

NOTES ON GEOGRAPHIC DISTRIBUTION

Amphibia, Hylidae, *Bokermannohyla sazimai* (Cardoso and Andrade 1982): distribution extension

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Bokermannohyla sazimai (Cardoso and Andrade 1982) was previously reported only for “Chapadão da Zagaia”, Parque Nacional Serra da Canastra, in the municipality of São Roque de Minas, Minas Gerais state, Brazil (46°50'00” W, 20°10'00” S; 1350 m a.s.l.). We present here a new record of this species that enlarges its distribution up to the municipality of Araxá, in the state of Minas Gerais.

During a field expedition to the municipality of Araxá, on 19 March 2006, we collected the specimen of *B. sazimai* (Figure 1) in the locality of “Mata da Cascatinha” (46°57'17” W, 19°39'35” S; 1072 m a.s.l.), a small protected area of deciduous forest (about 5 ha) in a legal reserve that belongs to the Bunge Fertilizantes S.A. *Bokermannohyla sazimai* was first recorded by the call emitted by a male. The adult male was found on a leaf about 30 cm above the ground on a steep slope, approximately 4 cm above a stream. The specimen was deposited in the Célio F. B. Haddad Collection (CFBH 11575), Universidade Estadual Paulista, Rio Claro, São Paulo, Brazil.



Figure 1 – Male of *Bokermannohyla sazimai* from the municipality of Araxá, Minas Gerais state, Brazil. Photo by L. O. M. Giasson.

The last record of this species was made approximately 20 years ago by Haddad et al. (1988) at the locality of the original description. According to Cardoso and Andrade (1982), *B. sazimai* is the smallest species of the genus and is closely related to *B. nanuzae* (Bokermann and Sazima 1973). Besides its small size, *B. sazimai* differs morphologically from *B. nanuzae* by its more rounded snout in profile, small number and size of tubercles in the hands and feet, and more robust arms (Cardoso and Andrade 1982; Haddad et al. 1988). The specimen that we collected was compared with topotypes of *B. sazimai* and *B. nanuzae*. We confirmed the distinctive characteristics described above and also observed that the head of *B. sazimai* is proportionally narrower than *B. nanuzae*. *Bokermannohyla sazimai* occurs inside gallery forest and the tadpoles swim in shallow ponds (Cardoso and Andrade 1982; Haddad et al. 1988).

This record of *B. sazimai* widens its distribution approximately 60 km northwards, which should be considered now as the northernmost limit of its distribution range. In spite of this extension in its geographical range, *B. sazimai* remains restricted to southwestern Minas Gerais state. Silva et al. (2006) discriminated 15 ecological units in the cerrado that can be defined as areas with the same dominant features in terms of physiognomy and phenology of vegetation, topography, and drainage. The areas of occurrence of *B. sazimai* are enclosed in the ecological unit 1A (*sensu* Silva et al. 2006), which is composed entirely of high plateau savannas (above 600 m a.s.l.). The dominant native vegetation is dense savanna (cerrado), but open savanna (campo cerrado), gallery forests, and some deciduous forests are also found; the total area of this unit is c. 173,000 km² (Silva et al. 2006). If we consider some degree of relationship between the ecological unit defined by Silva et al. (2006) and the occurrence of *B. sazimai*, we should expect a larger area of distribution that could reach the state of Goiás to the northwest. Corroborating this, *Hypsiboas goianus* (B. Lutz 1968), whose geographic distribution is better known (see Cruz and Caramaschi 1998), although not reproducing in the same environments, apparently has a distribution correlated with the ecological unit 1A (*sensu* Silva et al. 2006). However, the gallery

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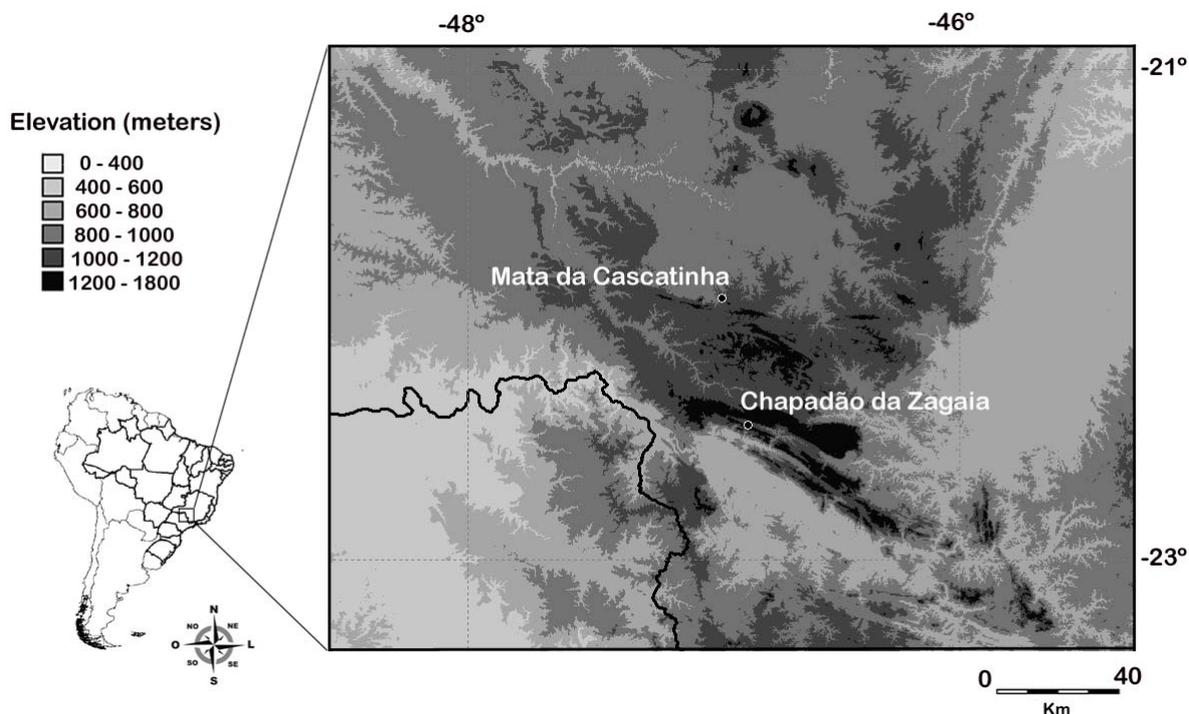


Figure 2 – Distribution of *Bokermannohyla sazimai*, showing the type locality at “Chapadão da Zagaia”, municipality of São Roque de Minas, and the point of new record at “Mata da Cascatinha”, municipality of Araxá, Minas Gerais state, Brazil.

forest and deciduous forests correspond to a small portion of the cerrado, and thus species dependent on this habitat are probably more susceptible to habitat fragmentation by human activities. In addition, *B. sazimai* probably occurs in low densities and should be considered rare, like other species of this genus (e.g., *B. nanuzae*, Eterovick and Sazima 2004).

Acknowledgements

We are grateful to Célio F. B. Haddad for the help with the identification and revision of the manuscript, to João G. R. Giovanelli for the map, to Museu de História Natural, Instituto de Biologia, UNICAMP (Collection ZUEC) for providing access to types of *Bokermannohyla sazimai* (ZUEC 4192, 4195, 4199, 4200, 4212) and *Bokermannohyla nanuzae* (ZUEC 3026-3029). For the revision and improvements in the manuscript, we also thank Cynthia P. A. Prado, Gilda V. Andrade, and Paula C. Eterovick. We thank FAPESP (01/13341-3) and CNPq for grants to the Laboratory of Herpetology, UNESP, Rio Claro, São Paulo, Brazil.

Literature cited

- Cardoso, A. J. and G. V. Andrade. 1982. Nova espécie de *Hyla* do Parque Nacional da Serra da Canastra. (Anura, Hylidae). *Revista Brasileira de Biologia* 42: 589-593.
- Cruz, C.A.G. and U. Caramaschi. 1998. Definição, composição e distribuição geográfica do grupo de *Hyla pollitaenia* Cope, 1870 (Amphibia, Anura, Hylidae). *Boletim do Museu Nacional, Zoologia* 329: 1-19.
- Eterovick, P. C. and I. Sazima. 2004. Anfíbios da Serra do Cipó, Minas Gerais Brasil. Belo Horizonte, PUC Minas. 152 p.
- Haddad, C. F. B., G. V. Andrade and A. J. Cardoso. 1988. Anfíbios anuros do Parque Nacional da Serra da Canastra, Estado de Minas Gerais. *Brasil Florestal* 64: 9-20.
- Silva J. F., M. R. Fariñas, J. M. Felfili and C. A. Klink. 2006. Spatial heterogeneity, land use, and conservation in the cerrado region of Brazil. *Journal of Biogeography* 33: 536–548.

Received September 2006

Accepted October 2006

Published online October 2006