

# Anura, Microhylidae, *Elachistocleis bicolor* (Valenciennes, 1838): Distribution extension in the province of Córdoba, Argentina

Guadalupe López<sup>1\*</sup> and Nicolás Pelegrin<sup>2</sup>

<sup>1</sup> Universidad Nacional de Córdoba, Facultad de Ciencias Exactas Físicas y Naturales. Vélez Sarsfield 299 X5000JJC Córdoba, Argentina.

<sup>2</sup> Universidad Nacional de Córdoba, Facultad de Ciencias Exactas, Físicas y Naturales, Centro de Zoología Aplicada. Rondeau 798 X5000AVP Córdoba, Argentina.

\* Corresponding author. E-mail: [lopezjguada@gmail.com](mailto:lopezjguada@gmail.com)

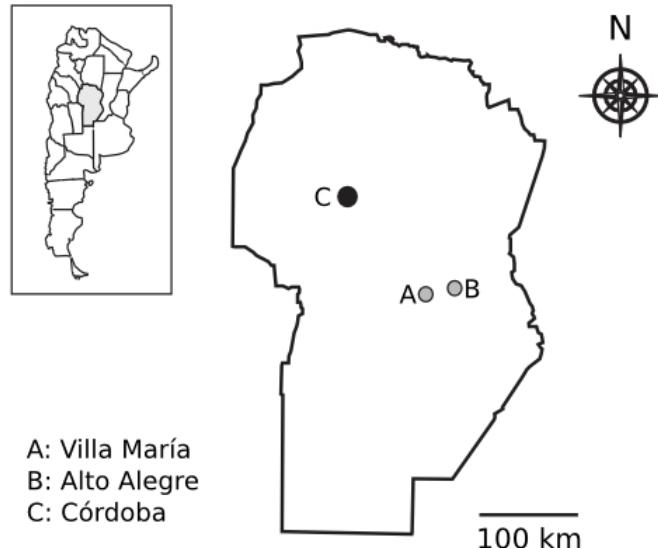
**ABSTRACT:** *Elachistocleis bicolor* is distributed in Argentina in the Chaco, Espinal, and Pampa ecoregions. Previous records in Córdoba, Argentina were restricted to the east of the province. Here we present a new record of *E. bicolor* for Córdoba in Reserva Natural San Martín (31°21' S, 64°15' W), about 150 km NW of the nearest record.

*Elachistocleis bicolor* (“ranita hocicuda”, “two-colored oval frog”) is a small frog (SVL: 22–40 mm) with an oval body and a small triangular head. Dorsum is dark brown to yellowish. Belly is yellow, with a black throat in males (De la Riva *et al.* 1996; 2000, Rodrigues *et al.* 2003). This nocturnal frog feeds mainly on ants and inhabits temporary ponds with grasses, hiding under logs and rocks (Gallardo and Olmedo 1992, López 2003, Berazategui *et al.* 2007, Lopez *et al.* 2007, Cossovich *et al.* 2011). Its reproduction is explosive (Wells 1977), extending from November to March in coincidence with heavy rains (De la Riva *et al.* 1996, Rodrigues *et al.* 2003).

Known distribution of *E. bicolor* extends from south-eastern Bolivia, southern Paraguay, northeastern Argentina, southeastern Brazil and Uruguay. In Argentina, its distribution includes the provinces of Salta, Formosa, Chaco, Misiones, Corrientes, Entre Ríos, Santa Fe, South of Buenos Aires and center of Córdoba (Gallego and Giménez 1998). In Córdoba it was recorded in Villa María (32°25' S, 63°15' W) and Alto Alegre (32°22' S, 62°53' W) (Gallego and Giménez 1998) (Figure 1).

This new record extends the distribution of *E. bicolor* to northwestern of Córdoba city, in Reserva Natural San Martín (31°21'00" S, 64°15'00" W). The frog was captured using drift fence-pitfall traps. Individuals were present only in grassland areas generated by recurrent fires in the Chaco-Espinal ecotone inside the reserve. These grasslands, mainly of the genus *Stipa* and *Setaria*, are characterized by a lack of trees and a low density of shrubs. Along with *E. bicolor* we captured some individuals of *Physalaemus biligonigerus*, *Leptodactylus mystacinus* and *Rhinella arenarum*.

This is the westernmost record of this frog in Córdoba, 150 km from the nearest record in the province. The specimen is deposited at the herpetology section of Centro de Zoología Aplicada (Facultad de Ciencias Exactas, Físicas y Naturales, Universidad Nacional de Córdoba), Córdoba, Argentina, under the code CZAA 243.



**FIGURE 1.** Records of *Elachistocleis bicolor* for the province of Córdoba, Argentina. A: Villa María (Gallego and Giménez 1998), B: Alto Alegre (Gallego and Giménez 1998), C: Córdoba city (this work).

**ACKNOWLEDGMENTS:** We thank Secretaría de Ambiente of Córdoba city for permission to work in Reserva Natural San Martín, and the personnel of the reserve for their assistance. NP has a postdoctoral fellowship from CONICET.

## LITERATURE CITED

- Berazategui, M., A. Camargo, and R. Maneyro. 2007. Environmental and seasonal variation in the diet of *Elachistocleis bicolor* (Guerin-Meneville 1838) (Anura: Microhylidae) from northern Uruguay. *Zoological Science* 24:225–231.  
Cossovich, S., L. Aun, and R. Martori. 2011. Análisis trófico de la herpetofauna de la localidad de Alto Alegre (Dept. Unión, Córdoba, Argentina). *Cuadernos de Herpetología* 25:11–19.  
De la Riva, I., J. Köhler, S. Lötzters, and S. Reichle. 2000. Ten years of research on bolivian amphibians: updated checklist, distribution, taxonomic problems, literature and iconography. *Revista Española de Herpetología* 14:19–164.  
De la Riva, I., R. Marquez, and J. Bosch. 1996. Advertisement calls of four microhylid frogs from Bolivia (Amphibia, Anura). *American Midland Naturalist* 136(2):418–422.

- Gallardo, J. M. and E. Olmedo. 1992. Anfibios de la República Argentina: ecología y comportamiento. *Fauna de agua dulce la República Argentina* 41:1-116.
- Gallego, F. and C. Gimenez. 1998. Hallazgo de *Elachistocleis bicolor* (Valenciennes, 1838)(Anura: Microhylidae) en la provincia del Espinal. *Cuadernos de Herpetología* 12:49.
- López, J. 2003. Ecología trófica de una comunidad de anuros en un remanente forestal asociado al río Paraná Medio. Tesina para optar al título de Licenciado en Biodiversidad. Universidad Nacional del Litoral. Facultad de Humanidades y Ciencias. Santa Fé. Argentina.
- Lopez, J. A., R. Ghirardi, P. A. Scarabotti, and M. C. Medrano. 2007. Feeding ecology of *Elachistocleis bicolor* in a riparian locality of the middle Paraná River. *The Herpetological Journal* 17:48-53.
- Rodrigues, D.J., S.F. Lopez, and M. Uetanabaro. 2003. Padrão reprodutivo de *Elachistocleis bicolor* (Anura, Microhylidae) na Serra da Bodoquena, Mato Grosso do Sul, Brasil. *Iheringia. Série Zoologia* 93:365-371
- Wells, K.D. 1977. The social behaviour of anuran amphibians. *Animal Behaviour* 25:666-693.

RECEIVED: May 2012

ACCEPTED: July 2012

PUBLISHED ONLINE: August 2012

EDITORIAL RESPONSIBILITY: Raúl Maneyro