

Amphibia, Anura, Hylidae, *Bokermannohyla sazimai* (Cardoso and Andrade, 1982): Distribution extension and geographic distribution map

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ABSTRACT: We provide a new record for *Bokermannohyla sazimai* from state of Minas Gerais and present a map representing its distribution. The new record from municipality of Uberlândia represents a distribution extension of 70 km western from the closest locality where it was previously known.

Bokermannohyla sazimai (Cardoso and Andrade, 1982) is a small hylid frog belonging to the *B. circumdata* species group (Faivovich *et al.* 2005), occurring inside gallery forests in Cerrado areas of southeastern Brazil (Cardoso and Andrade 1982; Haddad *et al.* 1988). The species was described from Serra da Canastra (20°10' S, 46°50' W), municipality of São Roque de Minas, state of Minas Gerais, Brazil, with subsequent reports from the municipalities of Nova Ponte (ca. 19°08' S, 47°40' W) and São Gotardo (ca. 19°18' S, 46°02' W) (Caramaschi *et al.* 2001), and Araxá (19°39' S, 46°57' W) (Giasson and Ribeiro 2006), all in Minas Gerais.

Herein we report a new record for this species from western Minas Gerais, based on one specimen (adult male, 31.8 mm snout-vent length [SVL]) collected on February 1995 by A. T. Bernardes, in the municipality of Uberlândia (ca. 18°54' S, 48°16' W). Voucher specimen are housed at the herpetological collection of Museu de Zoologia João Moojen, Universidade Federal de Viçosa, municipality of Viçosa, state of Minas Gerais, Brazil, under the catalog number MZUFV 2314 (Figure 1). The specimen reported here was compared by us with topotypes of *B. sazimai* and others available specimens of small to medium sized species of the *B. circumdata* group (SVL 30.0-57.0 mm, according to Napoli and Caramaschi 2004) (Appendix). The specimen's identification was also confirmed by Marcelo Felgueiras Napoli (Universidade Federal da Bahia).

Bokermannohyla sazimai is characterized mainly by its small size (SVL 30.1-35.1 mm in males, Table 1), head longer than wide (HW/HL mean = 0.95, SD = 0.05), small tympanum (TD/ED mean = 0.39, SD = 0.04), internarial distance (IND) equal or smaller than eye-nostril distance (END), dorsum cream color with reticulated thin brown stripes and random brown dots over it (Cardoso and Andrade 1982; Caramaschi and Feio 1990; Caramaschi *et al.* 2001; Napoli and Caramaschi 2004). The measurements

of MZUFV 2314 specimen agree with *B. sazimai* diagnosis in SVL (31.8 mm), TD/ED = 0.42 and IND/END = 0.60, as

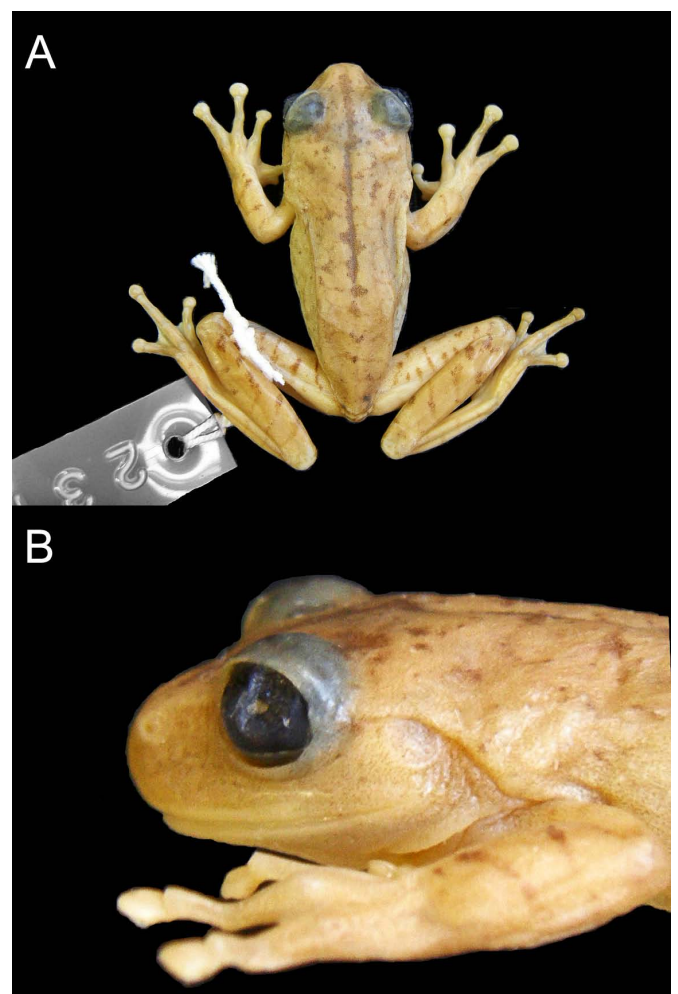


FIGURE 1. A) Specimen of *Bokermannohyla sazimai* (MZUFV 2314, adult male, 31.8 mm snout-vent length) from the municipality of Uberlândia, state of Minas Gerais, Brazil. B) Detail of the head of a *Bokermannohyla sazimai* specimen (MZUFV 2314). Photos by M.R. Moura.

TABLE 1. Mean and range of snout-vent length (SVL) of the small to medium sized species of the *Bokermannohyla circumdata* group (SVL 30.0-57.0 mm, according to Napoli and Caramaschi 2004). * Combined values of males (♂) and females (♀).

Species	n	Mean (mm)	Range (mm)	Reference
<i>Bokermannohyla ahenea</i>	66♂ 18♀	50.6 52.1	45.9-56.7 46.0-54.6	Napoli and Caramaschi (2004)
<i>Bokermannohyla astartea</i>	4♂	38.8	37.0-40.0	Bokerman (1967)
<i>Bokermannohyla diamantina</i>	6♂ 1♀	48.28 49.4	46.7-56.7 -	Napoli and Juncá (2006)
<i>Bokermannohyla feioi</i>	15♂ 2♀	38.6 -	37.0-40.2 39.3-40.3	Napoli and Caramaschi (2004)
<i>Bokermannohyla ibitipoca</i>	32♂	39.5	35.5-42.7	Caramaschi and Feio (1990)
<i>Bokermannohyla izecksohni</i> *	6♂,4♀	44.9	34.3-50.8	Jim and Caramaschi (1979)
<i>Bokermannohyla lucianae</i>	2♂	-	47.6-49.2	Napoli and Pimenta (2003)
<i>Bokermannohyla nanuzae</i>	3♂	41.0	40.0-42.0	Bokerman and Sazima (1973)
<i>Bokermannohyla ravida</i>	9♂ 1♀	42.1 38.0	37.7-47.6 -	Caramaschi <i>et al.</i> (2001)
<i>Bokermannohyla sazimai</i>	11♂ 18♂	31.7 -	29.0-36.4 30.1-35.1	Cardoso and Andrade (1982) Caramaschi <i>et al.</i> (2001)
	1♂	31.8	-	This work
<i>Bokermannohyla vulcaniae</i>	6♂	46.75	39.7-53.3	Vasconcelos and Giaretta (2003)

well in the dorsum color characteristics. However, this specimen presents the head length approximately equals to head width, HW/HL = 1.01. The specimen MZUFV 2314 also is smaller than all other species of the *B. circumdata* group, as mentioned in *B. sazimai* diagnosis (Cardoso and Andrade 1982) (Table 1).

Bokermannohyla sazimai is currently defined as Data Deficient by the IUCN red list (IUCN 2010) due the poorly knowledge of its geographical distribution. The record of *B. sazimai* from the municipality of Uberlândia represents a range extension of 240 km northwestern from its type locality (municipality of São Roque de Minas), and 70 km western from the municipality of Nova Ponte, the northwestern locality where it was previously known (Figure 2). It is important to note that two of the five known localities with occurrence of *B. sazimai* are inserted in priority areas to conservation of herpetofauna in the state of Minas Gerais (Drummond *et al.* 2005). Although the record from municipality of Uberlândia does not have a specific locality, it is near the Fazenda Tatu Priority Area,

which is defined as of extreme importance to conservation of herpetofauna. With exception of the record from municipality of São Gotardo (number 3 in Figure 2), which is located at São Francisco River Basin, all other records of *B. sazimai* remain distributed inside the Paranaíba River Basin.

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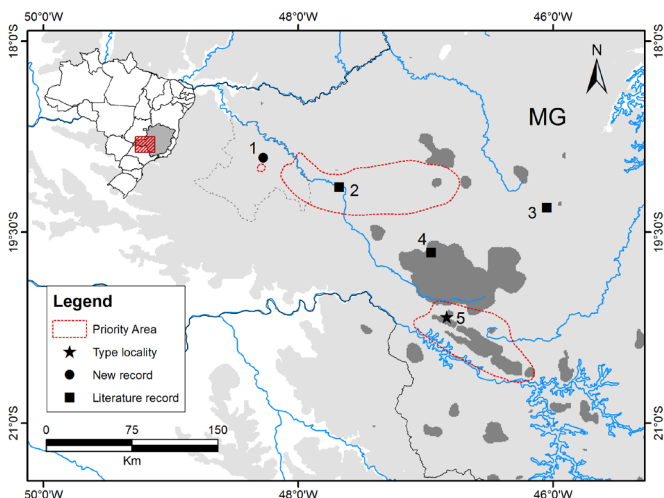


FIGURE 2. Geographic distribution of *Bokermannohyla sazimai*. MG, state of Minas Gerais. Municipalities: 1, Uberlândia; 2, Nova Ponte; 3, São Gotardo; 4, Araxá (Mata da Cascatinha); 5, São Roque de Minas (Serra da Canastra). Gray dashed line: municipality of Uberlândia. Colors: □ Elevations between sea level to 600 m; ■ Elevations between 600 to 1,000 m; ■ Elevations above 1,000 m. Map by M.R. Moura.

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APPENDIX 1. Specimens examined.

Bokermannohyla sazimai (n = 3) – Brazil: state of Minas Gerais, municipality of São Roque de Minas (MZUFV 4598-4600). *Bokermannohyla feioi* (n = 8) – Brazil: state of Minas Gerais, municipality of Lima Duarte, Serra do Ibitipoca (MZUFV 4210-4211, MZUFV 6849-6952, MZUFV 6902). *Bokermannohyla ibitipoca* (n = 15) – Brazil: state of Minas Gerais, municipality of Araponga, Serra do Brigadeiro (MZUFV 4419, MZUFV 6756-6757, MZUFV 6807-6810), municipality of Lima Duarte, Serra do Ibitipoca (MZUFV 4085-4086, MZUFV 6431-6434); state of Espírito Santo, municipality of Domingos Martins (MZUFV 5220-5221). *Bokermannohyla nanuzae* (n = 3) – Brazil: state of Minas Gerais, municipality of Caeté (MZUFV 428-430). *Bokermannohyla vulcaniae* (n = 1) – Brazil: state of Minas Gerais, municipality of Poços de Caldas (MZUFV 8220).