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Amphibia, Anura, Microhylidae, Gastrophrynninae, Elachistocleis Bicolor Guérin Méneville, 1838: Distribution Extension and Geographic Distribution Map

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Amphibia, Anura, Microhylidae, Gastrophrynninae, Elachistocleis Bicolor Guérin Méneville, 1838: Distribution Extension and Geographic Distribution Map

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15

Abstract - The geographic distribution of *Elachistocleis bicolor* (Anura: Microhylidae) extends over several biomes in Argentina, Bolivia, Paraguay, Peru, Uruguay and Brazil. In Brazil, this species was reported to occur in the States of Amazonas, Distrito Federal, Goiás, Mato Grosso do Sul, Paraná, Rio Grande do Sul, Santa Catarina and São Paulo. The current study reports the first record of *E. bicolor* for the state of Rondônia, Brazil, extending its distribution in 350 km eastwards from closest records in Beni, Bolivia and 715 km southwestwards from closest records in Amazonas.

I. INTRODUCTION

The frog *Elachistocleis bicolor* Guérin Méneville, 1838 (Figure 1) belongs to the Microhylidae family (Lavilla *et al.* 2003; Rodrigues *et al.* 2003). The taxonomy of the species from the genus *Elachistocleis* are controversial and have undergone several changes (Lavilla *et al.* 2003; Thomé and Brasileiro 2007). Lavilla *et al.* (2003) remove *E. bicolor* from synonymy with *E. ovalis* Schneider 1799, which is widely distributed in South America (Frost 2009). The occurrence of *E. ovalis* in syntopy with other congeneric species of the genus and also taxonomically problematic can lead to unreliable identifications (Kwet and Di Bernardo 1998; Lavilla *et al.* 2003). According to De La Riva *et al.* 2000, considerable confusion took place in the past regarding the identity of *E. bicolor* vs. *E. ovalis*, whose main external difference is the ventral coloration (see Frost 1985). Today most authors apply the name *E. bicolor* to the frogs with an immaculate venter (De La Riva *et al.* 2000).

The geographic distribution of this species extends over several biomes, including Amazonia, Chaco, *Cerrado*, Pampa and Pantanal in Argentina (Céspedes *et al.* 2001; Lavilla *et al.* 2003; Aceñolaza *et al.* 2004; Kacoliris *et al.* 2006; Echeverría *et al.* 2007; Baldo *et al.* 2008; Duré *et al.* 2008; GBIF 2008), Bolivia (De la Riva *et al.* 1996, 2000; Reichle 1997; Reichle and Kohler 1998; GBIF 2008), Paraguay (Brusquetti and Lavilla 2006; GBIF 2008), Peru (MVZ 1999), Uruguay (Lavilla *et al.* 2004; Maneyro and Beheregaray 2007; Canavero *et al.* 2008) and Brazil. In Brazil, this species was reported to occur in the States of Amazonas (Gordo 2003; Lima *et al.* 2006; GBIF 2008), Distrito Federal (Lima and Costa 2006; Camargo and Aguiar 2007), Goiás (Bastos *et al.* 2003), Mato Grosso do Sul (Strüssmann *et al.* 2000; Gordo and Campos 2003; Rodrigues *et al.* 2003; Ávila *et al.* 2004; GBIF 2008), Paraná (Conte and Rossa-Feres 2006, 2007; Shibatta *et al.* 2009), Rio Grande do Sul (Braun and Braun 1980; Kwet and Di-Bernardo 1998; Colombo *et al.* 2008; Moreira *et al.* 2008; Santos *et al.* 2008; Quintela *et al.* 2009), Santa Catarina (GBIF 2008; Lucas and Fortes 2008) and São Paulo (Bernarde and Kokubum 1999; Vasconcelos and Rossa-Feres 2005; Silva *et al.* 2008) (Figure 2).

In this work we report the first record of *E. bicolor* for the state of Rondônia, in southwestern Brazil, in a transitional region between the *Cerrado* and the Amazonian forest biomes. One male and three female of *E. bicolor* were collected at the municipality of Porto Velho, state of Rondônia, in an area of forested land on a private farm (08°43'09" S, 63°51'64" W), on 13 February 2009 by DBH. Specimens were identified according to De La Riva *et al.* (1996, 2000), Frost (2009), Lima *et al.* (2006) and Rodrigues *et al.* (2003).

These new records extend the geographic distribution of *E. bicolor* about 350 km eastwards from closest records in Beni, Bolivia (10°58'59.98" S, 66°06'00" W) and 715 km southwestwards from closest records in Amazonas, Brazil (03°18'15" S, 60°37'03" W) (Figure 2). Voucher specimens were deposited in the anuran

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collection of the *Centro de Estudos de Biomoléculas Aplicadas a Medicina*, Universidade Federal de Rondônia, Porto Velho, Rondônia, Brazil (CEBio 090212-010527, CEBio 090212-010531, CEBio 090212-010532, CEBio 091016-0105134).

II. ACKNOWLEDGEMENTS

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Figure 1 : *Elachistocleis bicolor* (female) showing the ovoid body, small and triangular head, dark brown to yellowish brown back with a white to light yellow stripe that extends from the nose to the urostylus region, immaculate yellow belly (the gular region is black in males), and a thin reddish-brown line in the back of the thighs

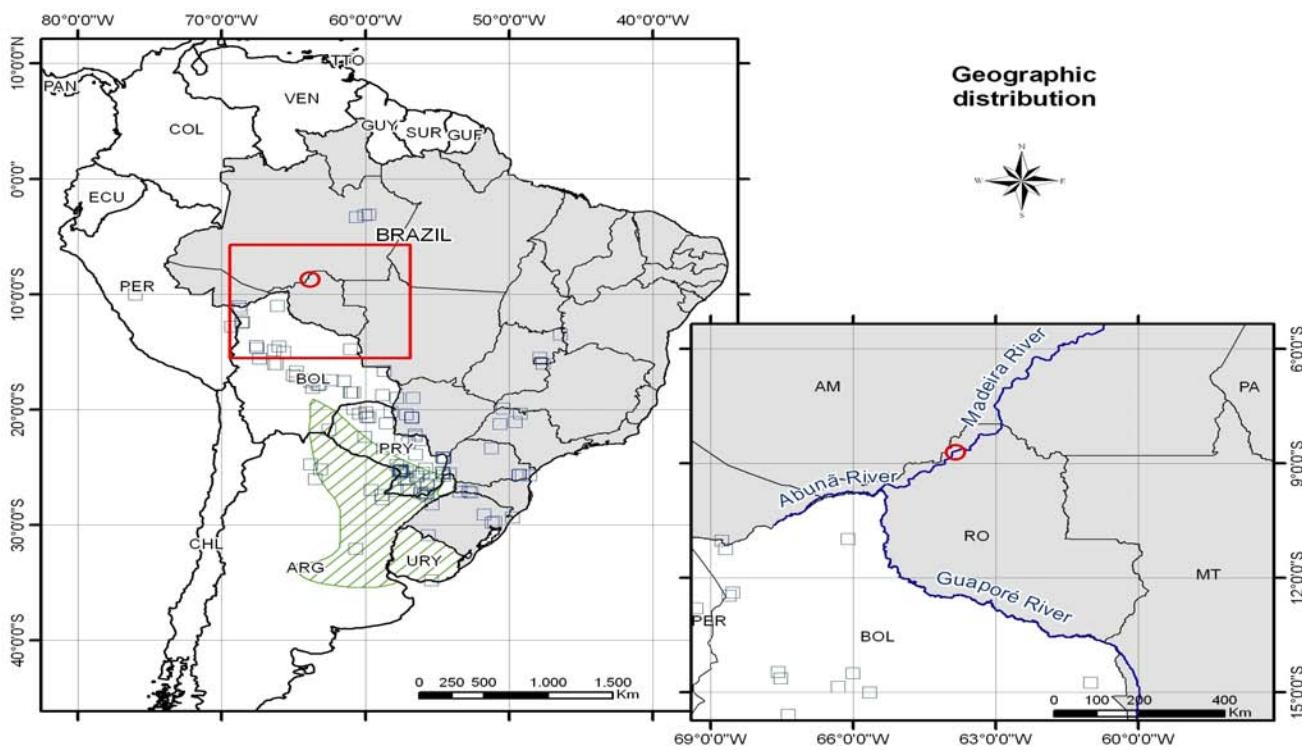


Figure 2 : Distribution map for *Elachistocleis bicolor* with the new record for the municipality of Porto Velho, state of Rondônia, Brazil (red circle). The blue squares correspond to records areas for *E. bicolor* obtained from the literature cited. The green area represents the distribution area for *E. bicolor* in the IUCN Red List of Threatened Species site (Lavilla *et al.* 2004)