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SHORT NOTE

New records of *Bokermannohyla ibitipoca* (Anura, Hylidae)

Nuevos registros de *Bokermannohyla ibitipoca* (Anura, Hylidae)

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ABSTRACT

Bokermannohyla ibitipoca is a small-sized frog restricted to the Mantiqueira Mountain Complex, Brazil, and is currently categorized as Data Deficient in the Red List of Threatened Species of the IUCN. Here we report new records of *B. ibitipoca* throughout Minas Gerais state, Brazil and provide a distribution map of the species.

Keywords. Atlantic Forest, geographical distribution, Minas Gerais state.

RESUMEN

Bokermannohyla ibitipoca es una rana pequeña restringida al Complejo Mantiqueira Brasil y se clasifica actualmente como Datos deficientes en la Lista Roja de Especies Amenazadas de la IUCN. Presentamos nuevos registros de *B. ibitipoca* en el estado de Minas Gerais, Brasil, y proporcionamos un mapa de distribución de la especie.

Palabras clave. Bosque Atlántico, distribución geográfica, estado de Minas Gerais

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Bokermannohyla ibitipoca (Caramaschi & Feio, 1990) (Fig. 1) is a member of *B. circumdata* group (Faivovich *et al.* 2005) described from Ibitipoca State Park, Minas Gerais state, Brazil. The species is diagnosed by presenting of transverse dark brown cross bars of blotches on dorsum, small tympanum, single and subgular vocal sac and presence of transverse dark bars on thighs and vertical bars on flanks (Caramaschi and Feio 1990). It is a small-sized hylid frog (males reaching 43 mm in snout-vent length) restricted to the Mantiqueira Mountain Complex, over 1200 m, found mainly on creeks in small primary and secondary gallery forests (Caramaschi and Feio 1990). Moreover, this species is currently categorized as Data Deficient in the Red List of Threatened Species (IUCN c2019) due to uncertainties about its extent of occurrence, conservation status, and ecological requirements (Rodrigues *et al.* c2004). Herein, we provide new records for *B. ibitipoca* and a map of the currently known geographical distribution of the species.

We collected individuals of *B. ibitipoca* between November 2011 to December 2016 (license 54493-12) in two different localities in Minas Gerais state: a dense ombrophylous forest located at the municipality of Bom Jardim de Minas (21°59'57.84" South, 44°10'36.12" West, ca. 1230 m), and in the arboreal vegetation of a marsh formed by several springs below a rocky slope inside an ombrophylous forest at Environmental Protection Area Alto Taboão (acronym EPA) (20°31'21.00" South, -42° 3'24.84" West; ca. 1500 m), at the municipality of Espera Feliz (Fig. 2). We housed the voucher specimens in the collections of the Museu de Zoologia João Moojen of the Universidade Federal de Viçosa (MZUFV 11570-71 and 11576), in the Universidade Estadual de Minas Gerais (UEMG 037), and in the Coleção Zoológica de Referência da Universidade Federal de Mato Grosso do Sul (ZUFMS).

Even with the new records the current distribution reinforces the status of Data Deficient provided by IUCN to this species. Also, it is possible to see a large gap in the distribution of the species. This occurs due to the two disconnected portions of the Mantiqueira Mountain Complex with a lower region between them; this gap occurs in many other species of the area (Silva *et al.* 2018). Thomé *et al.* (2014) explored this phenomenon and proposed that anuran diversity of Atlantic Rainforest is distributed accord-

Figure 1. Adult male of *Bokermannohyla ibitipoca* from the municipality of Bom Jardim de Minas, Minas Gerais state, Brazil.

ing geographic barriers and proposed three hypotheses to explain this disjointed distribution: (i) These occurrences are of two different species, and a systematic study is necessary in order to investigate it; (ii) there was not enough collection efforts in the region, and (iii) these two separated groups are a result of very recent geological and/or climatic events occurred in this region. Nevertheless, these new records show the importance of inventories in poorly studied regions in order to expand the distribution, fill gaps in the knowledge of Brazilian anurans and diminish the Wallace Shortfall of the species.

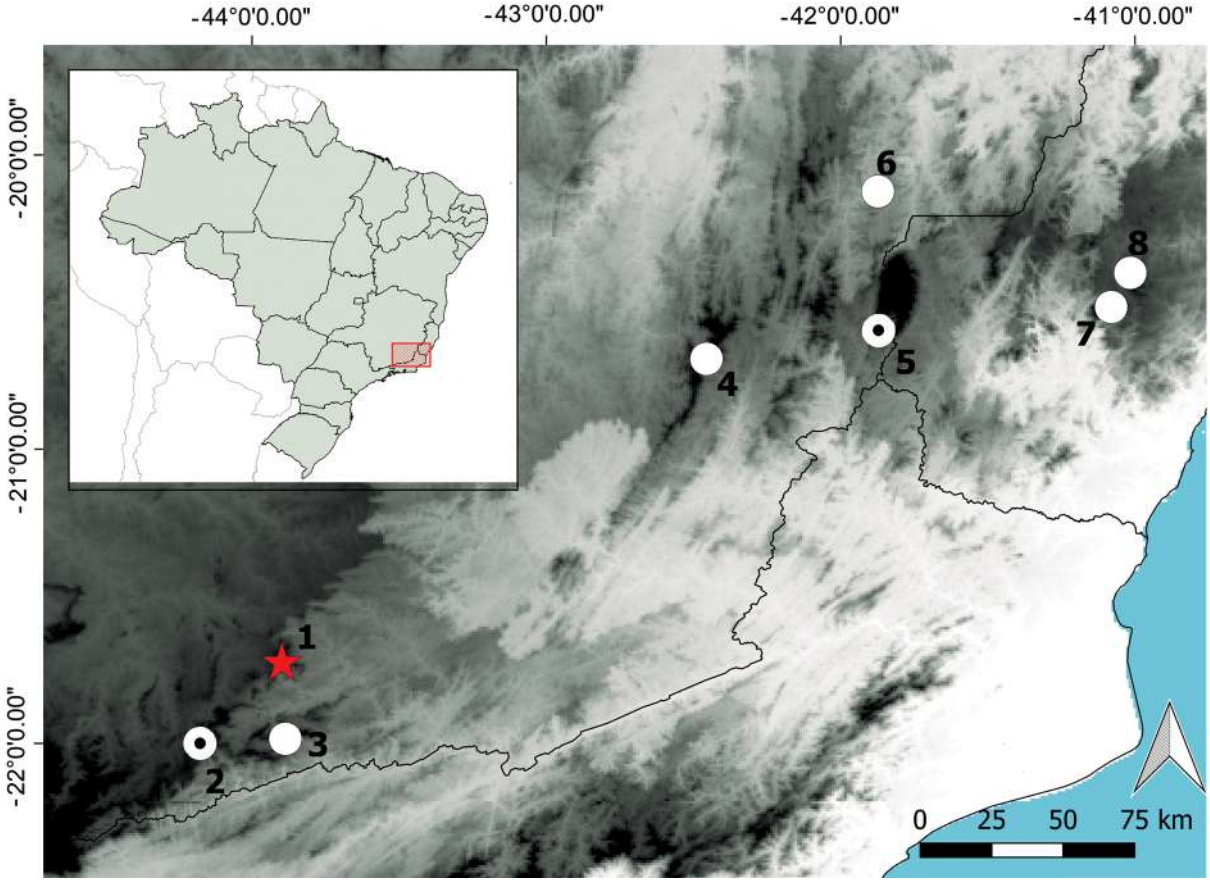

Figure 2. Distribution map of *Bokermannohyla ibitipoca* with type locality (red star), literature records (white circles) and new records (white dotted circles) indicated. Minas Gerais (MG) state: (1) Ibitipoca State Park (Caramaschi and Feio 1990); (2) Bom Jardim de Minas (this study); (3) Serra Negra da Mantiqueira State Park (Neves *et al.* 2017); (4) Serra do Brigadeiro State Park (Feio *et al.* 2003, 2008); (5) Espera Feliz, EPA Alto Taboão (this study); and (6) RPPN Mata do Sossego and Reserva Sossego do Muriqui (Santos *et al.* 2012). Espírito Santo (ES) state: (7) Forno Grande State Park (Montesinos *et al.* 2012); and (8) Pedra Azul State Park, Serra Boa Vista (Moura *et al.* 2008).

AUTHOR´S CONTRIBUTION

EAP and RCH collected data; EAP and MON wrote the paper; LCLR and DJS reviewed the paper.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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