## First record of the milk frog *Trachycephalus cunauaru* (Anura: Hylidae) from Rondônia state with updates on its geographical distribution

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The genus *Trachycephalus* Tschudi, 1838 currently consists of 14 with a wide geographic distribution from Mexico, Central America and South America east of the Andes, south to northern Argentina and eastern Brazil (Frost, 2016).

The recently described *Trachycephalus cunauaru* (Gordo et al. 2013) differs from all other congeners by having medium size (SVL 57.9-74.3 mm in males and SVL 74.4-84.9 mm in females); non-ossifying head skin with the underlying dermal bones; the back skin, including the head with many tubers and irregular glandular tissue; iris with a pinkish-beige colour, with a black horizontal bar and a transverse thin black line below the median, among other characters (Gordo et al. 2013).

Trachycephalus cunauaru usually inhabits the canopies of the Amazon forests in upland and flooded forests, where males usually callon cavities in tree trunks, which accumulate water and amplify the sound, making it possible to be heard in distances of up to 1 km from the source (Gordo et al. 2013). This seems to be a strategy to attract females from distant locations and allows individuals to spread more widely, reducing

the competition on breeding sites (Gordo et al. 2013). The males call during hours after sunset in cavities up to about 25 meters above the ground (Gordo et al. 2013).

Trachycephalus cunauaru occurs in Brazil, Bolivia, Peru and probably Ecuador and Venezuela (Gordo et al. 2013; Frost, 2016). The Negro and Amazonas rivers possibly represent geographical barriers to the species in the central Amazon region by isolating the same congener *Trachycephalus resinifictrix*, to which the river Xingu apparently also represents a geographic boundary to the species to southeastern Amazon (Gordo et al. 2013). In Brazil the species is recorded for the central region of the state of Amazonas, south and southwest of the state of Pará, east of Acre and north of Mato Grosso (Gordo et al. 2013).

During monitoring activity herpetofauna within the Floresta Nacional do Jamari (FLONA do Jamari), municipality of Itapuã do Oeste, Rondônia state, Brazil (-9.151956°, -62.903378°, 114 m about sea level), in an area of open rain forest with predominance of palms, on 29 July 2015, at about 20:00h, an individual was found in activity of shrub vegetation in an area of upland forest. The individual (Figure 1) was collected (collecting permit SISBIO/IBAMA n. 001/2013 – FNJ), had tissue samples taken and deposited in the Coleção da Herpetofauna de Rondônia (UFRO HEP 3275).

This is the first record of the species in the state of Rondônia within a conservation area, and highlights the importance of these on the preservation of local biodiversity. This record noted here (Figure 2) fill a gap of about 1165 km between the records of De la Riva (2000), department of Pando, Bolivia and the municipality of Paranaíta, northern Mato Grosso (Gordo et al. 2013) and distance about 328 km southeast of the type locality, in the municipality of Canutama, state of Amazonas (Gordo et al. 2013).

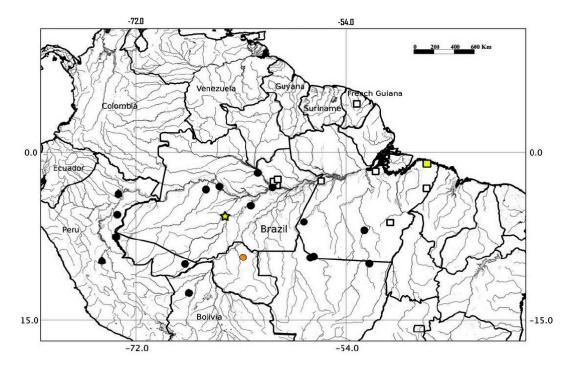
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**Figure 1.** *Trachycephalus cunauaru* Gordo et al. 2013 registered in the municipality of Itapuã do Oeste, Rondônia, Brazil - Photos by Diego Meneghelli.



**Figure 2.** Map with current geographical distribution of species *Trachycephalus cunauaru* and *Trachycephalus resinifictrix*, adapted from Gordo et al. (2013). Yellow star is the type locality of *T. cunauaru*; black dots represent records in the literature of the species *Trachycephalus cunauaru*; Orange circle represents the records of *Trachycephalus cunauaru* for the FLONA do Jamari, Itapuã do Oeste, Rondônia, Brazil; Yellow square represents the type locality *Trachycephalus resinifictrix* and black squares represent records in *Trachycephalus resinifictrix* literature.

**Acknowledgments.** We are grateful to esteemed colleagues Dr. Ivan Nunes and Dr. Marcelo Gordo for confirmation taxonomic species and the correction and suggestions in this manuscript. We also thank the SISBIO / IBAMA for collecting license granted.

## References

De la Riva, I., Köhler, J., Lötters, S., Reichle, S. (2000): Ten years of research on Bolivian amphibians: updated checklist, distribution, taxonomic problems, literature and iconography. Revista Española de Herpetología. 14: 19-164.

Frost, D. (2016): Trachycephalus cunauaru, Amphibian Species of the World 6.0, an Online Reference. Available at: http://research. amnh.org/vz/herpetology/amphibia/Amphibia/Anura/Hylidae/ Lophyohylinae/Trachycephalus/Trachycephalus-cunauaru.Last accessed on 30 June 2016.

Gordo, M., Toledo, L.F., Suárez, P., Kawashita-Ribeiro, R.A., Ávila, R.W., Morais, D.H., Nunes, I. (2013): A new species of milk frog of the genus *Trachycephalus* Tschudi (Anura, Hylidae) from the Amazonian rainforest. Herpetologica, 69: 466–479.