

## New record and distribution map of *Hyalinobatrachium cappellei* (van Lidth de Jeude 1904) (Anura: Centrolenidae)

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The family Centrolenidae currently comprises 150 species distributed within twelve genera (Castroviejo-Fisher et al., 2011). Considered endemic to America, this family inhabits regions from southern Mexico to Panama along the Andes, from Venezuela to Bolivia along the Orinoco and Amazonas river basins, in the “Guiana Shield” region, and both in the Brazilian and Argentinean Atlantic Forests (Cisneros-Heredia and McDiarmid, 2007). The species are nocturnal, arboreal anurans which spawn on vegetation or rocks near bodies of water (Guayasamin et al., 2006; Castroviejo-Fisher, 2009; Guayasamin et al., 2009; Rodrigues et al., 2010).

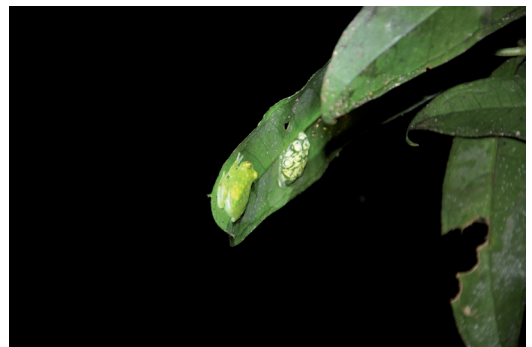
A recent taxonomic revision of the Centrolenidae (Castroviejo-Fisher et al., 2011) did not recover genetic distinction between the species *Hyalinobatrachium crurifasciatum*, *H. eccentricum*, *H. igniocus*, and *H. cappellei*. According to the Principle of Priority (ICZN, 1999) the name defined for this set of species was *Hyalinobatrachium cappellei*, given that it is the senior synonym.

Recently, *H. cappellei* individuals were recorded for the first time in Brazil in the municipalities of Cotriguaçu (09°51'16.9" S, 58°14'57.7" W) and Juína (11°20' S, 59°07' W), located in the north-western portion of the state of Mato Grosso (Rodrigues et al., 2010), although these were reported under the denomination *H. crurifasciatum*. Additionally, the species was recorded in the municipality of Careiro, state of Amazonas (Simões et al., 2012).

Herein, we record the fourth locality in Brazil, located in the state of Mato Grosso, municipality of Novo

Mundo, in Cristalino State Park (9° 32' 47" S, 55° 47' 38" W, Fig. 2). The distribution of *H. cappellei* is hereby extended by approximately 270 km in a straight line from the nearest locality. Four males of *H. cappellei* were observed at the above mentioned locality during February 2012. One of these vocalized near spawn laid abaxially on a leaf, which was suspended over a creek (Fig. 1). This particular individual was subsequently collected, and placed in the herpetological collection of the Federal University of the state of Mato Grosso (UFMT), Sinop campus, in the Acervo Biológico da Amazônia Meridional (ABAM) under the identification number ABAM-H 1319. Measurements comprised a snout-vent length of 21.88 mm, and head length of 6.81 mm.

The region of the Amazon in which the herein presented record of *H. cappellei* was made, is known as the “arco do desmatamento” (deforestation arc). Therefore, studies concerned with the geographical distribution of both flora and fauna in this region are of great importance, for they promote political strategies regarding the conservation of natural habitats and, consequently, of the species within.

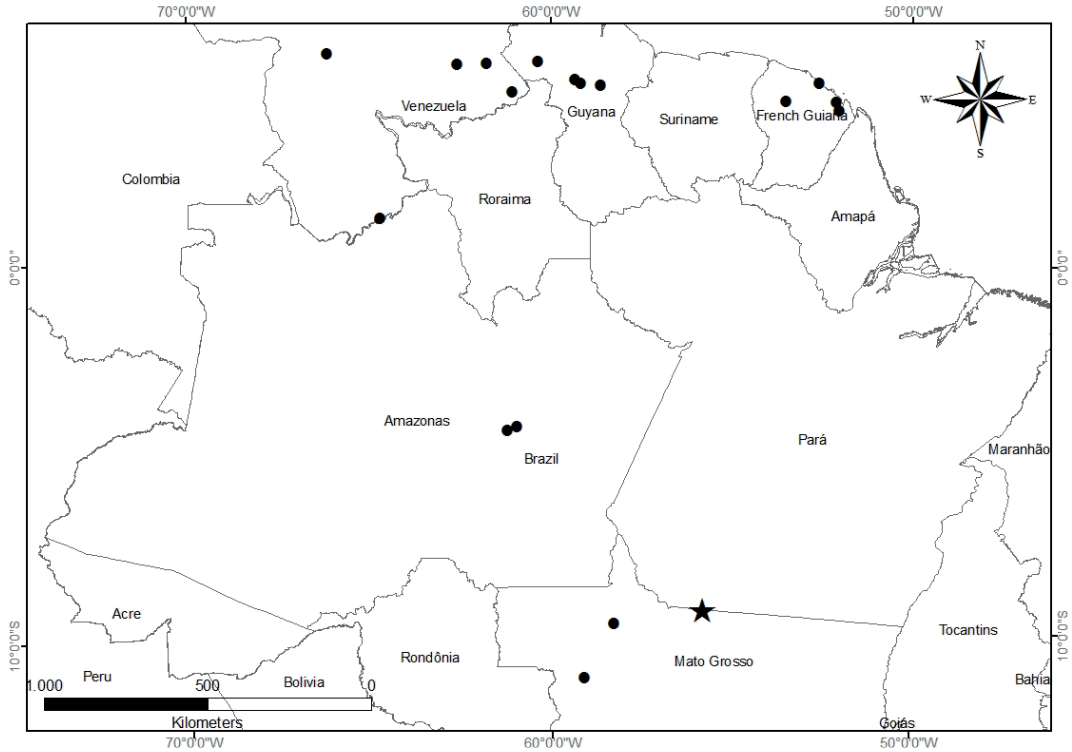


**Figure 1.** Vocalizing male and spawn of *Hyalinobatrachium cappellei* (Adult, ABAM-H 1319) at the Cristalino State Park, municipality of Novo Mundo, state of Mato Grosso, Brazil.

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**Figure 2.** Distribution map of *Hyalinobatrachium cappellei* in South America showing the old (black circles) and the new record (black star).

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## References

- Castroviejo-Fisher, S. (2009): Species limits and evolutionary history of glassfrogs. *Acta Universitatis Upsaliensis. Digital Comprehensive Summaries of Uppsala Dissertations from the Faculty of Science and Technology*, **642**, Uppsala.
- Castroviejo-Fisher, S., Vilà, C., Ayarzagüena, J., Michel, B., Ernst, R. (2011): Species diversity of *Hyalinobatrachium* glassfrogs (Amphibia: Centrolenidae) from the Guiana Shield, with the description of two new species. *Zootaxa* **3132**: 1-55.
- Cisneros-Heredia, D.F., McDiarmid, R.W. (2007): Revision of the characters of Centrolenidae (Amphibia: Anura: Athesphatanura), with comments on its taxonomy and the description of new taxa of glassfrogs. *Zootaxa* **1572**: 3-82.
- Guayasamin, J.M., Bustamante, M.R., Almeida-Reinoso, D., Funk, W.C. (2006): Glass frogs (Centrolenidae) of Yanayacu Biological Station, Ecuador, with the description of a new species and comments on centrolenid systematics. *Zoological Journal of the Linnean Society* **147**: 489-513.
- Guayasamin, J.M., Castroviejo-Fisher, S., Trueb, L., Rada, M., Vila, C. (2009): Phylogenetic systematics of Glassfrogs (Amphibia: Centrolenidae) and their sister taxon Allophryneruthveni. *Zootaxa* **2100**: 1-97.
- ICZN (1999): International Code of Zoological Nomenclature. Fourth Edition. The International Trust for Zoological Nomenclature, London.
- Rodrigues, D.J., Lima, M.M., Morais, D.H., Kawashita-Ribeiro, R.A. (2010): Amphibia, Anura, Centrolenidae, *Hyalinobatrachium crurifasciatum* Myers and Donnelly, 1997: First record from Brazil and geographic distribution map. *Check List* **6**: 392-394.
- Simões, P.I., Kaefer, I.L., Gomes, F.B.R., Lima, A.P. (2012): Distribution extension of *Hyalinobatrachium cappellei* (van Lidth de Jeude, 1904) (Anura: Centrolenidae) across Central Amazonia. *Check List* **8**: 636-637.