

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

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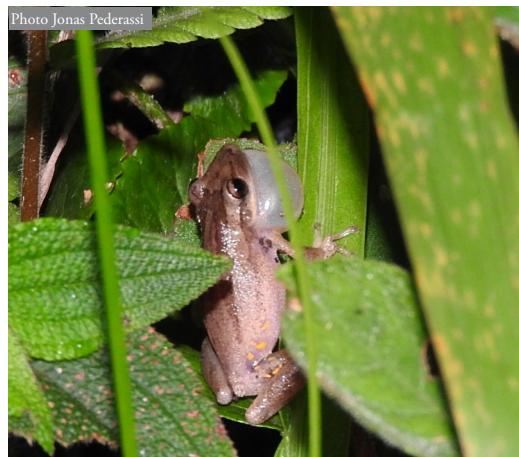
**RESUMEN:** Se documentan dos nuevas localidades en el Estado de Minas Gerais (Brasil) para *Scinax caldarum* (Anura, Hylidae). Los nuevos registros representan las primeras apariciones de la especie en las cuencas superiores de los ríos Grande y Preto, en el municipio de Bocaina de Minas, Estado de 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. rossaferesae* Conte, Araujo-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 rossaferesae* 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

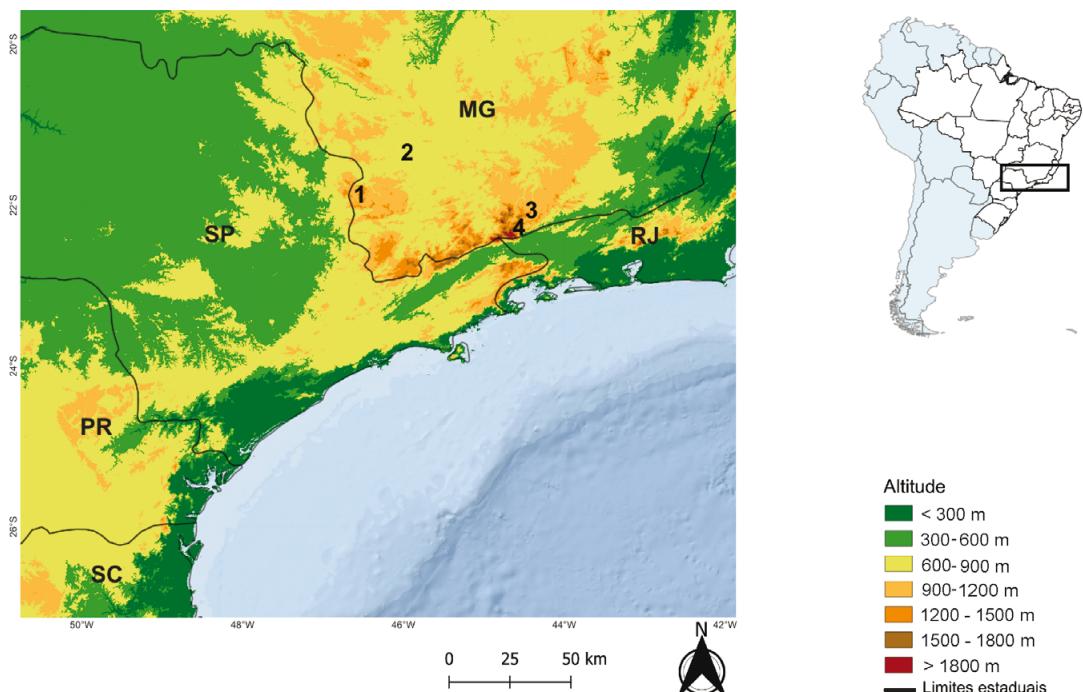
as a full species (as *Hyla caldarum*) by Cardoso et al. (1989) and combined as *Scinax caldarum* by Duellman and Wiens (1992).

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 caldarium*. (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 caldarium*. (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 caldarium* in the Municipality of Bocaina de Minas, State of Minas Gerais, Southeastern Brazil, in the upper Grande River basin ( $22^{\circ}7'S$  /  $44^{\circ}26'W$ , datum SIRGAS 2000; 1200 masl) and in the upper Preto River basin ( $22^{\circ}15'S$  /  $44^{\circ}30'W$ , datum SIRGAS 2000; 1000 masl at RPPN Fazenda Boa Vista) (Figure 2). Five individuals of *S. caldarium* 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*.

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