Elachistocleis matogrosso Caramaschi 2010, (Amphibia: Anura: Microhylidae) first records for Paraguay

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Locality — Paraguay, Departmento San Pedro, Santa Rosa del Aguaray, Reserva Natural Laguna Blanca (23°46′52.6°S, 56°17′28.9°W). Vouchers are housed in the Colección Zoológica de Para La Tierra (CZPLT) located at Reserva Natural Laguna Blanca (RNLB). Elachistocleis matogrosso, one male (CZPLT-H-505) collected on June 16, 2013 by Ryan Manders and one female (CZPLT-H-517) collected on July 2, 2013 by Jean-Paul Brouard.

Comments — To date three species of the family Microhylidae have been documented as occurring in Paraguay: Dermatonotus muelleri (Boettger, 1885), Chiasmocleis albopunctata (Boettger, 1885), and Elachistocleis bicolor (Guérin-Méneville, 1838). In Paraguay, D. muelleri is known from the Chaco and Cerrado eco-regions but the other two are widespread across the country in the Atlantic Forest, Cerrado, and Pantanal eco-regions. Elachistocleis bicolor has also been recorded in the Humid and Dry Chaco eco-regions (Brusquetti and Lavilla, 2006). Here we document the first Paraguayan records of one additional member of the family, Elachistocleis matogrosso, and the first records of this species outside of Brazil.

RNLB is located in the Cerrado zone of northeastern Paraguay (Fig. 1). It is a small 804 hectare reserve positioned around a freshwater lake system of 157 hectares (Guyra Paraguay, 2008). The reserve has a large tract of pristine Cerrado to the north, a patch of degraded Atlantic Forest to the south and an area of transition between (Eiten, 1972; 1978).

Specimens of *Elachistocleis matogrosso* were collected either in pitfall traps with drift fences (CZPLT-H-517) or by active searching (CZPLT-H-505) during ongoing inventory work at RNLB. All frogs were collected at the same temporary pool (23°46′52.6"S, 56°17′28.9"W) located southeast of the lake, in a transition area between degraded Atlantic forest and Cerrado.

Elachistocleis matogrosso is only known from Mato Grosso and Mato Grosso do Sul, Brazil (Caramaschi, 2010). The species shares the immaculate yellow venter of E. bicolor, E. haroi (Pereyra et al., 2013) and E. helianneae (Caramaschi, 2010) but can be distinguished from all by a broad irregular yellow stripe on the posterior side of the thighs, the presence of a whitish mid-dorsal stripe of variable length, by lacking small light spots on the dorsum, and by the greyish colour of the dorsum extending to the upper lip. Though it shares a mid-dorsal stripe with *E. haroi*, it is yellow in that species and reaches to the interorbital region. Furthermore the head width is approximately 92% of the head length in *E*. matogrosso, while in *E. bicolor* it is below 90%, in *E.* haroi 83.6-84.4% and in E. helianneae is above 94% (Caramaschi, 2010; Pereyra et al., 2013).

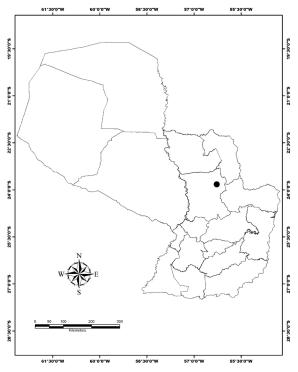


Figure 1. Map of Paraguay showing the collection locality for *Elachistocleis matogrosso*: San Pedro: Reserva Natural de Laguna Blanca, Municipality of Santa Barbara (CZPLT-H-505, 517).

Measurements of the RNLB *E. matogrosso* specimens CZPLT-H-505 (June 16, 2013; male, SVL 24 mm) and CZPLT-H-517 (June 2, 2013; female, SVL 31,8 mm) are all consistent with the information provided by Caramaschi (2010). All other diagnostic characters proposed by Caramaschi (2010) are present in the RNLB specimens (Fig. 2).

This species has likely been overlooked in Paraguay because of confusion with the widespread *Elachistocleis bicolor*. The presence of the species at RNLB extends its range southwards by approximately 300 km from the most southerly published locality of Nioaque, Mato Grosso do Sul, Brazil (Caramaschi, 2010).

Elachistocleis matogrosso is currently known in Paraguay only from this single locality. However further sampling in northeastern Paraguay may reveal them to be more widespread.

The amphibian list of 30 species for RNLB is greater than nine of the 16 political departments in Paraguay - Alto Paraná, Boquerón, Caaguazú, Caazapá, Cordillera, Guairá, Misiones, Ñeembucú and Paraguarí (Smith et al., 2012). Five snake species and one amphibian now have their known Paraguayan range confined to this small reserve (Cacciali et al., 2013; Smith et al., 2013a,b; Smith et al., 2014). Already designated an Important Bird Area by Birdlife International (IBA PY021: Guyra Paraguay, 2008) due to the extraordinarily high number of globally (11) and nationally (47) threatened bird species occurring within the reserve, it also deserves urgent recognition as an area of national and international importance for the conservation of herpetofauna. Consolidating the long term conservation of the RNLB should thus be a national conservation priority.

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Figure 2. *Elachistocleis matogrosso* (CZPLT-H-517) from Reserva Natural de Laguna Blanca, San Pedro, Paraguay.

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