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# A new species of the *Scinax catharinae* group (Anura, Hylidae) from Serra da Canastra, southwestern state of Minas Gerais, Brazil

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## Abstract

We describe *Scinax pombali* **sp. n.** a new species of treefrog of the *Scinax catharinae* group from Serra da Canastra, municipality of Capitólio (20º36'03''S, 46º17'34.9''W, 987 m a.s.l.), located in the Cerrado domains of the State of Minas Gerais, Southeastern Brazil. The new species is characterized by its small size, blotches and color pattern on dorsal surface and hidden regions of flanks and thighs, *canthus rostralis* lightly concave and well marked, absent nuptial pad, and lack of externally differentiated inguinal gland. Additionally, we describe the tadpole of this new species, which is characterized by the large-sized oral disc and presence of a large number of marginal papillae (two to three rows on its dorsal portion and some rows in unorganized arrangement on its lateroventral portion).

**Key words:** Hylidae, Dendropsophini, *Scinax pombali* **sp. nov.**, Serra da Canastra, Brazil

## Resumo

Descrevemos *Scinax pombali* **sp. n.** uma nova espécie do grupo *Scinax catharinae* distribuída na Serra da Canastra, município de Capitólio (20º36'03''S, 46º17'34.9''W, 987 m), localizado nos domínios do Cerrado do Estado de Minas Gerais, sudeste do Brasil. A nova espécie é caracterizada pelo tamanho pequeno, particular padrão de manchas e coloração da superfície dorsal e regiões escondidas dos flancos e coxas, *canthus rostralis* ligeiramente côncavo e bem marcado, ausência de almofadas nupciais e ausência de glândulas inguinais externamente diferenciadas. Adicionalmente, descrevemos o girino da nova espécie que é caracterizada pelo grande tamanho do disco oral e presença de um grande número de papilas marginais (duas a três fileiras na porção dorsal e algumas fileiras em arranjo desorganizado na porção lateroventral) .

**Palavras–chave:** Hylidae, Dendropsophini, *Scinax pombali* **sp. nov.**, Serra da Canastra, Brazil

## Introduction

*Scinax* Wagler, 1830 is the largest genus within Hylinae with 108 recognized species occurring from Mexico to Argentina and Uruguay (Faivovich *et al*. 2010; Nunes *et al*. 2010; Nunes & Pombal 2011; Cruz *et al*. 2011; Lima *et al*. 2011; Silva *et al*. 2011; Frost *et al*. 2011). Faivovich *et al*. (2005) grouped the species in this genus into two clades, the *S. catharinae* clade and *S. ruber* clade, and identified two monophyletic species groups within the first, the *S. catharinae* group and *S. perpusillus* group. Currently, the *S. catharinae* group comprises 31 species (Table 1) distributed from northeastern to southern Brazil, northeastern Argentina, southern Paraguay, and Uruguay (Faivovich 2002; Pimenta *et al.* 2007). Morphological synapomorphies of this group include the posterior part of the cricoid ring extensively elongated and curved, the partial mineralization of intercalary elements between

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ultimate and penultimate phalanges, and the laterodistal origin of the *m. extensor brevis distalis digiti III* (Faivovich 2002).

Although most representatives of the *S. catharinae* group are restricted to the Brazilian Atlantic forest, some species (e.g. *S. canastrensis*, *S. centralis*, *S. longilineus*, *S. luizotavioi*, *S. machadoi*, and *S. skaios*) occupy the Cerrado and transitional areas connecting these biomes (Faivovich 2002; Araújo *et al*. 2007; Pombal *et al*. 2010; Appendix). In general, these species are gallery forest dwellers that use marginal vegetation bordering streams (B. Lutz 1973; Lourenço *et al*. 2009a; Lourenço *et al*. 2009b; Pombal *et al*. 2010). The comparison of specimens collected directly in the field with material analyzed in herpetological collections revealed that some populations that occur in the Brazilian Cerrado represent a distinct species. Herein, we described this new species of the *S. catharinae* group from *campo rupestres* formations of the region of the Serra da Canastra, State of Minas Gerais, southeastern Brazil. This paper additionally includes the description of its conspicuous tadpole.

**TABLE 1.** Species assigned to the *Scinax catharinae* group and tadpoles descriptions.

| Species | Tadpole descriptions |
|---|---|
| *S. agilis* (Cruz and Peixoto, 1983) | – |
| *S. albicans* (Bokermann, 1967) | Carvalho-e-Silva & Carvalho-e-Silva, 1994 |
| *S. angrensis* (B. Lutz, 1973) | Carvalho-e-Silva *et al*. 1995 |
| *S. argyreornatus* (Miranda-Ribeiro, 1926) | Carvalho-e-Silva & Carvalho-e-Silva, 1998 |
| *S. ariadne* (Bokermann, 1967) | Bokermann, 1967 |
| *S. aromothyella* (Faivovich, 2005) | Kolenc *et al*. 2007 |
| *S. berthae* (Barrio, 1962) | de Sá *et al*. 1997 |
| *S. brieni* (De Witte, 1930) | – |
| *S. canastrensis* (Cardoso & Haddad, 1982) | – |
| *S. carnevallii* (Caramaschi & Kisteumacher, 1989) | – |
| *S. catharinae* (Boulenger, 1888) | Conte *et al*. 2007 |
| *S. centralis* (Pombal & Bastos, 1996) | – |
| *S. flavoguttatus* (Lutz & Lutz, 1939) | Heyer *et al*. 1990; Carvalho-e-Silva & Carnaval 1997 |
| *S. heyeri* (Peixoto & Weygoldt, 1986) | Peixoto & Weygoldt 1987 |
| *S. hiemalis* (Haddad & Pombal, 1987) | Haddad & Pombal 1987 |
| *S. humilis* (B. Lutz, 1954) | Carvalho-e-Silva & Carvalho-e-Silva 1998 |
| *S. jureia* (Pombal & Gordo, 1991) | – |
| *S. kautskyi* (Carvalho-e-Silva & Peixoto, 1991) | Carvalho-e-Silva *et al*. 1995 |
| *S. littoralis* (Pombal & Gordo, 1991) | Pombal & Gordo 1991 |
| *S. longilineus* (B. Lutz, 1968) | Andrade & Cardoso 1991 |
| *S. luizotavioi* (Caramaschi & Kisteumacher, 1989) | Bertoluci *et al*. 2007 |
| *S. machadoi* (Bokermann & Sazima, 1973) | Bokermann & Sazima 1973 |
| *S. muriciensis* Cruz *et al.*, 2011 | – |
| *S. obtriangulatus* (B. Lutz, 1973) | Heyer *et al*. 1990 |
| *S. ranki* (Andrade & Cardoso, 1987) | Andrade & Cardoso 1987 |
| *S. rizibilis* (Bokermann, 1964) | Bokermann 1964 |
| *S. skaios* Pombal *et al*., 2010 | – |
| *S. skuki* Lima *et al*., 2011 | – |
| *S. strigilatus* (Spix, 1824) | – |
| *S. trapicheiroi* (B. Lutz, 1954) | Carvalho-e-Silva & Carvalho-e-Silva 1994 |
| *S. tripui* Lourenço *et al*. 2009 | Lourenço *et al*. 2010 |

## Material and methods

Adult and tadpole specimens were collected at the municipality of Capitólio, in the region of the Serra da Canastra, State of Minas Gerais, southeastern Brazil. The type specimens are housed at the Museu Nacional, Rio de Janeiro, Brazil (MNRJ) and at the amphibian collection of the Universidade Federal de Minas Gerais, Belo Horizonte (UFMG).

Adult specimens were fixed in 10% formalin and stored in 70% ethyl alcohol solution. Tadpoles were killed in 5% lidocaine solution, then prepared and preserved in 10% formalin. Sex was determined by the presence of extended vocal sacs and vocal slits in males and oocytes in females by dissection or by visualization of oocytes through transparency of the skin. Measurements of adults were taken with an ocular micrometer in a Zeiss Stereomicroscope, except for snout–vent length, head length, width length, thigh length, tibia length, tarsus length, foot length, arm length, forearm length and hand length, which were taken with a caliper (0.1 mm). All measurements are in millimeters and followed Heyer *et al.* (1990). Webbing formula notation followed Savage & Heyer (1997). We agree with Fabrezi & Alberch (1996) regarding that the first digit is lost in anurans, thus digits are numbered II–V. Snout shape standards followed Heyer *et al.* (1990). Abbreviations for adults measurements are as follows: SVL (snout–vent length), HW (head width), HL (head length), END (eye–nostril distance), NW (nostril width), IND (internostril distance), ED (eye diameter), ESD (eye–snout distance), IOD (interorbital distance), TD (tympanum diameter), AL (arm length), UL (ulna length), HAL (hand length), TL (thigh length), SL (shank length), TAL (tarsus length), FL (foot length), FW (disc width of finger III), TW (disc width of toe IV).

We performed the comparisons of adult specimens based on observations of museum material and on literature information from Cochran (1955), Bokermann (1964, 1967), B. Lutz (1973), Bokermann & Sazima (1973), Cardoso & Haddad (1982), Cruz & Peixoto (1982), Andrade & Cardoso (1987), Haddad & Pombal (1987), Peixoto & Weygoldt (1987), Caramaschi & Kisteumacher (1989), Heyer *et al*. (1990), Carvalho-e-Silva & Peixoto (1991), Pombal & Gordo (1991), Pombal & Bastos (1996), Faivovich *et al*. (2005) for size measures and color in life. Specimens for comparisons (listed in Appendix) are deposited at Museu Argentino de Ciencias Naturales "Bernadino Rivadavia", Buenos Aires, Argentina; and the follow Brazilian herpetological collections: Adolfo Lutz Collection, Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro (AL–MN), Célio F.B. Haddad Collection, Universidade Estadual Paulista Júlio de Mesquita Filho, Rio Claro, São Paulo state (CFBH); Museu de Zoologia, Universidade de São Paulo, São Paulo (MZUSP); Museu de Zoologia "Prof. Adão José Cardoso", Universidade Estadual de Campinas, Campinas, São Paulo state (ZUEC); Universidade Federal de Minas Gerais, Belo Horizonte, Minas Gerais state (UFMG); Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Rio de Janeiro state (MNRJ); Pontifícia Universidade Católica de Minas Gerais, Belo Horizonte, Minas Gerais state (MCNAM); Laboratório de Biossistemática de Anfíbios, Universidade Federal do Estado do Rio de Janeiro, Rio de Janeiro, Rio de Janeiro state (UNIRIO); Departamento de Zoologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Rio de Janeiro state (ZUFRJ).

We collected a large series of tadpoles (in several developmental stages), froglets, and juveniles. The characteristic coloration with spots on the dorsum of adults of the new species was also present in tadpoles, froglets, and juveniles; therefore, we used this unique coloration among all species known for the study site to assign tadpoles to the new species. Further, through our fieldwork in this location, we have never observed any other species of *Scinax* in the stream where the tadpoles and adults of the new species were collected. Thus, we are confident on the identification of the tadpoles of the new species. Voucher lots are housed in the Tadpoles Collection of the Universidade Federal de Minas Gerais (UFMG), Belo Horizonte, State of Minas Gerais. External morphology descriptions and proportions were based on 21 tadpoles in stages 28–30 of Gosner (1960) (lots UFMG 91; 1146). Measurements and terminology followed Altig and McDiarmid (1999) for TL (total length), BL (body length), TAL (tail length), MTH (maximum tail height), IND (internarial distance), IOD (interorbital distance), TMW (tail muscle width), and TMH (tail muscle height); Lavilla & Scrocchi, (1986) for BW (body width), BWN (body width at narial level), BWE (body width at eyes level), BH (body height), ESD (eye-snout distance), END (eye-nostril distance), NSD (nostril-snout distance), ED (eye diameter), ND (narial diameter), SED (snout-spiracular distance), and ODW (oral disc width); Grosjean (2005) for DFH (dorsal fin height) and VFH (ventral fin height). Additional measurements were taken as SL (spiracle length: distance between the insertion of the spiracle and its distal edge) and SDEH (spiracle distal edge height: perpendicular distance between the spiracle distal edge and the ventral surface of the tadpole). All measurements were taken with aid of ImageTool version 3.00

(UTHSCSA ImageTool). To obtain high quality photos we used an adjustable platform to support tadpoles immersed on water (Schacht & McBrayer 2009).

Morphological features of known tadpoles of the *Scinax catharinae* group were obtained from Conte *et al.* (2007) and from descriptions (Table 1). The size classes of the oral disc for tadpoles of the *S. catharinae* group were determined by the ratio ODW/BW (small/middle < 0.70 < large). When original descriptions did not provide the oral disc size, comparisons were made considering illustrations and specimens deposited at UFMG (listed in Appendix).

## Results

### *Scinax pombali* sp. nov.

(Figs. 1 and 2)

**Holotype.** MNRJ 49479, an adult male (21.1 mm SVL) collected at Ribeirão da Capivara, Chapadão da Babilônia (20º36'03''S, 46º17'34.9''W, elevation 987 m), Serra da Canastra, municipality of Capitólio, State of Minas Gerais, Brazil, on 27 August 2007 by A.L.G. Carvalho and colleagues.

**Paratypes.** MNRJ 49476, 49478, adults gravid females, and MNRJ 49477, adult male, all collected with the holotype. MNRJ 54986, adult male collected at Chapadão da Babilônia, municipality of Capitólio, State of Minas Gerais, Brazil, on 12 November 2004. UFMG 10601–02, UFMG 10610, adult females collected at Serra de Capitólio, municipality of Capitólio, state of Minas Gerais, Brazil, on 16 February 2012 by F.S.F. Leite. UFMG 10603, UFMG 10611–12, UFMG 10616, adult males collected at Serra de Capitólio, municipality of Capitólio, state of Minas Gerais, Brazil, on 16 February 2012 by T.L. Pezzuti.

**Diagnosis.** The new species is assigned to the genus *Scinax* based on the identification of the following morphological synapomorphies suggested by Faivovich *et al.* (2002): webbing between toes I and II that does not extend beyond the subarticular tubercle of toe I, origin of the *m. pectoralis abdominalis* at well defined tendons, and *m. pectoralis abdominalis* overlapping *m. obliqus externus*. It is assigned to the *S. catharinae* species group due to the laterodistal origin of the *m. extensores brevis distalis digit III* (presumed synapomorphy suggested by Faivovich 2002), and by having developed webbing between toes II and III (the species of the *S. perpusillus* group exhibit reduced webbing between toes II and III according to Peixoto 1987 and Faivovich 2002). This small species is diagnosed by: (1) in life, dorsum gray with black blotches bordered by a silver line; a black elliptical spot between the eyes and nostrils; inguinal region and hidden surfaces of thigh with irregular brown blotches on yellow background; (2) snout sub–elliptical in dorsal view; (3) *canthus rostralis* well marked; (4) lack of externally differentiated inguinal gland; (5) glandular area on medial margin of finger II do not developed to form a distinct nuptial pad; (6) tadpoles with large-sized oral disc and multiseriate marginal papillae on anterior and posterior labium of the oral disc.

**Comparison with other species.** *Scinax pombali* differs from all species of the *S. catharinae* species group by its unique dorsal color pattern, with blotches outlined in silver, and by its single black elliptical spot between the eyes and nostrils (Figure 1). Additional characters diagnosing the new species are listed below.

The new species differs from *S. agilis* (n= 4 males and 29 females), *S. argyreornatus* (n= 24 males and 19 females), and *S. skuki* (n= 22 males and 4 females) by its larger size (SVL of males in *Scinax pombali* 20.2–25.1, females 28.6–34.9; SLV of males in these species 13.1–17.1mm, females 14.7–25.1mm), and from *S. ariadne* (n=40 males and 9 females) and *S. catharinae* (n= 25 males and 16 females) by its smaller size (SVL of males in *Scinax pombali* 20.2–25.1, females 28.6–34.9; SLV of males in these species 28.8–47mm, females 38–47mm). *Scinax pombali* is distinguished from *S. aromothyella* (n=16), *S. berthae* (n=4), *S. centralis* (n= 1), *S. luizotavioi* (n= 10), *S. machadoi* (n= 6), and *S. ranki* (n= 3) by the larger size of female (SVL of females in *Scinax pombali* 28.6–34.9; SLV of female in these species 19.5–30.6mm), whereas females of this species are smaller than those of *S. albicans* (n=9), *S. strigilatus* (n=7), and *S. tripui* (n= 5) (SLV of females in these species 36.1–45.5mm). The new species differs from *S. muriciensis* (n= 4) by the smaller size of males (SLV of males in this species 27–28.9mm).

*Scinax pombali* differs from all species of the *S. catharinae* group except *S. aromothyella*, *S. argyreornatus*, *S. berthae*, and *S. skuki* by its sub–elliptical snout in dorsal view: the snout in *S. ariadne* and *S. obtriangulatus* is

rounded; in *S. albicans*, *S. angrensis*, *S. flavoguttatus*, *S. humilis*, *S. littoralis*, *S. muriciensis*, *S. strigilatus*, *S. trapicheiroi*, and *S. tripui* is rounded with a mucronate end; in *S. agilis*, *S. canastrensis*, *S. longilineus*, *S. rizibilis*, and *S. skaios* is subovoid; in *S. carnevallii* and *S. kautskyi* is mucronate; in *S. luizotavioi* is sub-elliptical with a pointed end. Most specimens of *S. argyreornatus* and *S. skuki* have mucronate snout, but some have sub-elliptical snout, thus we can not differentiate them from the new species by this feature.

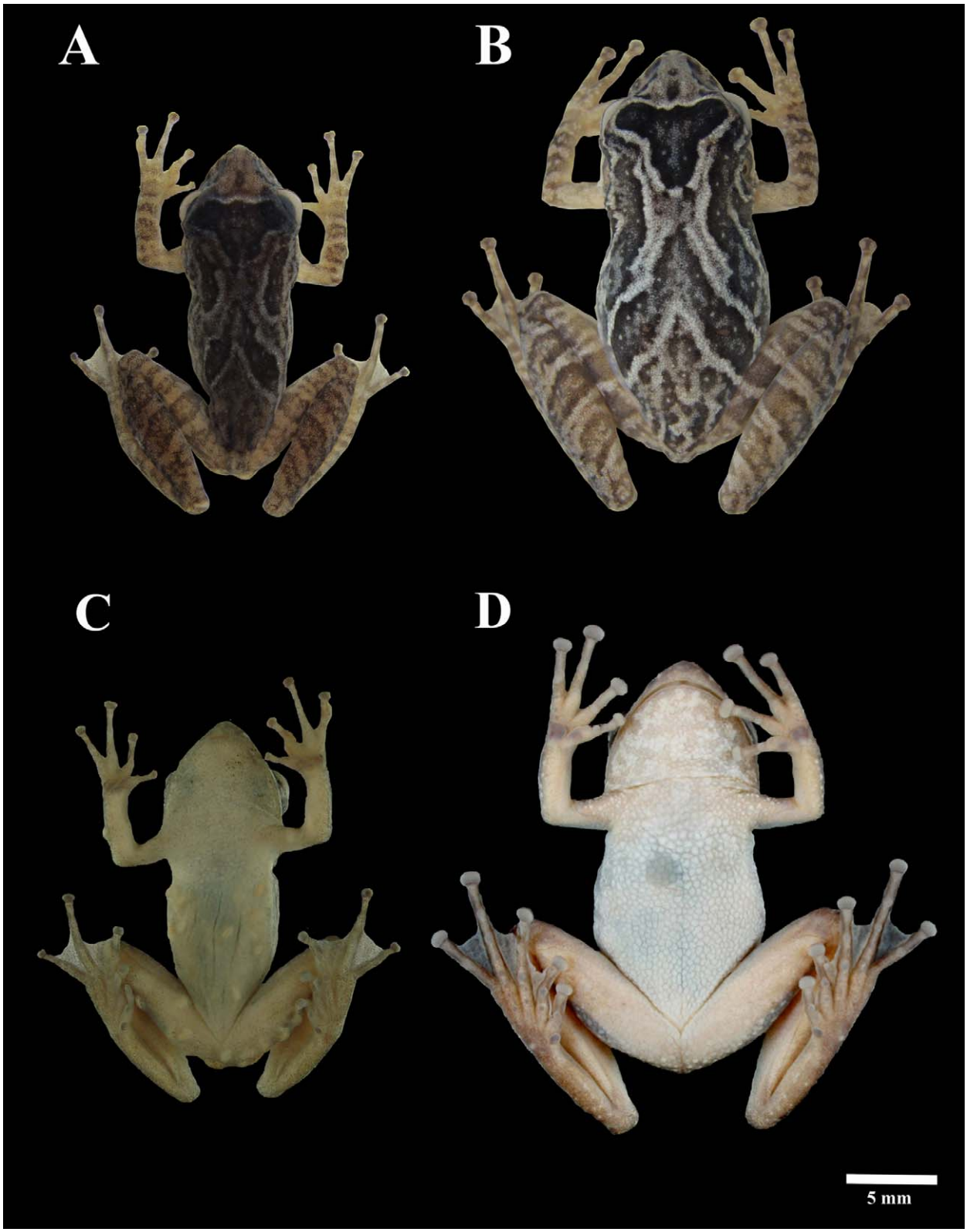


**FIGURE 1.** Dorsal and ventral views of *Scinax pombali*: (A) holotype (MNRJ 49479) and (b) female paratype (MNRJ 49476). Note the color and spots pattern.

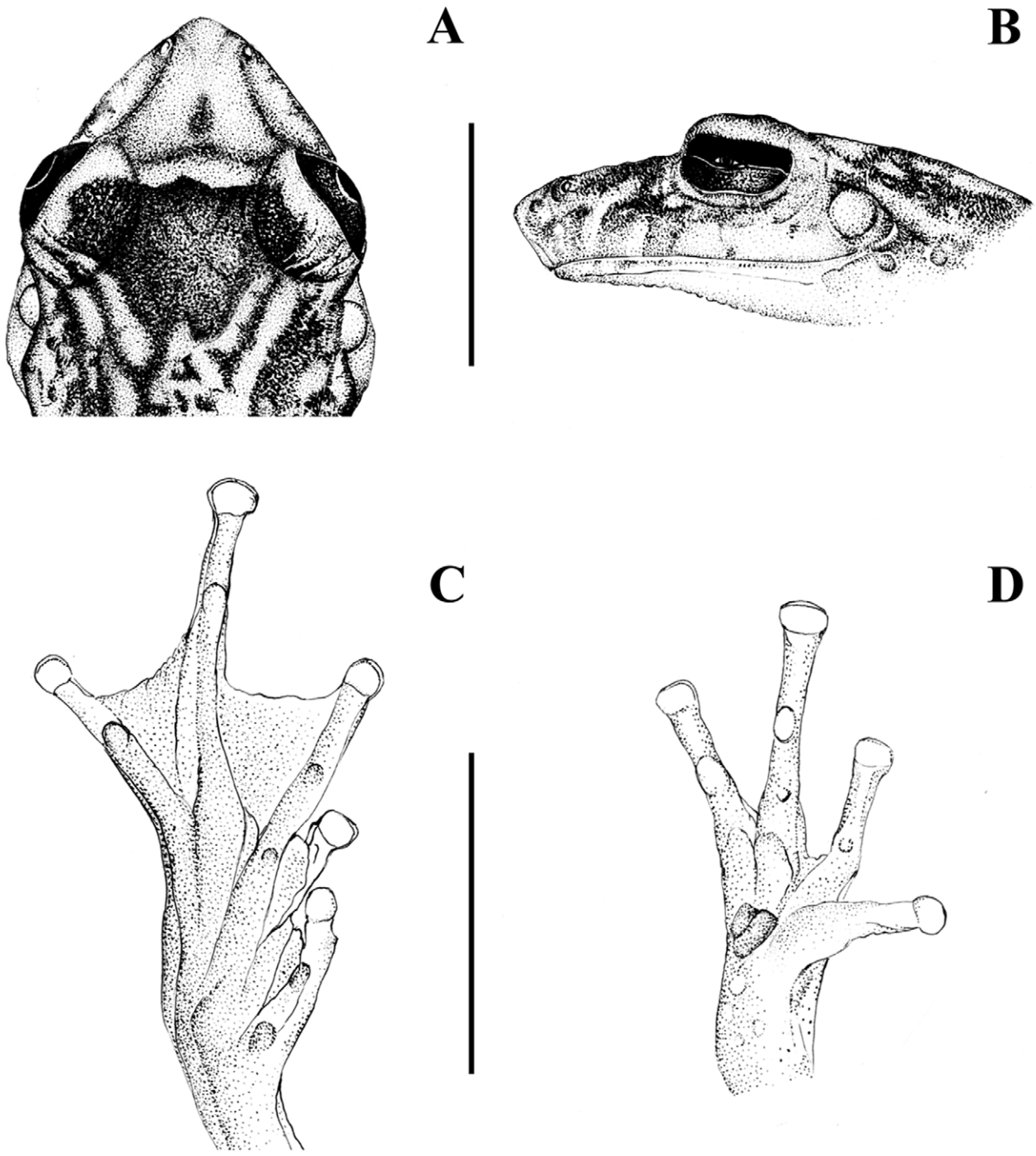


**FIGURE 2.** Holotype of *Scinax pombali* (MNRJ 49479): (A) dorsal and (B) lateral views of the head (scale = 5 mm), (C) hand, and (D) foot (scales = 1 mm).

The well marked c*anthus rostralis* distinguishes *S. pombali* from *S. agilis*, *S. albicans*, *S. argyreornatus S. ariadne*, S. *aromothyella*, *S. berthae*, *S. brieni*, *S. catharinae*, *S. centralis*, *S. jureia*, *S. machadoi*, *S. obtriangulatus*, *S. ranki*, *S. rizibilis*, *S. skuki*, and *S. trapicheiroi* (*canthus rostralis* poorly marked in these species).

The lack of an externally differentiated inguinal gland distinguish *Scinax pombali* from *S. ariadne*, *S. brieni*, *S. canastrensis*, *S. catharinae*, *S. centralis*, *S. jureia*, *S. hiemalis*, *S. longilineus*, *S. luizotavioi*, *S. obtriangulatus*, *S. ranki*, *S. rizibilis*, and *S. skaios* (particularly hypertrophied in *S. centralis* and externally well differentiated in the other species).

**TABLE 2.** Measurements of the type series of *Scinax pombali* (*= Holotype).

| | ♂ MNRJ 49479* | ♂ MNRJ 49477 | ♂ MNRJ 54986 | ♂ UFMG 10603 | ♂ UFMG 10611 | ♂ UFMG 10612 | ♂ UFMG 10616 | Mean ± SD | ♀ MNRJ 49476 | ♀ MNRJ 49478 | ♀ UFMG 10601 | ♀ UFMG 10602 | ♀ UFMG 10610 | Mean ± SD |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SVL** | 21.1 | 22.0 | 22.7 | 23.2 | 24.3 | 25.1 | 20.24 | 22.66 ± 1.72 | 28.6 | 29.08 | 34.32 | 31.68 | 34.9 | 31.72 ± 2.90 |
| **HW** | 6.6 | 7.8 | 7.7 | 7.08 | 7.7 | 7.8 | 6.7 | 7.34 ± 0.53 | 10.4 | 11.12 | 10.9 | 10.14 | 11.4 | 10.79 ± 0.52 |
| **HL** | 8.5 | 8.9 | 8.7 | 9.1 | 9.2 | 9.62 | 7.9 | 8.85 ± 0.55 | 10.82 | 11.2 | 13.4 | 12.4 | 13.3 | 12.22 ± 1.18 |
| **END** | 2.4 | 2.6 | 2.0 | 2.5 | 2.7 | 2.86 | 2.1 | 2.45 ± 0.31 | 3 | 3.1 | 3.94 | 3.5 | 3.98 | 3.50 ± 0.46 |
| **IND** | 1.9 | 1.9 | 2.1 | 1.98 | 1.92 | 1.98 | 1.94 | 1.96 ± 0.07 | 1.44 | 1.41 | 2.68 | 2.72 | 2.68 | 2.19 ± 0.69 |
| **ED** | 2.8 | 2.8 | 3.6 | 3.8 | 3.98 | 4.16 | 3.46 | 3.51 ± 0.54 | 3.4 | 3.15 | 5.7 | 5.3 | 5.6 | 4.63 ± 1.25 |
| **ESD** | 3.7 | 3.4 | 3.0 | 3.94 | 4.08 | 4.14 | 3.28 | 3.65 ± 0.43 | 4.3 | 4.2 | 5.9 | 5.36 | 6 | 5.15 ± 0.86 |
| **IOD** | 2.6 | 2.6 | 2.3 | 2.26 | 2.42 | 2.38 | 2.2 | 2.39 ± 0.16 | 1.74 | 1.74 | 2.8 | 2.6 | 2.94 | 2.36 ± 0.58 |
| **TD** | 1.0 | 1.1 | 1.2 | 1.18 | 1.3 | 1.28 | 1 | 1.15 ± 0.12 | 1.2 | 1.25 | 1.7 | 1.7 | 1.64 | 1.50 ± 0.25 |
| **AL** | 6.8 | 6.1 | 7.7 | 7.6 | 8.38 | 8.6 | 7.5 | 7.53 ± 0.86 | 10 | 10.32 | 12 | 10.8 | 12.2 | 11.06 ± 0.99 |
| **UL** | 3.8 | 4.2 | 4.1 | 3.1 | 3.82 | 4.2 | 3.02 | 3.75 ± 0.50 | 5.64 | 5.46 | 6.1 | 5.45 | 6.96 | 5.92 ± 0.64 |
| **HAL** | 6.3 | 6.8 | 7.2 | 7.46 | 8.1 | 8 | 6.8 | 7.24 ± 0.66 | 8.74 | 8.9 | 11.1 | 10.7 | 11.18 | 10.12 ± 1.21 |
| **TL** | 10.3 | 11.7 | 11.3 | 11.9 | 11.7 | 12.1 | 10.5 | 11.36 ± 0.70 | 15.42 | 15.06 | 16.8 | 16.2 | 19.2 | 16.54 ± 1.64 |
| **SL** | 10.9 | 12.5 | 11.9 | 12.18 | 13 | 13.6 | 11.38 | 12.21 ± 0.93 | 16.58 | 16.46 | 19.88 | 18.14 | 17 | 17.61 ± 1.43 |
| **TAL** | 5.8 | 6.8 | 6.5 | 5.46 | 6.96 | 7.8 | 6.32 | 6.52 ± 0.77 | 8.56 | 8.5 | 10.9 | 9.8 | 9.5 | 9.45 ± 0.99 |
| **FL** | 9.4 | 11.0 | 9.8 | 11.42 | 12.2 | 11.7 | 10.2 | 10.82 ± 1.04 | 14.28 | 14.14 | 16.4 | 15.7 | 17.9 | 15.68 ± 1.56 |

The new species differs from *S. agilis*, *S. albicans*, *S. angrensis*, *S. aromothyella*, *S. carnevallii*, *S. catharinae*, *S. brieni*, *S. humilis*, *S. littoralis*, *S. luizotavioi*, *S. machadoi*, *S. obtriangulatus*, *S. rizibilis*, *S. skaios*, *S. trapicheiroi*, and *S. tripui* in having a glandular area on medial margin of finger II that does not develop to form a distinct nuptial pad (*S. rizibilis* has hypertrophied nuptial pad; in other species this glandular area is developed forming a distinct nuptial pad that changes the width of the finger II, but the nuptial pad is not hypertrophied).

The inguinal region and hidden surfaces of thigh with irregular brown blotches on yellow background *S. pombali* differs from *S. agilis* ("without flash color"; Cruz & Peixoto 1982), *S. albicans*, (dark brown transversal bars on pale background), *S. angrensis* ("dark blotches surrounding the light area"; B. Lutz 1973), *S. ariadne* (light brown irregular blotches on violet or pink background), *S. brieni*, ("pale blue"; B. Lutz 1973), *S. carnevallii* ("whitish with black spots scattered", Caramaschi & Kisteusmacher 1989), *S. catharinae* (dark brown irregular blotches on light blue background), *S. flavoguttatus* (brown irregular blotches on orange background), *S. heyeri* ("orange-yellow"; Peixoto & Weygoldt 1987), *S. hiemalis* ("black blotches on a greenish background"; Haddad & Pombal 1987), *S. humilis* (dark irregular blotches on bluish or pale background), *S. kautskyii* ("blackish brown with whitish spots"; Carvalho-e-Silva & Peixoto 1991), *S. luizotavioi* (light brown irregular blotches on pale background), *S. littoralis* ("black bars on a whitish or greenish background"; Pombal & Gordo 1991), *S. obtriangulatus* ("dull grayish violet"; B. Lutz 1973), *S. ranki* ("greenish with dark blotche"; Andrade & Cardoso 1987), *S. skaios* ("brown or pale green with irregular dark brown stripes"; Pombal *et al*. 2010), *S. strigilatus* ("greenish"; Pimenta *et al*. 2007), *S. trapicheiroi* (dark brown irregular blotches on light blue background), and *S. tripui* (dark brown irregular blotches on greenish background).

**Description of holotype**. Body slender and short size. Head longer than wide (40.07% of SVL). Snout sub-elliptical in dorsal view and protruding in profile. Nostril located laterally, immediately before the tip of snout, opening directed dorsum–laterally, elliptical, and protruding. *Canthus rostralis* well marked and nearly concave. Loreal region slant and concave. Eye large, protruding laterally, with diameter 42.42% of head width. Interorbital and internostril distance 39.09% and 29.09% of head width respectively. Tympanum rounded, *annulus timpanicus* not well defined, with diameter measuring 35.71% of eye diameter. Supratympanic fold marked and granulated. Tongue large, elongated, unattached in the posterior and laterally borders. Vocal slits present, diagonals, starting from the back of the tongue. Vomerine teeth in two contiguous convex small series of four teeth each, between choanae, though slightly displaced posteriorly. Choanae elliptical. Vocal sac subgular, not expanded externally.

Members slender, with forearms longer than arms. Outer margins of the forearm and tarsus smooth. Hands 29.81% of snout–vent length. Inner metacarpal tubercle absent and outer metacarpal bilobeted. Subarticular tubercles single and rounded, supernumerary absent. Membranes absent between fingers II and III, rudimental between III and IV, and IV and V. Discs on fingers elliptical, wider than long. Length of fingers II<III=V<IV. Glandular area on medial margin of finger II does not develop to form a distinct nuptial pad. This glandular area extends medially up to the margin of the outer metacarpal tubercle, and distally up to the base of the second subarticular tubercle. Foot 44.63% of snout vent length. Outer metatarsal tubercle absent and inner single and rounded. Single and conical subarticular tubercles on toe I, others rounded. Supernumerary absent. Length of toes: I<II<V<III<IV. Toes with webbing formula I–II1$^{-}$–3III1$^{-}$–2$^{2/3}$IV2$^{1/2}$–1$^{-}$V. Elliptical discs wider than long.

The inguinal regions do not have a externally differentiated inguinal gland . The pectoral fold is absent. The cloacal opening is at upper level of thighs. Skin on dorsum rough. Granular skin on throat, belly, and undersurfaces of thigh.

**Color of holotype in preservative.** Dorsal coloration gray with shades of silver and brown (Fig. 1). Interocular region with a triangular shaped black marking bordered by silver line. Dorso-lateral region with a black stripe bordered by a conspicuous silver line, extending from the pre–ocular region to mid–body. Posterior dorsal region with an inverted V-shaped black marking bordered by a conspicuous silver line. Anterior and posterior dorsal surfaces of the arms and legs with transversal black strips. *Canthus rostralis* with a black strip. A black elliptical spot between the eyes and nostrils. Supratympanic fold with a black strip through all its extension. Light brown dots on belly and throat. Iris gray. The inguinal region is white with irregular brown blotches.

**Color in life (based on type series).** The same as in preservative, except for the brighter and sharper intensity and contrast and the brown colored iris with dense gold dots. Inguinal region and hidden surfaces of thigh with irregular brown blotches on yellow background (Figure 1).

**Variation of adult specimens.** Measurements of the type series are shown in Table 2. Males are slender and smaller than females. Females exhibit more vivid and bright blotches, and a T-shaped mark between the eyes.

Black dorsal-lateral strip in some specimens reaches the inguinal region. Little black elliptical spot between the eyes and nostrils is sharper and darker in females. Inner metacarpal tubercle is single and oval in females. Some male and all females have supranumerical tubercles. The absence of these tubercles in the holotype is likely a preservation artifact. Males and females have variable webbing formula I–II$1^{1/2}$–3III$1^{1/2}$–$3^{+}$IV3–$1^{1/2}$V; I–II$1^{2/3}$–3III$2^{-}$–$3^{+}$IV$3^{+}$–$1^{1/2}$V; I–II$1^{1/2}$–3III$1^{1/2}$–$3^{+}$IV$3^{-}$–$1^{+}$V; I–II$2^{-}$–3III$2^{-}$–$3^{1/2}$IV$3^{-}$–1V.

**Etymology.** The specific epithet is the singular genitive case of the name Pombal. José P. Pombal Jr. is an important herpetologist that has significantly contributed to our understanding of the taxonomy of the genus *Scinax*. We recognize his contribution in the taxonomy of Brazilian anurans and take great pleasure in honoring our teacher and colleague.

**Tadpole description.** Body depressed (BH/BW = 0.78–0.95) (Fig. 3A and 3B); slightly longer than one third of total length (BL/TL = 0.33–0.37); oval in dorsal view. In lateral view, ventral contour of body flat in the gular region, convex in the abdominal region. Snout rounded in dorsal view (BWN/BWE = 88–95), and sloped to truncated in lateral view. Nostrils rounded, small (ND/BL = 0.01–0.02), dorsally located (IND/BWN = 0.39–0.47), closer to eyes than to the snout (NSD/END = 1.18–1.69). Eyes large (ED/BWE = 0.21–0.25), dorsally located (IOD/BWE = 0.69–0.77), dorsolaterally directed. Spiracle single, sinistral, and lateroventral (SDEH/BH = 0.35–0.45); large, posterodorsally projected, visible in dorsal and lateral views; its inner wall free from the body and slightly longer than the external wall; opening located at the posterior third of the body (SED/BL = 0.69–0.80). Intestinal switchback point located at the center of the abdominal region (Fig. 3C). Vent tube small with dextral opening, entirely fused to ventral fin. Tail slightly higher than body (MTH/BH = 1.02–1.16); well-developed musculature (TMH/MTH = 0.52–0.65) does not reach the rounded tip of the tail. Dorsal fin low (DFH/TMH = 0.50–0.63), with margin slightly convex, maximum height in the beginning of the distal third of the tail; emerges on posterior third of the body at a low slope; ventral fin with margin convex; origin concealed by vent tube; shorter than dorsal fin (DFH/VFH = 1.18–1.52). Oral disc (Fig. 3D) ventrally positioned; large-sized (ODW/BW = 0.71–0.96, measured with oral disc folded); not emarginated; two to three rows of marginal papillae in alternate disposition on its dorsal portion, without a dorsal gap; most papillae long and conical and some bi or trifurcated; lateroventral portion with multiseriate rows of marginal papillae, in unorganized arrangement, differing in papillae size and shape: external rows with smaller and conical papillae; inner rows with rounder, wider and larger papillae, some trapezoidal shaped; rows of submarginal papillae in the lateral portion of the oral disc portion, entering between anterior and posterior parts of the oral disc; few submarginal papillae (three to four) between anterior tooth rows (A1 and A2), laterally. Tooth row formula (LTRF) 2(2)/3; all rows long with approximately the same length, and with a variable number of indentations; wide jaw sheaths darkly pigmented; upper jaw sheath “M” shaped and lower sheath "V" shaped. Measurements for all the available developmental stages are shown in Table 3.

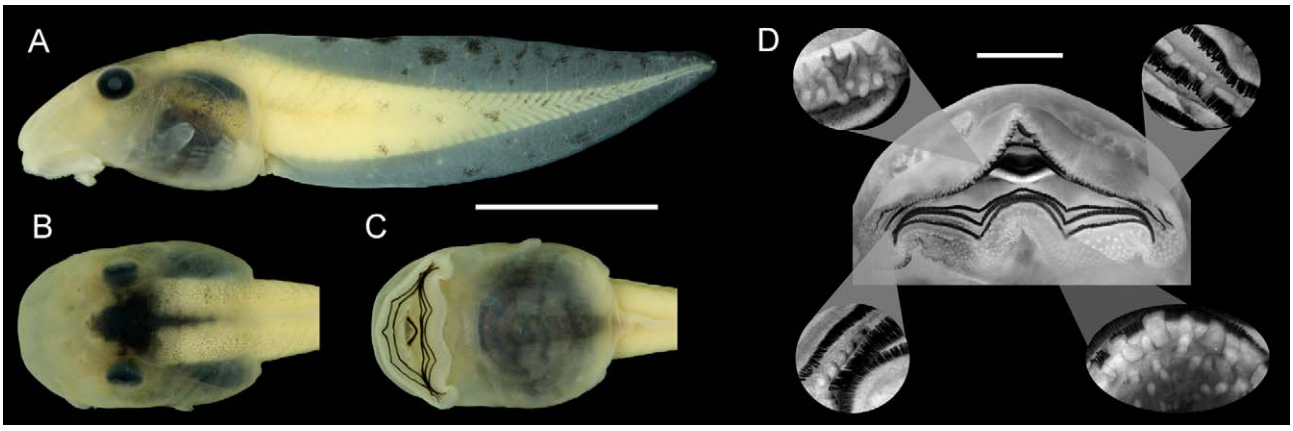


**FIGURE 3.** Tadpole of *Scinax pombali* (UFMG1146) at stage 29 according to Gosner (1960): (A) lateral view; (B) dorsal view; (C) ventral view (scale = 10 mm); (C) oral disc (scale = 2 mm); details of oral disc structures are not in scale.

**TABLE 3.** Measurements (in mm) of tadpoles of *Scinax pombali* from Capitólio, state of Minas Gerais, Brazil, for developmental stages 28–30 (n= 21) according to (Gosner 1960). For abbreviations, see the text.

| Characters | Min | Max | Mean ± SD |
|---|---|---|---|
| TL | 33.0 | 40.8 | 37.5 ± 2.3 |
| BL | 11.6 | 14.4 | 13 ± 0.8 |
| TAL | 21.1 | 27.5 | 24.6 ± 1.7 |
| MTH | 7.4 | 10.1 | 8.6 ± 0.7 |
| DFH | 2.5 | 3.3 | 2.9 ± 0.2 |
| VFH | 1.9 | 2.8 | 2.2 ± 0.2 |
| TMH | 4.6 | 6.0 | 5.1 ± 0.4 |
| BH | 7.2 | 9.7 | 8.0 ± 0.6 |
| SL | 1.5 | 2.1 | 1.8 ± 0.2 |
| SDEH | 3.7 | 4.3 | 3.3 ± 0.4 |
| SED | 8.3 | 10.6 | 9.7 ± 0.6 |
| ED | 1.8 | 2.3 | 2.0 ± 0.1 |
| BW | 7.8 | 10.6 | 9.2 ± 0.8 |
| BWN | 7.1 | 9.1 | 8.1 ± 0.6 |
| BWE | 7.8 | 10.0 | 8.9 ± 0.7 |
| TMW | 3.6 | 5.2 | 4.4 ± 0.5 |
| END | 2.4 | 3.0 | 2.7 ± 0.2 |
| ESD | 5.3 | 7.1 | 6.1 ± 0.5 |
| NSD | 3.2 | 4.5 | 3.7 ± 0.3 |
| ND | 0.5 | 0.8 | 0.2 ± 0.1 |
| IND | 0.2 | 0.3 | 2.2 ± 0.0 |
| IOD | 5.8 | 7.5 | 6.5 ± 0.5 |
| ODW | 6.9 | 9.0 | 7.9 ± 0.7 |

**Tadpole coloration in life.** Body presenting two golden bands, formed by concentration of the golden tiny iridophores, one in the snout region, especially between eyes and nostrils, and other in the posterior third of the body (Fig. 4A and 4B). These bands are broken by a median dark brown irregular stripe that can reach the abdominal region, which is golden (intestine partially visible). In smaller individuals the color pattern is more contrasting. Spiracle tube translucent. Tail muscle light brown. Some individuals present a dark lateral stripe under the dorsal fin in the proximal third of the tail. Fins translucent, with some dark blotches especially in dorsal fin. Iris with golden dots.

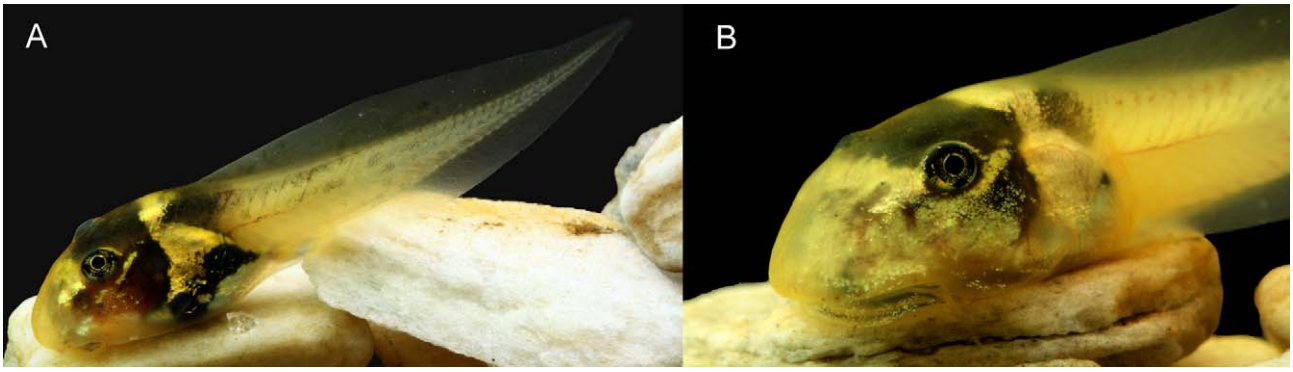


**FIGURE 4.** Tadpole of *Scinax pombali* (UFMG1146) photographed in life: (A) dorsolateral view of a smaller specimen; (B) detail of the body of a larger individual with a less contrasting color pattern.

**Tadpole coloration in preservative.** In 10% formalin, the shiny bands are absent (Fig. 3A). The body acquires light brown coloration. The iris loses its golden tones, becoming black.

**Comparison with other tadpoles of the *S. catharinae* group**. Tadpoles of *Scinax pombali* are distinguished from all known species of the *S. catharinae* group, with exception to *S. ariadne*, by the large-sized oral disc and presence of multiseriate marginal papillae on anterior and posterior labium of the oral disc (median to small-sized oral disc and uni to biseriate rows of marginal papillae in most species). Also differs from many species, with exception of *S. albicans*, *S. angrensis*, *S. ariadne*, and *S. flavoguttatus*, by the absence of dorsal gap on the row of marginal papillae of the oral disc (present in some species as wide gap, and in others as small gap).

As mentioned for some species of the group (*S. albicans*, *S. angrensis*, *S. kautskyi*, *S. trapicheiroi*, *S. machadoi*, *S. ariadne*, *S. tripui*, and *S. flavoguttatus*) *S. pombali* shows a concentration of the golden tiny iridophores between eyes and nostrils, giving it a flashy banding bright pattern, which is absent in *S. argyreornatus*, *S. berthae*, *S. catharinae*, *S. hiemalis*, *S. humilis*, *S. littoralis*, *S. luizotavioi*, *S. longilineus*, *S. obtriangulatus*, *S. ranki*, and *S. rizibilis*.

*Scinax pombali* differs from *S. kautskyi* by the dextral vent tube (vent tube positioned medially in this specie), and from *S. berthae* by the rounded tail tip and by the upper jaw sheath "M" shaped (tail with a flagellum and jaw sheath arch shaped in *S. berthae*). Tadpoles of *S. pombali* also differ from those of *S. aromothyella* by the M-shaped upper jaw sheath (arch-shaped upper jaw in this species). It differs from *S. catharinae* and *S. tripui* by the ventrolateral spiracle (in these species spiracle opens at the body midline).

*Scinax pombali* differs from *S. ariadne*, *S. rizibilis*, and *S. machadoi* by LTRF (these species exhibit 2/3, 2(2)/3(3) and 2(2)/3(1), respectively). Despite the similarity, *S. pombali* differs from *S. ariadne* by the rounded snout in dorsal view (very truncated in *S. ariadne*), presence of long, conical, and bi or trifurcated marginal papillae in the dorsal portion of oral disc (absence of differentiated papillae in the anterior labium in *S. ariadne*), trapezoidal-shaped and large papillae in the ventral portion of oral disc (absence of differentiated papillae in the posterior labium in *S. ariadne*), rows of submarginal papillae between anterior and posterior parts of oral disc and between anterior tooth rows (absence of submarginal papillae in *S. ariadne*), absence of black blotches in caudal musculature simulating transversal bars (present in *S. ariadne*), and presence of golden bands between nares and eyes (absent in *S. ariadne*).

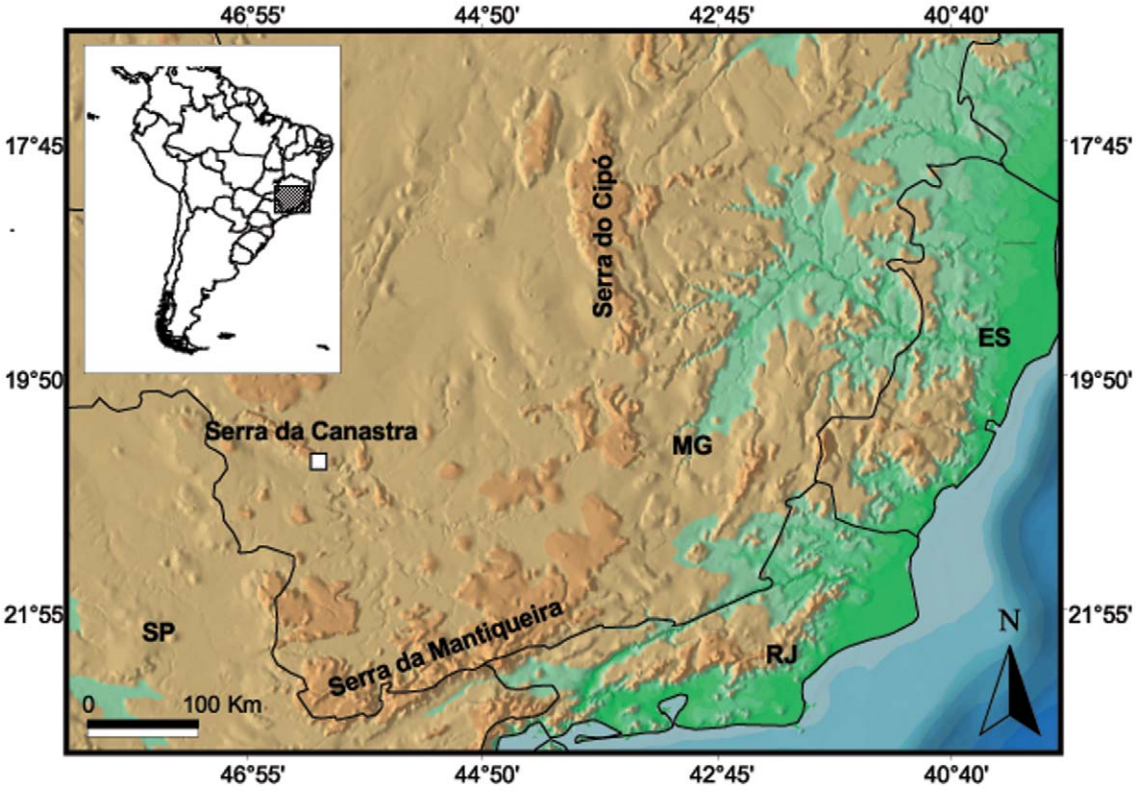


**FIGURE 5.** Type locality of *Scinax pombali* (white square), located in the Municipatily of Capitólio, State of Minas Gerais, Southeastern Brazil.

**Distribution, natural history, and comments.** *Scinax pombali* is known only for the type locality (Fig. 5). The species was collected in an altered *campo rupestre* remnant located in the southwestern portion of the State of Minas Gerais, ca. 55 km from the Parque Nacional da Serra da Canastra. This area holds 29 anuran species, including five *Scinax* (*S. canastrensis*, *S. fuscovarius*, *S. machadoi*, *S. maracaya*, and *S. squalirostris*) (Haddad *et al*. 1988). Also, frogs considered endemic to the area had their distribution recently expanded (e.g. *Scinax canastrensis*; Oliveira–Filho & Kokubum 2003; Araújo *et al*. 2007; Moura & Cazelli 2011). This indicates the need of additional field research, which may reveal not only new populations of already known species, but also new species, as the one described here**.** Most specimens of *Scinax pombali* were collected during the night, when they were in reproductive activity, but four specimens were collected during the day. The specimens were found in the marginal shrubby–arboreal vegetation along a permanent stream (a small gallery-like forest surrounded by *campo rupestre* vegetation, 987m of elevation). The stream is part of major river system where ponds are formed on the marginal rock surfaces. It is possible that the new taxon described here is syntopic with other congeners in watercourses present along the Serra da Canastra.

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**APPENDIX.** Additional specimens examined.

*Scinax agilis*: **BRAZIL, State of Espírito Santo:** Domingos Martins (CFBH 19450), Guarapari (CFBH 1358, CFBH 19459, CFBH 22804, CFBH 22808, MZUSP 102453-4, MZUSP 102456), Linhares (MNRJ 4146 and MNRJ 14210–13 paratypes, CFBH 18052-56, MNRJ 43094–95, MZUSP 59517), São Matheus, (CFBH 1567), Sooretama (ZUEC 9485), Vila Velha (ZUEC 3743, ZUEC 5990).

*Scinax albicans*: **BRAZIL, State of Rio de Janeiro:** Cachoeira de Macacu (MNRJ 40080–82), Duque de Caxias (MNRJ 53670–87, MNRJ 54126), Nova Friburgo (MNRJ 23393–96, MNRJ 35863-66); Teresópolis (MNRJ 4053 paratype, MNRJ 39930–35).

*Scinax angrensis*: **BRAZIL, State of Rio de Janeiro:** Angra dos Reis (MNRJ 2018 and MNRJ 2512 syntypes, MNRJ 49656, ZUFRJ 9021, ZUFRJ 9023–24); Parati (MNRJ 22115–17, MNRJ 44115–17).

*Scinax ariadne:* **BRAZIL, State of São Paulo:** São José do Barreiro (MZUSP 74199 holotype, 74200 alotype, MZUSP 73897–73932, paratype, MNRJ 4051, paratype, MZUSP 110333–110337, MZUSP 95523–95528, MZUSP 110331–110332, MZUSP 110338–110339, MZUSP 110313–110330, MNRJ 43610, MNRJ 76658-68).

*Scinax argyreornatus*: **BRAZIL, State of Bahia:** Canavieiras (MNRJ 40304), Ilhéus (MNRJ 51728-29, MZUSP 107311, MZUSP 107333, MZUSP 107247, MZUSP 107286, MZUSP 107288), Porto Seguro (MNRJ 37929–30, MNRJ 37932–33, MNRJ 51729). **State of Espírito Santo:** Colatina (MNRJ 0114, lectotype), Linhares (MNRJ 22967–23038, MNRJ 23005, MNRJ 23018, MNRJ 23025, MZUSP 118086-87), Santa Teresa (MNRJ 38390–36), Sooretama (MZUSP 120534, 120537, 120542), Mimoso do Sul (MZUSP 66468–69). **State of Rio de Janeiro:** Barro Branco (MNRJ 43595, MNRJ 43598), Cabo Frio (MNRJ 47538), Cachoeira de Macacu (MNRJ 49523), Citrolândia (MNRJ 54990, MNRJ 54992), Duque de Caxias (MNRJ 60651), Iraguaí (MNRJ 16892–93), Niterói (MNRJ 51542–43, MNRJ 56678, MNRJ 59781, MNRJ 59582–83, MNRJ 69601). **State of São Paulo:** Pariquera-Açu (MNRJ 64805).

*Scinax aromothyella*: **ARGENTINA, Province of Buenos Aires:** Ingeniero Maschwitz (MACN 16094), Punta Lara (MACN 11001 paratype). **Province of Missiones:** San Vicente (MACN 35278 holotype, MACN 35270-77, MACN 35262, MACN 35265-69, and MACN 37103-117 paratypes). **BRAZIL, State of Santa Catarina:** Passos Maia (CFBH 25776). **State of São Paulo:** São Bernardo do Campo (MACN 11002 paratypes).

*Scinax berthae*: **ARGENTINA, Provincia de Buenos Aires:** Escobar (MACN 37241–43, MACN 37245–54, MACN 37257), Ingeniero Maschwitz (MANC 16094, MACN 36983–85), Islã Talabera (MACN36989–91, MACN36992–96), Punta Lara (MACN 11001–02 and MNRJ 3590 paratypes), San Isidro (MNRJ 59527–28). **BRAZIL, State of São Paulo:** Botucatu (MNRJ 34761–65, MNRJ 40581, MNRJ 62855). **State of Rio Grande do Sul:** Santa Maria (MNRJ 34763, MNRJ 39897, MNRJ 69987–90, MNRJ 69995, MNRJ 70014, MNRJ 80344).

*Scinax brieni*: **BRAZIL, State of São Paulo:** Capão Bonito (MZUSP 136554–57), Juquitiba (MZUSP 134707-10), Miracatu (MZUSP 95440–44), Paranapiacaba (AL–MN 2592–94 paratypes, MZUSP 9625-26, MZUSP 10634, MZUSP 10980, MZUSP 108083, MZUSP 109455-56), Piedade (MZUSP 123391– 97), Ribeirão Pires (MNRJ 71156), Santo André (CFBH 24838), Salesópolis (MZUSP 451, MZUSP 30864, MZUSP 30867–69, MZUSP 54486-87).

*Scinax catharinae*: **BRAZIL, State of Paraná**: Guaratuba (MNRJ 35106-07), Morretes (MNRJ 80204). **State of Santa Catarina:** Florianópolis (MNRJ 72229-34, MNRJ 72236), Santo Amaro da Imperatriz (MNRJ 74419-22, MNRJ 74422-25, MNRJ 74422-28, MNRJ 74430), São Bento do Sul (MNRJ 44411–413), Rio Vermelho (MZUSP 116288, MZUSP

116302, MZUSP 116306, MZUSP 116393).

*Scinax canastrensis:* **BRAZIL, State of Minas Gerais:** Capitólio (MNRJ 49484), Furnas (CFBH 173446), São Roque de Minas (CFBH 29, CFBH 9152, CFBH 9154, MNRJ 4147 holotype, MNRJ 4148 paratype, ZUEC 4188–89 and ZUEC 4191–93 paratypes, ZUEC 4337, ZUEC 4340, ZUEC 4357, ZUEC 4444).

*Scinax carnevallii*: **BRAZIL, State of Minas Gerais:** Braúnas (MCNAM2013), Caratinga (MNRJ 4201–09, ZUEC 6633, ZUEC 6635), Caeté (MCNAM10494–515, MCNAM 10538–39, MCNAM3432–35), Conceição do Mato Dentro (MCNAM 3432–42, MCNAM 3463–64), Irapé (MCNAM 6208, MCNAM 6717–22, Marliéria (MNRJ 4182 holotype, MNRJ 4186–200 paratypes), São José do Mantimento (MCNAM 4060–61, MCNAM 4978–81.

*Scinax centralis*: **BRAZIL, State of Goiás:** Itapari (MNRJ 17932), Silvânia (MNRJ 17465 holotype, MNRJ 17466–17475 paratypes, MNRJ 32239–44).

*Scinax flavoguttatus*: **BRAZIL, State of Minas Gerais:** Lima Duarte (MNRJ 79425-28), Simonésia (MNRJ 32800, MNRJ 32803-04). **State of Rio de Janeiro:** Cachoeira de Macacu (MNRJ 68785-93), Cambuci (MNRJ 51483-84), Duque de Caxias (MNRJ 53688–703, MNRJ 60711-13), Itatiaia (MZUSP 109421-22), Nova Friburgo (MNRJ 23397–401), Parati (MNRJ 32862–64), Petrópolis (MNRJ 57575–76, MNRJ 75203), Rezende (MZUSP 143886), Teresópolis (MNRJ 60958, MNRJ 72635, MZUSP 109416, MZUSP 109471), Visconde de Mauá (MNRJ 76994, MNRJ 76996). **State of São Paulo:** São José do Barreiro (AL–MN 2090, holotype, MNRJ 23404–07, MNRJ 23404-07, MNRJ 76651-52), Salesópolis (MZUSP 68983).

*Scinax heyeri*: **BRAZIL, State of Espírito Santo:** Santa Tereza (MNRJ 56023-27, MZUSP 76668, ZUEC 7527).

*Scinax hiemalis*: **BRAZIL, State of São Paulo:** Bertioga (MZUSP 137330-31), Boracéia (MZUSP 30846-47, MZUSP 30865-66), Botucatu (MNRJ 30645–75, MZUSP 73788-89), Campinas (ZUEC 5856 and ZUEC 5859-64 paratypes, MNRJ 5973–74), Mogi das Cruzes (MZUSP 137355-56, MZUSP 137361-63), Souzas (MZUSP 60555, MZUSP 106776).

*Scinax humilis*: **BRAZIL, State of Rio de Janeiro:** Cachoeira de Macacu (MNRJ 40088, MNRJ 40090, MNRJ 40093–94), Cassimiro de Abreu (MNRJ 57093, MNRJ 61153), Duque de Caxias (MNRJ 1478 paralectotype, MNRJ 71828, MNRJ 71832, MNRJ 71838), Guapimirim (MNRJ 23411–12, MNRJ 40096–103, MNRJ 40179–80), Grumari (MNRJ 40181), Macaé (MNRJ 47376, MNRJ 73190), Magé (MNRJ 55230-31, MNRJ 55234), Mangaratiba (MNRJ 54762), Nova Iguaçu (MNRJ 2248 lectotype), Paracambi (MNRJ 76530, MNRJ 76532–33), Rio de Janeiro (MZUSP 107758, MZUSP 107762), Saquarema (MNRJ 77167-68, MNRJ 77183), Tijuca (MZUSP 107757).

*Scinax jureia*: **BRAZIL, State of São Paulo:** Iguape (MNRJ 14202–03 and CFBH 6068–69 paratypes, ZUEC 8864–65, ZUEC 8869–70, ZUEC 8872, ZUEC 8875, ZUEC 8896), Pedro de Toledo (CFBH 21259), Peruíbe (CFBH 24101).

*Scinax kautskyi*: **BRAZIL, State of Espírito Santo:** Aracruz (MNRJ 39785–98); Cariacica (MNRJ 27889–30, MNRJ 27956); Domingos Martins (ZUFRJ 2012 holotype, 2013 paratype, ZUFRJ 5753–55, ZUFRJ 5757–58, ZUFRJ 6321–22).

*Scinax littoralis*: **BRAZIL, State of Paraná:** Guaraqueçaba (MNRJ 33763), Guaratuba (CFBH 23213), Morretes (CFBH 18094–95, CFBH 23169–71). **State of São Paulo:** Cubatão (CFBH 9234-35, CFBH 9240, CFBH 10541, CFBH 11379), Iguape (CFBH 811, CFBH 813, CFBH 815, ZUEC 8876, ZUEC 8880, ZUEC 8882–86, ZUEC 8889–90, ZUEC 8892–94), MZUSP 73736–38 paratypes), Itariri (CFBH10637), Jacupiranga (MNRJ 68861–62), Juréia (MNRJ 46993), Mongaguá (CFBH 17361, CFBH 17365–66, CFBH 17370, CFBH 17377–78, CFBH 17380), São Sebastião (CFBH 19251), Ubatuba (CFBH 1048, CFBH 1095, CFBH 1099-1100, CFBH 1212, CFBH 2066, CFBH 2591, CFBH 2593, CFBH 7781, MZUSP 122871).

*Scinax longilineus*: **BRAZIL, State of Minas Gerais:** Belo Horizonte (MNRJ 5361, MNRJ 16003–07, MNRJ 30966–69, MNRJ 61434, MNRJ 61437, MNRJ 61444), Ibituruna (MNRJ 76514–18), Moeda (MNRJ 65653), Poços de Caldas (MNRJ 40618, MNRJ 4060 holotype, ZUEC 7601–03, ZUEC 7608, ZUEC 7610–16, ZUEC 8288), Sete Lagoas (MNRJ 78640–43).

*Scinax luizotavioi*: **BRAZIL, State of Minas Gerais:** Bom Jardim de Minas (MNRJ 76524), Brumadinho (MNRJ 66656), Catas Altas (MNRJ 4210 holotype, MNRJ 4211–16 paratypes, MNRJ 4516, MNRJ 49684–688, MNRJ 60344), Ewbank da Câmara (MNRJ 47863), Ouro Preto (LZV 626-29, LZV 772-79, LZV 781-83, LZV 788, LZV 789, MCNAM 7717-20, MCNAM 772240, MNRJ 48121), Serra da Moeda (MNRJ 60303), São Gonçalo do Rio Abaixo (MNRJ 4473–508 and MNRJ 4509–16 paratypes, MNRJ 32462–74, MNRJ 36781–804, MNRJ 50620, MNRJ 66229, MNRJ 66229).

*Scinax machadoi*: **BRAZIL, State of Minas Gerais:** Conceição do Mato Dentro (MCNAM3443), Jaboticatubas (MNRJ 17476–77 paratypes, MNRJ 39696, MZUSP 76670–71, MZUSP 76238, ZUEC 1929-34 and ZUEC 1936-37 paratypes, ZUEC 2107, ZUEC 2240, and ZUEC 12730 paratypes), São Gonçalo do Rio Preto (MCNAM11672–83, MCNAM8573–87).

*Scinax muriciensis*: **BRAZIL, State of Alagoas:** Murici (MNRJ 60189 holotype, MNRJ 60187-88 paratypes).

*Scinax obtriangulatus*: **BRAZIL, State of Rio de Janeiro:** Itatiaia (MNRJ 4036 alotype, MNRJ 32517–23, MNRJ 54404–07, MNRJ 54414), Resende (ZUEC 4081-82). **State of São Paulo:** Campos do Jordão (MZUSP 108291, MZUSP 77625, MZUSP 107813, MZUSP 107844–45), São José do Barreiro (MNRJ 75838-40, MNRJ 76669, MNRJ 76671-72).

*Scinax ranki*: **BRAZIL, State of Minas Gerais:** Poços de Caldas (ZUEC 4309, ZUEC 4490, and ZUEC 4535 paratypes, ZUEC 5400-01, ZUEC 5403-04, ZUEC 5406, ZUEC 5028-32, MNRJ 49657, MNRJ 57947).

*Scinax rizibilis*: **BRAZIL, State of Santa Catarina:** Campo Alegre (MZUSP 142260), Rio Vermelho (MZUSP 116281), Santo Amaro da Imperatriz (MNRJ 74432). **State of São Paulo:** Campo Grande da Serra (MZUSP 73660 holotype, MZUSP 73853–55 patatypes), Ibiúna (MZUSP 141693), Piedade (MZUSP 136494), Ribeirão Branco (CFBH 1790, CFBH 1797, CFBH 1802, MNRJ 18224–25, MNRJ 28139, MNRJ 28149); Ribeirão Grande (MNRJ 18225, MNRJ 19360–64, MNRJ

19366, MNRJ 28131–52).

*Scinax skaios*: **BRAZIL, State of Goiás:** Chapada dos Guimarães (MNRJ 46545), Pirenópolis (MNRJ 72264), Santa Rita do Novo Destino (MNRJ 54471 holotype, MNRJ 54472–74 paratypes).

*Scinax skuki*: **BRAZIL, State of Alagoas:** Maceió, (MNRJ 70000 holotype, MNRJ 70001-70010, MNRJ 70011 paratopotypes.

*Scinax strigilattus*: **BRAZIL, State of Bahia:** Amargosa (MNRJ 55960), Ataca (MNRJ 44987–88), Belmonte (MNRJ 38096, MNRJ 38099), Ibirapitanga (MNRJ 38095–98 neotype, MNRJ 38093–94), Ilhéus (MNRJ 48644), Itamaraju (MNRJ 46806), Itapebe (MNRJ 38101–03), Jussari (MNRJ 38980, MNRJ 44946–949).

*Scinax trapicheiroi*: **BRAZIL, State of Rio de Janeiro:** Bom Jesus do Itabapoana (MNRJ 36473–74), Ilha Grande (MNRJ 3920–03, MNRJ 47975, MNRJ 51517, MNRJ 64157–58), Maricá (MNRJ 73533–40) MNRJ 76194–99), Niterói (MNRJ 59550–52, MNRJ 59782–88), Petrópolis (MNRJ 34093–100, MNRJ 54763–64), Rio de Janeiro (MNRJ 3615–17, MNRJ 3618–625, MNRJ 27583, MNRJ 27697 704, MNRJ 28411, MNRJ 34884, MNRJ 35862, MNRJ 48674–83, MNRJ 74622), Saquarema (MNRJ 74766, MNRJ 75911-12, MNRJ 76762, MNRJ 76766, MNRJ 79572–75), Valença (MNRJ 47619–20).

*Scinax tripui*: **BRAZIL, State of Minas Gerais:** Ouro Preto (MNRJ 42890 holotype, MNRJ 48743–48745, MNRJ 48762–48767, and MCNAM 7741–7761 paratypes), Simonésia (MNRJ 21507-08), Itabira (MNRJ 30472-74).