

Distribution extension of *Scinax caldarum* (Anura, Hylidae) to Bocaina de Minas, State of Minas Gerais, Brazil

Jonas Pederassi¹, Ulisses Caramaschi¹, Joara de Sousa Andrade² & Mauro S. Cruz Souza Lima²

¹ Universidade Federal do Rio de Janeiro. Museu Nacional. Departamento de Vertebrados. Quinta da Boa Vista, São Cristóvão. 20940-040 Rio de Janeiro. RJ. Brasil. C.e.: jonaspederasi@yahoo.com.br

² Universidade Federal do Piauí. Campus Amílcar Ferreira Sobral. BR 340, Km 3,5, Meladão. 64800-000 Floriano. PI. Brasil.

Fecha de aceptación: 9 de julio de 2024.

Key words: amphibia, APA da Serra da Mantiqueira, RPPN Fazenda Boa Vista, Caldas snouted treefrog.

RESUMEN: Se documentan dos nuevas localidades en el Estado de Minas Gerais (Brasil) para *Scinax caldarum* (Anura, Hylidae). Los nuevos registros representan las primeras apariciones de la especie en las cuencas superiores de los ríos Grande y Preto, en el municipio de Bocaina de Minas, Estado de Minas Gerais, sureste de Brasil, a una distancia de 220 km de su localidad original (Poços de Caldas, MG) y 170 km de Alfenas (MG), la única otra ocurrencia conocida.

Scinax caldarum (B. Lutz, 1968) (Anura, Hylidae; Figure 1) belongs to the *Scinax granulatus* species group according to Araújo-Vieira *et al.* (2023). It is included in a highly supported clade (jackknife 100 % absolute frequency) involving *Scinax duartei* (B. Lutz, 1951), *S. rossaferezae* Conte, Araújo-Vieira, Crivellari & Berneck, 2016, and *S. caldarum*. It is closely related to *Scinax duartei* as pointed out by B. Lutz (1973), who considered *S. caldarum* as “subspecies or perhaps even as an aberrant population of *Hyla d. duartei*, smaller in size, with longer legs and a slightly divergent pattern, adapted to a specialized biotope”. *Scinax rossaferezae* has a dorsal color pattern of a pale yellow, light to dark gray from dark brown, or black background, with round, irregular, and elongated darker blotches (Conte *et al.*, 2016), which differentiates the species from *S. caldarum* and *S. duartei*, which have two irregular longitudinal stripes arising from an interocular marking (Pugliese *et al.* 2004; Conte *et al.*, 2016).

“*Hyla duartei caldarum*” was originally described by B. Lutz (1968) from “Poços de Caldas, Minas Gerais (21°50'20"S / 46°33'53"W, 1100 masl)”. It was recognized

as a full species (as *Hyla caldarum*) by Cardoso *et al.* (1989) and combined as *Scinax caldarum* by Duellman and Wiens (1992).

Currently, the species is reported only to the municipalities of Poços de Caldas and Alfenas (21°27'S / 45°56'W), both localities in the State of Minas Gerais, Brazil. The species was considered locally extinct in the Municipi-



Figure 1: *Scinax caldarum*, male unvouchered specimen in the calling site at an open-area swamp in Bocaina de Minas, MG.

Figura 1: *Scinax caldarum*, espécimen macho no registrado en el sitio de llamado en un pantano de área abierta en Bocaina de Minas, MG.

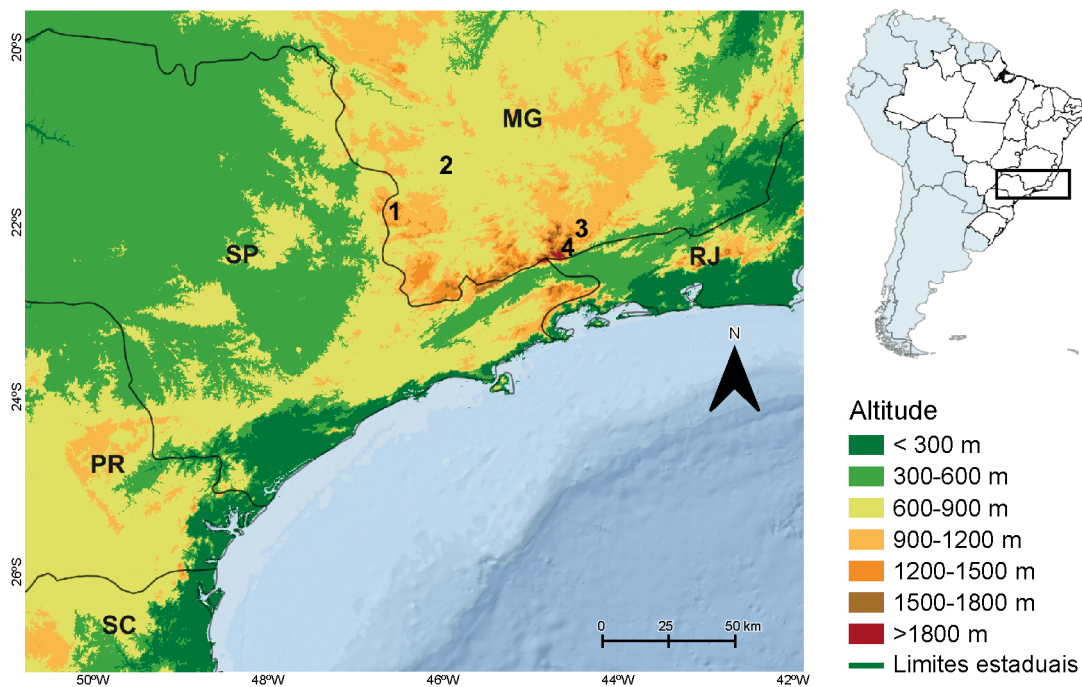


Figure 2: Registered occurrence of *Scinax caldarum*. (1) Poços de Caldas, MG (type-locality); (2) Alfenas, MG; (3-4) New distribution occurrence (Bocaina de Minas, MG; 3. Upper Grande River basin, 4. Upper Preto River basin). **Figura 2:** Ocurrencia registrada de *Scinax caldarum*. (1) Poços de Caldas, MG (localidad tipo); (2) Alfenas, MG; (3-4) Nueva ocurrencia de distribución (Bocaina de Minas, MG; 3. Cuenca superior del río Grande, 4. Cuenca superior del río Preto).

pality of Alfenas by Ferrante *et al.* (2019) because surveys during 2013, 2015, and 2017 failed in to register its presence.

Herein we report the occurrence of *Scinax caldarum* in the Municipality of Bocaina de Minas, State of Minas Gerais, Southeastern Brazil, in the upper Grande River basin (22°7'S / 44°26'W, datum Sirgas 2000; 1200 masl) and in the upper Preto River basin (22°15'S / 44°30'W, datum Sirgas 2000; 1000 masl at RPPN Fazenda Boa Vista) (Figure 2). Five individuals of *S. caldarum* were collected, three in 2015 at the Grande River basin, and two in 2016 at the Preto River basin (RPPN Fazenda Boa Vista). Advertisement calls were recorded. The specimens were deposited in Museu Nacional, Rio de Janeiro (MNRJ 93005–93006, 930010–93011, 93016).

These new records represent the first occurrences of the species in the upper basins of the Grande and Preto rivers, comprising 220 km from its type locality (Poços de Caldas) and 170 km from Alfenas. The advertisement call is congruent to the previously reported for the species (Andrade and Cardoso, 1991; Magrini and Giaretta, 2010) and is described in detail in Pederassi *et al.* (2022) as *Scinax* aff. *duartei*.

ACKNOWLEDGMENTS: We thank Sisbio for the license 50 094 for research in APA da Serra da Mantiqueira and Pró-Fundação Mantiqueira (L.M. de Sá Pereira, President) for authorizing the research at the RPPN Fazenda Boa Vista. UC acknowledges the Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq) for fellowship.

REFERENCES

- Andrade, G.V. & Cardoso, A.J. 1991. Descrição de larvas e biologia de quatro espécies de *Hyla* (Amphibia, Anura). *Revista Brasileira de Biologia*, 51(2): 391–402.
- Araujo-Vieira, K., Lourenço, A.C.C., Lacerda, J.V.A., Lyra, M.L., Blotto, B.L., Ron, S.R. *et al.* 2023. Treefrog diversity in the Neotropics: Phylogenetic relationships of *Scinaxini* (Anura: Hylidae: Hylinae). *South American Journal of Herpetology*, 27: 1–143.
- Cardoso, A.J., Andrade, G.V. & Haddad, C.F.B. 1989. Distribuição espacial em comunidades de anfíbios (Anura) no sudeste do Brasil. *Revista Brasileira de Biologia*, 49: 241–249.
- Conte, C.E., Araujo-Vieira, K.L., Crivellari, B. & Berneck, B. von M. 2016. A new species of *Scinax* Wagler (Anura: Hylidae) from Paraná, southern Brazil. *Zootaxa*, 4193: 245–265.
- Duellman, W.E. & Wiens, J.J. 1992. The status of the hylid frog genus *Olophryne* and the recognition of *Scinax* Wagler, 1830. *Occasional Papers of the Museum of Natural History, University of Kansas*, 151: 1–23.
- Lutz, B. 1951. Nota prévia sobre alguns anfíbios anuros do Alto Itatiaia. *O Hospital. Rio de Janeiro*, 39: 705–707.
- Lutz, B. 1968. New Brazilian forms of *Hyla*. *Pearce-Sellards Series, Texas Memorial Museum*, 10: 3–18.
- Lutz, B. 1973. *Brazilian Species of Hyla*. Austin: University of Texas Press. Texas. USA.
- Ferrante, L., Monteiro-Leonel, A.C., Gaiga, R., Kaefer, I.L. & Fearnside, P.M. 2019. Local extinction of *Scinax caldarium*, a treefrog in Brazil's Atlantic Forest. *Herpetological Journal*, 29: 295–298.
- Magrini, L. & Giaretta, A.A. 2010. Calls of two Brazilian species of *Scinax* of the *S. ruber* clade (Anura: Hylidae). *Herpetology Notes*, 3: 121–126.
- Pederassi, J., Lima, M.S.C.S., Pineschi, R.B. & Caramaschi, U. 2022. *Bioacústica dos anfíbios anuros da Serra da Mantiqueira, Bocaina de Minas, MG*. Ponta Grossa: Atena Editora. Paraná. Brasil.
- Pugliese, A., Pombal-Jr., J.P. & Sazima, I. 2004. A new species of *Scinax* (Anura: Hylidae) from rocky montane fields of the Serra do Cipó, southeastern Brazil. *Zootaxa*, 688: 1–5.

First record of *Algyroides nigropunctatus* (Duméril & Bibron, 1839) from Crete

Ferran de la Cruz^{1,2,3}, Anna Kawamoto⁴, Guillem Pérez i de Lanuza⁴ & Enrique Font⁴

¹ CIBIO Research Centre in Biodiversity and Genetic Resources, InBIO Associate Laboratory. Campus de Vairão. Universidade do Porto. Calle Padre Armando Quintas, 7. 4485-661 Vairao. Portugal. C.e.: delacruz.ferran@gmail.com

² Departamento de Biologia. Faculdade de Ciências. Universidade do Porto. Rua Campo Alegre, s/n. 4169-007 Porto. Portugal.

³ BIOPOLIS Program in Genomics, Biodiversity and Land Planning, CIBIO. Campus de Vairão. Universidade do Porto. Calle Padre Armando Quintas, 7. 4485-661 Vairao. Portugal.

⁴ Ethology Lab. Cavanilles Institute of Biodiversity and Evolutionary Biology. University of Valencia. Apdo. 22085. 46071 Valencia. Spain.

Fecha de aceptación: 15 de junio de 2024.

Key words: *Algyroides*, Crete, distribution, Greece, lizard.

RESUMEN: se describe el hallazgo de varios individuos de *Algyroides nigropunctatus* en La Canea (oeste de la isla de Creta). A pesar de que esta especie ha sido descrita como alóctona anteriormente en otros enclaves, este es el primer registro fuera de Europa continental, muy alejado de su rango de distribución natural.

The Dalmatian *Algyroides* (*Algyroides nigropunctatus* [Duméril & Bibron, 1839]), commonly known as the blue-throated keeled lizard, is a small diurnal lizard adapted to shaded and humid habitats, a crucial ecological trait responsible for its natural distribution across the Balkans (Bischoff, 1981; Carneiro *et al.*, 2017; Speybroeck *et al.*, 2016). It is the most widely distribu-

ted species of the genus, occurring along the east Adriatic coast from northeast Italy to southern Greece, including many islands of the Adriatic and Ionian Seas (Sillero *et al.*, 2014; Speybroeck *et al.*, 2016). In the last years, new local records of this species have increased its natural distribution range (Bringsøe, 1995; Ajtic *et al.*, 2005; Andriopoulos & Pafilis, 2016). In con-