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SHORT NOTE

New records of *Boana icamiaba* (Anura: Hylidae) in the Brazilian Amazon rainforest

Nuevos registros de *Boana icamiaba* (Anura: Hylidae) en la amazonía brasileña

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ABSTRACT

Boana icamiaba is an Amazonian anuran species reported for sites in the mid-lower Madeira-Rio Tapajós River and lower Tapajós-Rio, and Xingu River interfluves – municipalities of Juruti, Altamira, Santarém, and Itaituba, state of Pará, northern Brazil. We provided the first records of *Boana icamiaba* for the states of Mato Grosso and Rondônia, central and northern Brazil, which enlarges the knowledge on its distribution in approximately 470 km southmost and circa 886 km southwestmost from the nearest previously recorded locality.

Keywords. Amazonian forest, Anura, biogeography, Hylidae, South America

RESUMEN

Boana icamiaba es una especie de anura amazónica descrita recientemente para localidades de la mitad inferior del Río Madeira-Río Tapajós y de los interfluvios de los Ríos Tapajós y Xingu, en los municipios de Juruti, Altamira, Santarém y Itaituba, estado de Pará, norte de Brasil. Proporcionamos los primeros registros de *Boana icamiaba* en los estados de Mato Grosso y Rondônia, centro y norte de Brasil. Estos registros amplían la distribución conocida a aproximadamente 470 km hacia el sur y cerca de 886 km al suroeste de la localidad más cercana anteriormente registrada.

Palabras clave. Anura, América del Sur, biogeografía, Hylidae, selva amazónica

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The Neotropical genus *Boana* Gray, 1825 is currently represented by 93 valid species and is widely distributed from Nicaragua to Argentina, throughout most of South America (Frost c2018). These amphibian species are known as gladiator frogs and are divided in seven species groups: *Boana albopunctata* (Spix, 1824), *Boana benitezi* (Rivero, 1961), *Boana faber* (Wied-Neuwied, 1821), *Boana pellucens* (Werner, 1901), *Boana pulchella* (Duméril and Bibron, 1841), *Boana punctata* (Schneider, 1799), and *Boana semilineata* (Spix, 1824) (Faivovich *et al.* 2005). Belonging to the *B. semilineata* species group, *Boana icamiaba* is a recently described Amazonian anuran species from the state of Pará, northern Brazil (Peloso *et al.* 2018).

Our study provides the first records of *Boana icamiaba* for the states of Mato Grosso and Rondônia, Brazil. In Mato Grosso, numbering eight adult males of *B. icamiaba* (Fig. 1) were collected at the Parque Estadual do Cristalino – municipality of Novo Mundo, state of Mato Grosso. Five male specimens were collected on 10th Jun, 2012 (9°47' South, 55° 86' West) and three on 28th Feb, 2018 (9°49' South, 55°15' West). All specimens were found calling inside riparian forests in stream margins. The collected voucher specimens were anesthetized with 2 % lidocaine, fixed in 10 % formalin, and preserved in 70 % ethanol to be stored at the Herpetological Collection of the Acervo Biológico da Amazônia Meridional – ABAM (ABAM-H 1461–1465, ABAM-H 3757–3759) of the Universidade Federal de Mato Grosso, Campus Universitário de Sinop, Mato Grosso state.

The collected specimens of *B. icamiaba* are in total accordance with the original description of Peloso *et al.* (2018). The main characters that distinguish *B. icamiaba* from all species in the *B. geographica-semilineata* clade are: (1) presence of a prepollex developed into a spine, which is absent in the species of the *B. geographica-semilineata* clade; and (2) absence of nuptial pads, which is present in the species of the *B. geographica-semilineata* clade. Additional morphological and bioacoustic comparisons between *B. icamiaba* and named species of the *B. semilineata* group are presented in Peloso *et al.* (2018). In addition to the specimens found at sites in Mato Grosso state, we also found new records of *B. icamiaba* for the state of Rondônia based on the two specimens collected in the municipality of Parecis (12°14' South, 61°11' West). The voucher specimens analyzed can be found at the Amphibian Collection of the Museum Nacional do Rio de Janeiro – MNRJ (MNRJ 85693, MNRJ 84107).

Figure 1. Specimen of *Boana icamiaba* collected at Parque Estadual do Cristalino, municipality of Novo Mundo, Mato Grosso state, Brazil.

The geographic distribution of *Boana icamiaba* was restricted to some locations in the mid-lower Madeira-Tapajós River and lower Tapajós-Xingu River interfluves encompassing the municipalities of Juruti, Altamira, Santarém, and Itaituba (Peloso *et al.* 2018). The new records in the municipalities of Novo Mundo and Parecis, in the states of Mato Grosso and Rondônia, respectively, extend the distribution of *B. icamiaba* in approximately 470 km southmost and ca. 886 km southwestmost from the nearest known locality (Vila Pedro, municipality of Itaituba; Fig. 2) (Peloso *et al.* 2018).

The lack of fundamental information such as geographic distribution of anuran species represents a limiting factor for planning and decision-making processes regarding conservation strategies (Hortal *et al.* 2015). In this context, Mato Grosso and Rondônia represent strategic states for being inserted in an area internationally known as Deforestation Arc Zone – region where agricultural and livestock activities combined with major infrastructure construction threaten wood areas. This study is important to fill gaps in knowledge about the distribution of *B. icamiaba*, a newly described species from Brazilian Amazon rainforest.

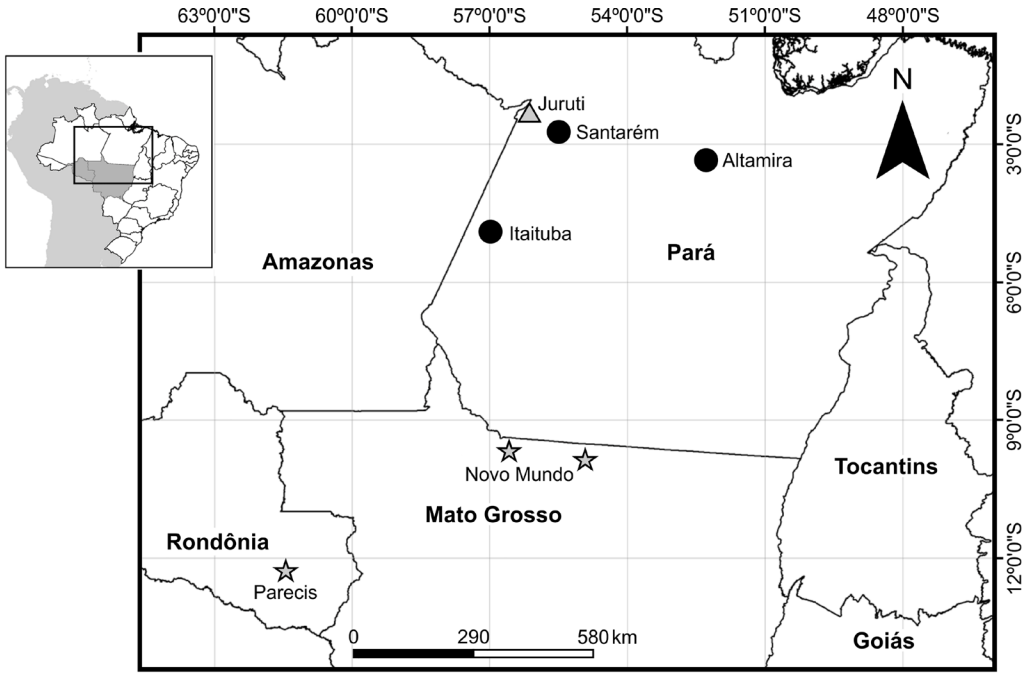

Figure 2. Distribution map of *Boana icamiaba* in Brazil. The grey triangle indicates the type locality and the black dots represent the paratypes locations (Peloso ***et al.*** 2018). The grey stars indicate the new records in the states of Mato Grosso and Rondônia, central and northern Brazil.

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AUTHOR'S CONTRIBUTION

SFA was responsible for collecting data, identifying the specimens, and writing the text; WSSW was responsible for writing the text; MP identified the specimens and writing the text; KCP reviewed the text and created the images; FHO writing the text and edited the images; JCN collected data and writing the text; DJR was responsible for collecting data, identified the specimens, and writing the text.

CONFLICT OF INTEREST

The authors declare that there are no conflicts of interest.

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