

Distribution extension of *Chiasmocleis mantiqueira* Cruz, Feio and Cassini, 2007 (Anura, Microhylidae)

Emanuel Masiero da Fonseca^{1,*}, Matheus de Oliveira Neves¹, Diego José Santana², Celso Henrique Varela Rios¹, Rose Marie Hoffmann de Carvalho¹

Abstract. We provide new data on the distribution of *Chiasmocleis mantiqueira*, a small microhylid frog endemic to the Atlantic Forest. We found *C. mantiqueira* in Parque Municipal da Lajinha, municipality of Juiz de Fora, state of Minas Gerais, Brazil, and present an updated distribution map of this species as well as a discussion of its current range.

The genus *Chiasmocleis* Méhely, 1904 is currently composed of 25 species, with distribution in Panama and tropical South America, north and east of the Andes (Frost, 2011). In the Atlantic Forest there are ten species distributed in two distinct morphological groups based on the development of the webbing on feet: the *C. leucosticta* and the *C. schubarti* groups (Cruz, Caramaschi and Izecksohn, 1997). *Chiasmocleis mantiqueira* belongs to the *C. leucosticta* group, which comprises species with well developed webbing on feet, and is composed of *C. capixaba* Cruz, Caramaschi and Izecksohn, 1997, *C. cordeiroi* Caramaschi and Pimenta, 2003, *C. crucis* Caramaschi and Pimenta, 2003, *C. leucosticta* (Boulenger, 1888), *C. mantiqueira* Cruz, Feio and Cassini, 2007 and *C. sapiranga* Cruz, Caramaschi and Napoli, 2007 (Cruz, Feio and Cassini, 2007).

Chiasmocleis mantiqueira was described from the municipality of Ervália, district of Careço, Parque Estadual da Serra do Brigadeiro (PESB) (20°53' S, 42°31' W; 1227 m above sea level), Minas Gerais, southeastern Brazil (Cruz, Feio and Cassini, 2007). Currently, *Chiasmocleis mantiqueira* is only known from its type locality, although the species is present in the amphibian species list of the state of São Paulo with an unspecified locality (Araújo et al., 2009; Rossa-Feres et al., 2011).

During fieldwork on 9 January 2009, we found a single female specimen of *Chiasmocleis mantiqueira* (Figure 1) while checking one of three lines of funnel traps with drift fences in Parque Municipal da Lajinha (21°47' S, 43°22' W, around 900 m a.s.l.), an urban Atlantic Forest fragment in the municipality of Juiz de Fora, state of Minas Gerais. This finding of *C. mantiqueira* in Juiz de Fora extends its geographic distribution ca. 135 km southwest of Serra do Brigadeiro (type locality) (Figure 2). The voucher specimen is deposited in the Coleção Herpetológica/Anfibios da Universidade Federal de Juiz de Fora (CAUFJF 893), Minas Gerais, Brazil.

This record is the first of *Chiasmocleis mantiqueira* out of its type locality, despite the record from São Paulo state, of which no voucher specimens exist. Thus, the record of *C. mantiqueira* from Parque Municipal da Lajinha is the southern-most record according to published vouchered data.



Figure 1. *Chiasmocleis mantiqueira* from Parque da Lajinha, Juiz de Fora, Minas Gerais. CAUFJF 893 (female) Photo: Celso Henrique Varela Rios.

1 Universidade Federal de Juiz de Fora, Instituto de Ciências Biológicas, Laboratório de Herpetologia. CEP 36036-900. Juiz de Fora, MG, Brazil.

2 Universidade Federal da Paraíba, Centro de Ciências Exatas e da Natureza, Departamento de Sistemática e Ecologia. CEP 58051-900. João Pessoa, PB, Brazil.

* corresponding author: emanuel_fonseca_1990@yahoo.com.br

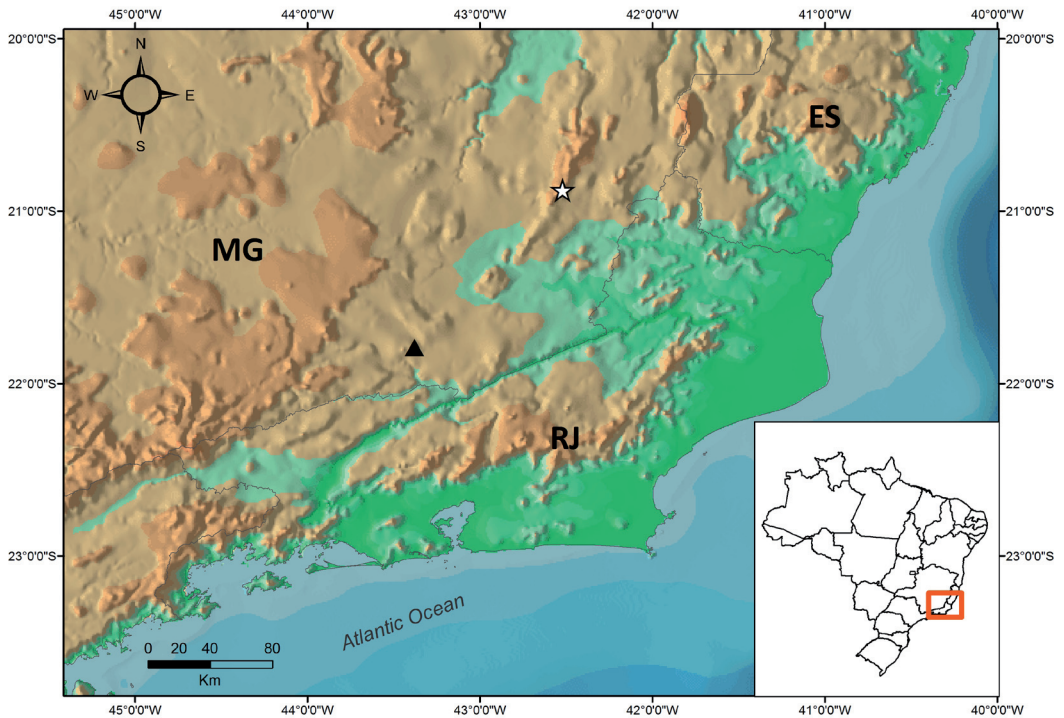


Figure 2. Geographic distribution of *Chiasmocleis mantiqueira*. Star = Ervália, Parque Estadual da Serra do Brigadeiro (type locality); Triangle = Parque Municipal da Lajinha (new record). Both record in state of Minas Gerais.

Chiasmocleis mantiqueira is classified by IUCN as “Data Deficient” (Angulo, 2008), so the data presented here may contribute to increase the knowledge of its distribution. Nevertheless, this species should remain listed as “Data Deficient”, since data on its geographic range is still scarce.

Acknowledgements. We thank Carla Santana Cassini and Mirco Solé for reviewing the manuscript and Marcelo Gehara for his English revision of an early version of the manuscript. DJS thanks CAPES for his current PhD scholarships and RMHC thanks FAPEMIG for financial support. The collection permit was issued by Instituto Chico Mendes de Conservação da Biodiversidade – ICMBio (17746-1).

References

- Angulo, A. (2008): *Chiasmocleis mantiqueira*. In IUCN 2012. IUCN Red List of Threatened Species. Version 2012.1. Available at: <http://www.iucnredlist.org>. Last accessed on 31 July 2012.
- Araujo, O.G.S., Toledo, L.F., Garcia, P.C.A., Haddad, C.F.B. (2009): The amphibians of São Paulo state, Brazil. *Biota Neotropica* 9(4): 197-209.

- Cruz, C.A.G., Caramaschi, U., Izecksohn, E. (1997): The genus *Chiasmocleis* Mehely, 1904 (Anura, Microhylidae) in the Atlantic Rain Forest of Brazil, with a description of three new species. *Alytes International Journal of Batrachology* 15(2): 49-71.

- Cruz, C.A.G., Feio, R.N., Cassini, C.S. (2007): Nova Espécie de *Chiasmocleis* Mehely, 1904 (Amphibia, Anura, Microhylidae) da Serra da Mantiqueira, Estado de Minas Gerais, Brasil. *Arquivos do Museu Nacional* 65(1): 33-38.

- Frost, D.R. (2011): *Amphibian Species of the World: an Online Reference*. Version 5.5 (31 January, 2011). Available at: <http://research.amnh.org/vz/herpetology/amphibia/>. Last accessed on 31 July 2012.

- Rossa-Feres, D.C., Sawaya, R.J., Faivovich, J., Giovanelli, J.G., Brasileiro, C.A., Schiesari, L., Alexandrino, J.M.B., Haddad, C.F.B. (2011): Anfíbios do Estado de São Paulo, Brasil: Conhecimento Atual e Perspectivas. *Biota Neotropica* (Edition in Portuguese. Online) 11(1a): 1-19.

APPENDIX 1. Additional specimens examined.

- Chiasmocleis mantiqueira*: MZUFV 7312–7316 (paratypes); MZUFV 10023–10027, 10140–10143 (topotypes).