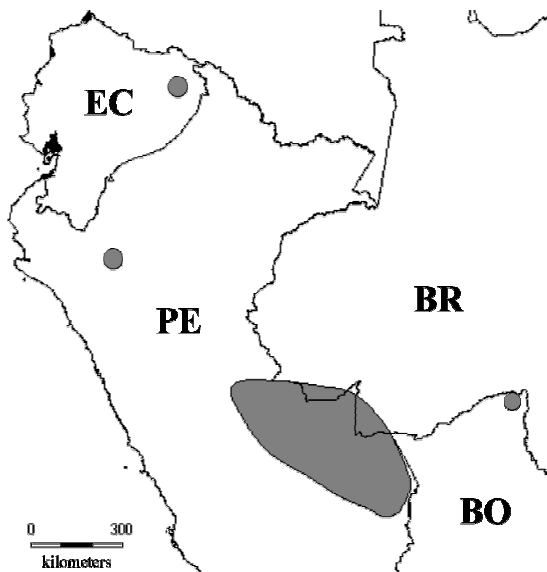


Figure 2. General distribution of *Eleutherodactylus skydmainos*. Map based on Rodríguez et al. (2004), and subsequent records by Padiál et al. (2004), Padiál and De la Riva (2005), and this paper. EC = Ecuador, PE = Peru, BR = Brazil, BO = Bolivia.

Table 1. Species of *Eleutherodactylus* recorded in the Amazonian lowlands region of the Republic of Ecuador. Species recorded at the Tiputini Biodiversity Station (TBS), Province of Orellana, Ecuador are marked with an asterisk *.

<i>Eleutherodactylus acuminatus</i> Shreve, 1935*
<i>Eleutherodactylus altamazonicus</i> Barbour and Dunn, 1921*
<i>Eleutherodactylus aureolineatus</i> Guayasamin, Ron, Cisneros-Heredia, Lamar and McCracken, 2006*
<i>Eleutherodactylus carvalhoi</i> Lutz, 1952
<i>Eleutherodactylus conspicillatus</i> Günther, 1859*
<i>Eleutherodactylus croceinguinis</i> Lynch, 1968*
<i>Eleutherodactylus diadematus</i> Jiménez de la Espada, 1875*
<i>Eleutherodactylus lacrimosus</i> Jiménez de la Espada, 1875*
<i>Eleutherodactylus lanthanites</i> Lynch, 1975*
<i>Eleutherodactylus librarius</i> Flores and Vigle, 1994*?
<i>Eleutherodactylus malkini</i> Lynch, 1980*
<i>Eleutherodactylus martiae</i> Lynch, 1974*
<i>Eleutherodactylus nigrovittatus</i> Andersson, 1945*
<i>Eleutherodactylus ockendeni</i> Boulenger, 1912*
<i>Eleutherodactylus orphnolaimus</i> Lynch, 1970*
<i>Eleutherodactylus paululus</i> Lynch, 1974*
<i>Eleutherodactylus peruvianus</i> Melin, 1941*
<i>Eleutherodactylus pseudoacuminatus</i> Shreve, 1935*
<i>Eleutherodactylus quaquaversus</i> Lynch, 1974
<i>Eleutherodactylus skydmainos</i> Flores and Rodríguez, 1997*
<i>Eleutherodactylus sulcatus</i> Cope, 1874*
<i>Eleutherodactylus trachyblepharis</i> Boulenger, 1918
<i>Eleutherodactylus variabilis</i> Lynch, 1968*
<i>Eleutherodactylus ventrimarmoratus</i> Boulenger, 1912*

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