

# A new species of small *Scinax* Wagler, 1830 (Amphibia, Anura, Hylidae) of the *Scinax ruber* clade from Cerrado of central Brazil

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**Abstract.** A new species of the *Scinax ruber* clade from the Brazilian Cerrado Domain similar to *Scinax fuscomarginatus*, *S. parkeri*, *S. trilineatus* and *S. wandae* is described. It is characterized by small snout-vent length, body slender, head approximately as long as wide and slightly wider than body, subovoid snout in dorsal view, protruding snout in lateral view, a developed supratympanic fold, absence of flash colour on the posterior surfaces of thighs, hidden portions of shanks and groin, and large vocal sac. *Scinax lutzorum* sp. nov. differs from *S. fuscomarginatus*, *S. parkeri* and *S. trilineatus* by its slightly larger SVL; from *Scinax fuscomarginatus* and *S. parkeri* it differs by its more slender body; from *Scinax fuscomarginatus* and *S. trilineatus* the new species differs by its wider head and more protruding eyes; and it differs from *Scinax parkeri* and *S. wandae* by its shorter snout. Comments on the type specimens of *S. fuscomarginatus* are presented and a lectotype is designated for this species.

**Keywords:** lectotype, new species, *Scinax fuscomarginatus*, *Scinax lutzorum*.

## Introduction

The hylid frog genus *Scinax* Wagler, 1830 currently comprises 97 recognized species distributed from eastern and southern Mexico to Argentina and Uruguay, Trinidad and Tobago, and St. Lucia (Frost, 2009). The majority of the species occur in tropical and subtropical areas, with a high diversification in the Atlantic Forest of South-eastern Brazil (Pombal, Haddad and Kasahara, 1995; Faivovich, 2002; Frost, 2009). Faivovich et al. (2005) found two monophyletic groups in this genus, the *Scinax catharinae* and *S. ruber* clades, recognizing two species groups for the *Scinax ruber* clade – the *Scinax rostratus* and *Scinax uruguayus* groups – and also a large number of species unassigned to any species group.

Fifteen species of the *Scinax ruber* clade excluding the *S. rostratus* and *S. uruguayus* species group (sensu Faivovich et al., 2005) are recorded for Cerrado-Caatinga-Chaco region (see Duellman, 1999): *S. acuminatus* (Cope,

1862), *S. cabralensis* Drummond, Baêta and Pires, 2007, *S. camposseabrai* (Bokermann, 1968), *Scinax castroviejoi* De La Riva, 1993, *S. curicica* Pugliese, Pombal and Sazima, 2004, *S. eurydice* (Bokermann, 1968), *S. fuscomarginatus* (A. Lutz, 1925), *S. fuscovarius* (A. Lutz, 1925), *S. maracaya* (Cardoso and Sazima, 1980), *S. nasicus* (Cope, 1862), *S. pachyrcrus* (Miranda-Ribeiro, 1937), *S. parkeri* (Gauge, 1929), *S. rogerioi* Pugliese, Baêta and Pombal, 2009, *S. squalirostris* (A. Lutz, 1925) and *S. x-signatus* (Spix, 1824).

Herein, we describe a new species from the Brazilian Cerrado Domain (see Ab'Saber, 1977 for description of this Domain) of the *Scinax ruber* clade, similar to *Scinax fuscomarginatus* and *S. parkeri*. Also, we make comments on the type specimens of *S. fuscomarginatus*.

## Materials and methods

We compared the new species with the species of the *Scinax ruber* clade excluding the *S. rostratus* and *S. uruguayus* species group (sensu Faivovich et al., 2005) recorded for Cerrado-Caatinga-Chaco region (see Duellman, 1999), and with four species morphologically similar to it, that belonged to the former *Scinax staufferi* species group (sensu Duellman and Wiens, 1992), all of them now recognized in *S. ruber* clade (sensu Faivovich et al., 2005) unassigned to any species group. We did not compare the new species to

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*Scinax x-signatus* for the reasons explained in Pombal, Haddad and Kasahara (1995) and in Pugliese, Baêta and Pombal (2009).

The specimens examined are housed in the following collections: AL-MN (Adolpho Lutz collection, Museu Nacional, Rio de Janeiro, Brazil), CFBH (Célio F. B. Haddad collection, Departamento de Zoologia, Universidade Estadual Paulista, Rio Claro, Brazil), LZV (Laboratório de Zoologia dos Vertebrados, Universidade Federal de Ouro Preto, Minas Gerais, Brazil), MACN (Museo Argentino de Ciencias Naturales “Bernadino Rivadavia”, Buenos Aires, Argentina), MNRJ (Museu Nacional, Rio de Janeiro, Brazil), MZUSP (Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil), USNM (National Museum of Natural History, Smithsonian Institution, Washington, United States of America), ZUEC (Museu de Zoologia Prof. Dr. Adão José Cardoso, Universidade Estadual de Campinas, Campinas, Brazil), ZUFG (Coleção de Zoologia, Universidade Federal de Goiás, Goiânia, Brazil) and ZUFRJ (Coleção de Anfíbios, Departamento de Zoologia, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil). Specimens examined are listed in the Appendix.

Specimens were fixed in 10% formalin and stored in 70% ethanol. The measurements of adults were taken with an ocular micrometer in a Zeiss stereomicroscope are: eye to the tip of snout distance (ESD), eye to nostril distance (END), inter-nostrils distance (IND), and tympanum diameter (TD). The remaining measurements, snout-vent length (SVL), head length (HL), head width (HW), thigh length (THL), tibio-fibula length (TBL), tarsus length (TL), foot length (FL), arm length (AL), forearm length (FAL), hand length (HAL), interorbital distance (IOD), and eye diameter (ED), were taken with a caliper with 0.2 mm of precision. Drawings of the holotype were made using a Zeiss stereomicroscope coupled to a camera lucida. All measurements are in millimetres and follow Cei (1980) and Duellman (2001). Webbing formula notation follows Savage and Heyer (1997). Snout standards (in dorsal view and in profile) follows Heyer et al. (1990).

## Results

### *Scinax lutzorum* sp. nov. (figs 1 and 2)

#### Holotype

MNRJ 51438, adult male, from the Municipality of Aragominas (7°09'35"S; 48°31'39"W), State of Tocantins, Brazil, collected by P. Faforelli and L. Machado on 26-27 February 2008.

#### Paratype

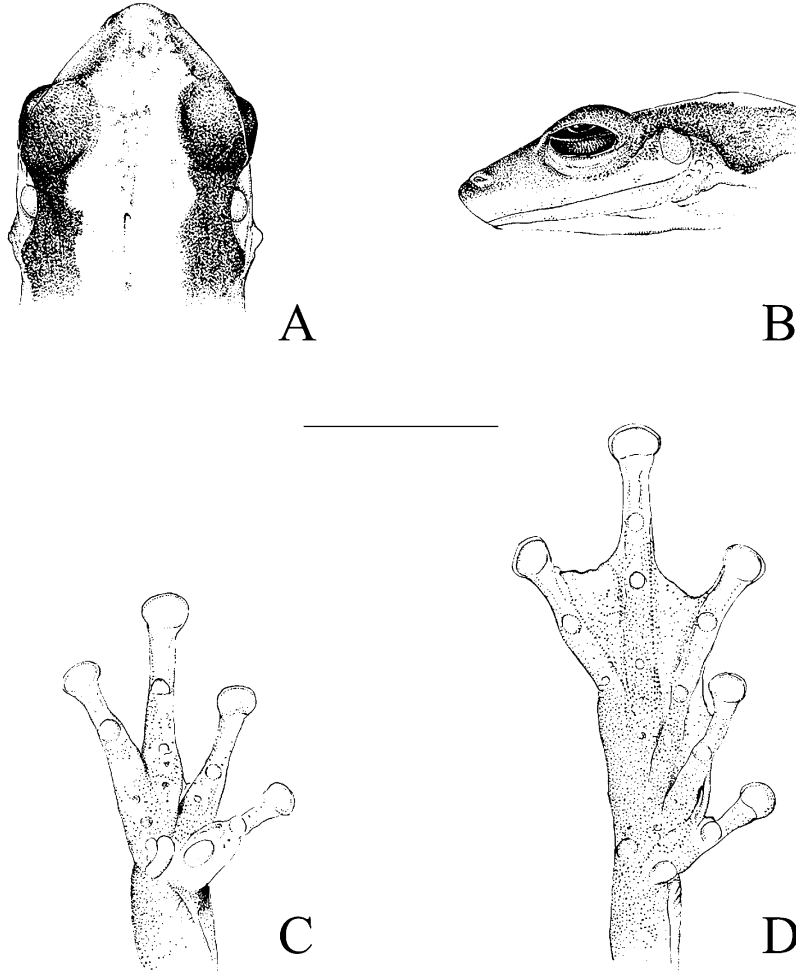
MNRJ 51439, adult male collected with the holotype.

#### Diagnosis

A small-sized species (males 23.7 mm and 25 mm SVL) belonging to the *Scinax ruber* clade (sensu Faivovich et al., 2005), characterized by body slender, head approximately as long as wide and slightly wider than body, sub-ovoid snout in dorsal view, protruding snout in lateral view, a developed supratympanic fold, absence of yellow flash colour on the posterior surfaces of thighs, hidden portions of shanks and groin, and large vocal sac.



**Figure 1.** *Scinax lutzorum* sp. nov., holotype (MNRJ 51438, SVL 25.0 mm), dorsal (A) and ventral (B) views.



**Figure 2.** *Scinax lutzorum* sp. nov., holotype (MNRJ 51438). (A) Dorsal and (B) lateral views of head; (C) hand and (D) foot. Scale = 5 mm.

#### *Comparisons with other species*

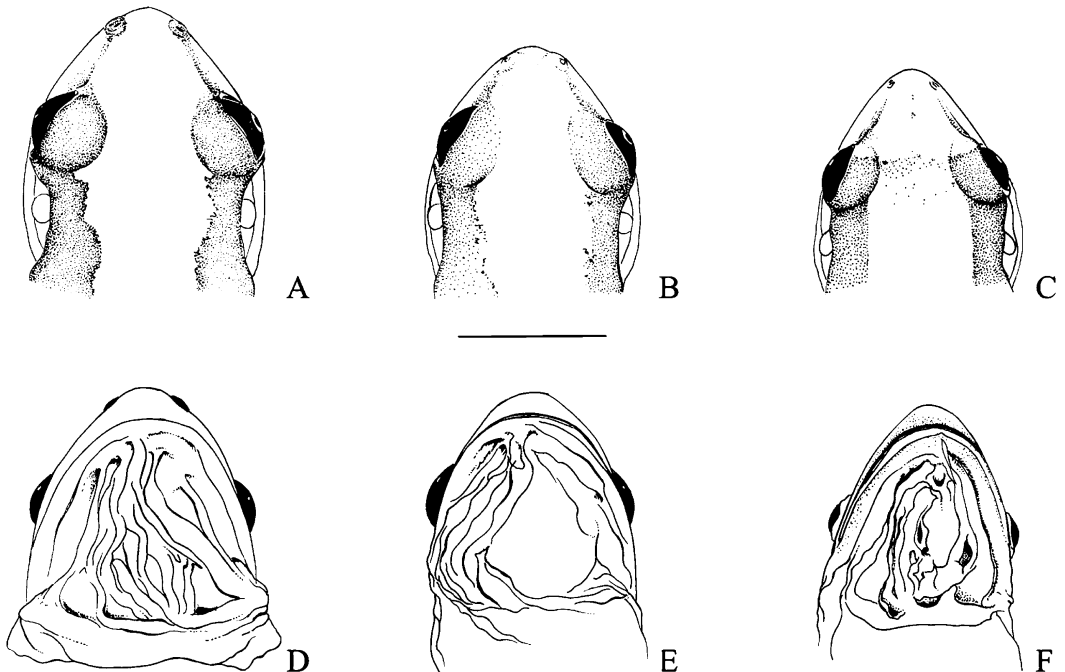
*Scinax lutzorum* sp. nov. (SVL 23.7 and 25 mm) promptly differs from *S. acuminatus* (SVL 39.0-45.0 mm; B. Lutz, 1973), *S. camposseabrai* (SVL 28.9-33.5 mm; Caramaschi and Cardoso, 2006), *S. castroviejoii* (SVL 41.9 mm; De la Riva, 1993); *S. eurydice* (SVL 30.0-33 mm; Bokermann, 1968), *S. fuscovarius* (SVL 41.0-44.0 mm; Cei, 1980) and *S. maracaya* (SVL 26.7-28.0 mm; Cardoso and Sazima, 1980) by its smaller size in males. From *S. cabralensis*, *S. lutzorum* differs by its more slender body, narrower head (SVL/HW = 3.4 in holotype and in paratype), dorsum smooth and with two

dorsolateral dark brown stripes (robust body, SVL/HW = 2.8,  $n = 3$  males, granulated skin; and spotted pattern on the dorsum in *Scinax cabralensis*; Drummond, Baêta and Pires, 2007). The new species can be distinguished from *S. curicica* and *S. rogerioi* by its slender body, bigger vocal sac, absence of an interorbital inverted triangular blotch, and uniform colour on the thighs (with yellow flash colour in *S. curicica* and stripes in *S. rogerioi*; Pugliese, Pombal and Sazima, 2004; Pugliese, Baêta and Pombal, 2009). *Scinax lutzorum* differs from *S. nasicus* by its smaller size (SVL 27.0-35 mm in *S. nasicus*; Cei, 1980), slender body, snout subovoid in dorsal view, big-

ger vocal sac, and uniform colour on the thighs (subelliptical snout and with yellow flash colour in *S. nasicus*). The new species differs from *S. pachycrus* by its slender body, bigger vocal sac, smaller tibio-fibula length proportionally to snout-vent length ( $SVL/TBL = 1.9$  in *Scinax lutzorum* sp. nov., and  $SVL/TBL = 1.6$  to  $1.8$ ,  $n = 9$  in *S. pachycrus*), and dorsum with two dorsolateral dark brown stripes (black subcanthal stripe from behind nostril to sacral region in *S. pachycrus*; B. Lutz, 1973).

The most morphologically similar species to *Scinax lutzorum* sp. nov. are *S. fuscomarginatus*, *S. parkeri*, *S. trilineatus* and *S. wandae*. The new species can be distinguished from *S. fuscomarginatus* by its more slender body, slightly larger SVL ( $SVL = 16.7$ - $22.1$  mm,  $n = 17$  males in *S. fuscomarginatus*), in general wider head (fig. 3) in *Scinax lutzorum* sp. nov. and more protruding eyes (fig. 3), developed supratympanic fold (indistinct or slightly-developed supratympanic fold in *S. fuscomarginatus*), in general the snout is longer in

*Scinax lutzorum* sp. nov., but values overlap with some specimens of *S. fuscomarginatus* ( $ESD/HL = 0.4$  and  $0.5$  in *Scinax lutzorum* sp. nov. and  $ESD/HL = 0.2$  to  $0.5$ ,  $n = 17$  males in *S. fuscomarginatus*), and by toe I only fringed, with not webbing (webbing on third phalange of toe I in *S. fuscomarginatus*). *Scinax lutzorum* sp. nov. differs from *S. parkeri* by its slightly larger SVL in males ( $SVL = 21.0$ - $22.6$  mm in *S. parkeri*,  $n = 3$  males), dorsum smooth (dorsum slightly granular in *S. parkeri*), snout shorter ( $ESD/HL = 0.43$  and  $0.51$  in *Scinax lutzorum*;  $0.8$ - $1.0$  in *S. parkeri*), and body more slender. *Scinax lutzorum* differs from *S. trilineatus* by its slightly larger SVL ( $SVL = 19.7$ - $22$  mm,  $n = 6$  males, in *S. trilineatus*), wider head and more protruding eyes (fig. 3), and slightly larger outer metatarsal tubercle (smaller or indistinct outer metatarsal tubercle in *S. trilineatus*). From *S. wandae* it differs by its snout less protruding in profile, shorter snout, and absence of interocular blotch (present in *S. wandae*; Pyburn and Fouquette, 1971).



**Figure 3.** Dorsal and ventral views of the head. (A and D) *Scinax lutzorum* sp. nov. (holotype, MNRJ 51438), (B and E) *S. trilineatus* (MNRJ 60202) and (C and F) *S. fuscomarginatus* (MNRJ 13288).

*Description of holotype*

Small-sized species; body slender; head approximately as long as wide and slightly wider than body; snout protruding in lateral view and sub-ovoid in dorsal view; nostrils directed dorso-laterally, nearly elliptical, located on a small elevation; *canthus rostralis* almost straight, slightly marked; loreal region broad and nearly concave; eye large, protruding; tympanum visible, small, nearly rounded, slightly larger than the adhesive disc of finger III; developed supratympanic fold; vocal sac single, externally expanded, very large, and subgular; vocal slits large, laterally on mouth floor; tongue medium-sized, ovoid, weakly notched posteriorly, free behind; two patches of seven (left patch) or eight teeth each one, patch composed by two rows, the anterior with two or three teeth and the posterior with five teeth; patches of vomerine teeth narrowly separated, between choanae; choanae large-sized, oval. Arm slender, forearm moderately robust; fingers moderately slender, medium-sized; fingers length  $I < II < IV < III$ ; nuptial pad, with a white patch of acini on inner surface of Finger I; finger discs medium-sized, almost elliptical; disc of Finger I smaller than those of the other fingers; inner metacarpal tubercle moderately developed, single, and elliptical; outer metacarpal tubercle large, divided, with internal more elongated; subarticular and supernumerary tubercles single, small and rounded; webbing absent between Finger I and II and very reduced between the other fingers. Legs moderately slender; toe discs medium-sized, almost rounded in the Fingers I and II, elliptical in the others; inner metatarsal tubercle medium-sized, single, almost ovoid; outer metatarsal tubercle small, single, protruding; toes long and slender; toes length  $I < II < III \approx V < IV$ ; subarticular and supernumerary tubercles single, small and rounded. Webbing formula  $I2^+ - 3III^{1/2} - 2^{1/2}III^{1/2} - 2^{1/2}IV2^+ - 1^{1/3}V$ ; when free, toes are fringed, except on inner side of the Toe I and outer side of the Toe V. Skin on upper, lateral and under surfaces smooth; chest and belly

granular. Posterior surfaces of the thighs, hidden portions of shanks and groin uniform.

*Colour in preservative of the holotype*

Dorsum light brown with two dorsolateral dark brown stripes from posterior corner of the eye to the inguinal region; on the flanks these stripes are irregular; a thin dorsal dark brown line from interorbital space to sacral region; a thin dark brown line on the *canthus rostralis*; a cream stripe on the upper lip, from snout tip and extending onto the flank to groin; upper surfaces of leg with two transversal dark brown stripes; dorsal surface of arm light brown; forearm with two dark brown transversal stripes; dorsal and ventral surfaces of hand and foot light brown with dark brown dots marginally; throat, chest, and belly light cream.

*Measurements (in mm)*

Holotype (paratype): SVL 25.0 (23.7); HL 8.1 (8.1); HW 7.3 (7.0); ED 3.1 (2.5); IOD 3.0 (2.4); ESD 3.8 (3.5); END 2.2 (2.3); IND 1.7 (1.7); TD 1.3 (1.1); AL 4.4 (4.1); FAL 4.6 (4.4); HAL 7.0 (6.3); THL 10.4 (9.8); TBL 12.9 (12.3); TL 10.7 (10.3); FL 17.2 (16.2).

*Variation*

The tympanum of the paratype has the same size of the adhesive disc of Finger III and the tympanum of the holotype is slightly bigger than the adhesive disc of Finger III. Paratype has two longitudinal and marginal pale brown stripes on the dorsum, and paratype colouration is paler than that of holotype, overall. Moreover, paratype nostrils are upon a smaller elevation than that of the holotype.

*Distribution and habitat*

It is known only from the type-locality in Aragominas Municipality, Tocantins State, Brazil, an area inside the Cerrado Biome. The Cerrado Biome spreads over about 2 million km<sup>2</sup> of Brazilian territory, plus small areas

in eastern Bolivia and north-western Paraguay. The distribution of the Cerrado is coincident with the plateau of central Brazil, extending from the southern borders of the Amazonian forest to areas in the southern States of São Paulo and Paraná (Oliveira-Filho and Ratter, 2002). Cerrado, Caatinga and Chaco Biomes form a continuous of open formations subhumid to semiarid that extends through the interior of South America, from north-eastern Brazil to northern Argentina (Duellman, 1999).

### Etymology

The specific name honours Adolpho Lutz (1855-1940) and his daughter Bertha Lutz (1894-1976). Adolpho Lutz was a health scientist and naturalist. He identified numerous tropical diseases and was responsible for their eradication or control. Despite opposition from the medical community, he prescribed methods of control for yellow fever and even had shown that the disease was transmitted by mosquito using himself as a subject, and as herpetologist, he is remembered by his work on taxonomy and life history of frogs (Adler, 1989), and together with Miranda-Ribeiro is a Brazilian pioneer in the study of amphibians (Pombal and Caramaschi, 2007). Bertha Lutz was one of the most important herpetologists. Moreover, she was an important feminist. She co-founded the first Women Rights Movement in Brazil, which indicated her to be part of the committee to draft the new Brazilian Constitution in 1932 that finally resulted in equal suffrage for women in 1933. She was delegate to the San Francisco meeting at which the United Nations was founded in 1945 and, she was the Brazilian representative in the Inter-American Commission for Women held in Washington in 1974. Bertha Lutz started her herpetological career as assistant of her father. She worked with systematic, life history, development and behaviour; her principal publication is the "Brazilian Species of *Hyla*" (Adler, 1989).

### Remarks

Through its geographical distribution, *Scinax fuscomarginatus* has a large variation in snout shape that should be mucronate, nearly rounded, rounded, subelliptical, subovoid, pointed, or truncate. The snouts in profile can be acute, strongly acute, protruding or rounded. Vocal sac can be small, medium or very large. The inner metatarsal tubercle varies from indistinct to large, as well as the outer metatarsal tubercle, which varies from indistinct to large. This variation suggests that *Scinax fuscomarginatus*, as now recognized, is a species complex.

Adolpho Lutz (1925) did not designate type specimens for *Hyla fuscomarginata* (= *Scinax fuscomarginatus*) in the original description, which was an usual procedure at that time. After that, Cochran (1961) and B. Lutz (1973) cited the specimens housed in USNM (USNM 96964; called cotype) and MNRJ (AL-MN 845-846) as syntypes. In the catalogue of Adolpho Lutz collection in the Museu Nacional, the following specimens are recorded as syntypes: AL-MN 845-50. The specimens AL-MN 848-50 are poorly preserved (two specimens are dissected) and a specific identification of AL-MN 850 is not possible. The specimen AL-MN 847 is very poorly preserved (dehydrated and broken in three parts) and is not possible any specific identification. The other two specimens AL-MN 845 and 846 are in better preserved conditions; the AL-MN 846 is probably *Dendropsophus rubicundulus*. So, here we designate the AL-MN 845 as a lectotype of *Hyla fuscomarginata*. All others specimens, including USNM 96964 are paralectotypes.

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## Appendix: Comparative material examined

*Scinax acuminatus*: **BRAZIL**: MATO GROSSO: Cáceres MNRJ 2370; Cuiabá MNRJ 39698; **PARAGUAY**: Ciudad de Asunción MNRJ 39903; no data MNRJ 40352.

*Scinax cabralensis*: **BRAZIL**: MINAS GERAIS: Joaquim Felício MNRJ 42883 (holotype), MNRJ 42884-88 (paratypes); Buenópolis MNRJ 42886 (paratype).

*Scinax camposseabrai*: **BRAZIL**: BAHIA: Maracás MNRJ 4048; MINAS GERAIS: Matias Cardoso MNRJ 21739-42, 36258.

*Scinax cardosoi*: **BRAZIL**: RIO DE JANEIRO: Teresópolis ZUF RJ 4125-26 (paratypes).

*Scinax curíca*: **BRAZIL**: MINAS GERAIS: Catas Altas, Serra do Caraça MNRJ 55010-11; Diamantina MNRJ 39552-55; Mariana LZV 125A-129A; Ouro Branco LZV 477A; Ouro Preto MNRJ 41693-701; Santana do Riacho MNRJ 26327 (holotype), MNRJ 26321-26, 26339-40 (paratypes), MNRJ 38733-34.

*Scinax eurydice*: **BRAZIL**: BAHIA: Maracás MNRJ 4050 (holotype), MZUSP 59912-14 (topotypes); São José MZUSP 63543.

*Scinax fuscomarginatus*: **BRAZIL**: BAHIA: Barreiras MNRJ 905; Barreirinha MNRJ 900-901; Bom Jesus da Lapa MNRJ 902-03, 30485; Caravelas MNRJ 34979-81; Entre Rios MNRJ 37911; Salvador 3240-43; DISTRITO FEDERAL: Planaltina MNRJ 18328-29; GOIÁS: Alto

Paraíso de Goiás MNRJ 27788-90; Aporé MNRJ 41473-78; Goiânia MNRJ 36026-30; Mambáí MNRJ 27811-13; Mossamedes MNRJ 32845-52, 53381; Pirenópolis MNRJ 51214-27; Pontalina MNRJ 32399-401; Rio Verde MNRJ 51491; São João da Aliança MNRJ 27769-71; Serra da Mesa MNRJ 36024-25; Silvânia MNRJ 18219-22; MARANHÃO: São Luís MNRJ 53222; MATO GROSSO: Dourados MNRJ 50854-55; Itigina MNRJ 30994, 30999-02; MATO GROSSO DO SUL: Represa do Rio Pardo MNRJ 40161-66; MINAS GERAIS: Belo Horizonte AL-MN 845 (lectotype), 58020; Barão de Cocais MNRJ 21326-30; João Pinheiro MNRJ 38831-33, 50697-02, 57992; Lagoa Santa MNRJ 3082, 13288-96, 33672; Patos de Minas MNRJ 57003-04; Pirapora MNRJ 894, 5847-54; Santana do Riacho MNRJ 26330-38, 38716-23; São Gonçalo do Rio Abaixo MNRJ 58905-06; Sindrolândia MNRJ 58021-29; Uberaba MNRJ 36530; Vespasiano MNRJ 58050-52; PARAÍBA: Mamanguape MNRJ 18042-47; RIO DE JANEIRO: Itatiaia MNRJ 14545-47, 60150-57; Niterói MNRJ 2139; RONDÔNIA: Porto Velho MNRJ 3963 (paratype of *Hyla madeirae*); SÃO PAULO: Mariléia MNRJ 55186-87; Nova Manchester MNRJ 895; Piraju MNRJ 19408; TOCANTINS: Goiatins MNRJ 43921; Porto Alegre do Tocantis MNRJ 41472.

*Scinax fuscovarius*: BRAZIL: MATO GROSSO: São Luiz de Cárceres MNRJ 0229, 5221 (lectotype and paralectotype, respectively, of *Hyla megapodia*); MINAS GERAIS: Juiz de Fora AL-MN 76 (holotype), MNRJ 32063; Esmeraldas ZUEC 4025; Serra da Canastra ZUEC 4453; Serra do Cipó ZUEC 3900, 7508; Viçosa ZUEC 6156; SÃO PAULO: Botucatu ZUEC 1227-30; Campinas ZUEC 7705-08; Santo André ZUEC 6024; São Paulo ZUEC 293, 299, 302; Ubatuba ZUEC 4172, 5879-83, 6867-88.

*Scinax maracaya*: BRAZIL: MINAS GERAIS: Alpinópolis MNRJ 4119 (holotype), ZUEC 4099 (paratype), ZUEC

4132-35, 8224-25, 8300-02; Nova Lima ZUEC 4100-01; Água Limpa ZUEC 7931-33.

*Scinax nasicus*: ARGENTINA: CORRIENTES: MNRJ 39991-92; Pontaporã, Taquaripi, Distrito de Inhuverá: MNRJ 2219.

*Scinax pachycrus*: BRAZIL: BAHIA: Caetité MNRJ 25060-67; Itacaré MNRJ 29407-08; Maracás MNRJ 52481-86; PARAÍBA: Maturéia MNRJ 54460.

*Scinax parkeri*: BOLIVIA: SANTA CRUZ DE LA SIERRA: Nueva Moka MACN 14409-12.

*Scinax rogerioi*: BRAZIL: GOIÁS: Alto Paraíso de Goiás MNRJ 27759 (holotype), 27754-58 (paratypes), 27760-61 (paratypes); MINAS GERAIS: Ouro Preto MNRJ 41703-04, 41707, 41710, 46700, 46703-04.

*Scinax squalirostris*: ARGENTINA: CORRIENTES: Galarza MNRJ 39989; Mburucuyá, Parque Nacional Mburucuyá MNRJ 39990; BRAZIL: MINAS GERAIS: Lima Duarte MNRJ 46439-43; Santana do Riacho MNRJ 45341-44; SÃO PAULO: São José do Barreiro MNRJ 56529.

*Scinax staufferi*: HONDURAS: OLANCHO: Salamá MNRJ 58989-90; NICARAGUA: REGIÓN AUTÓNOMA DEL ATLÁNTICO NORTE: Gracias a Dios Cape, Caño Awawás Stream MNRJ 58991-92.

*Scinax trilineatus*: BRAZIL: PARÁ: Belém MNRJ 60201-06.

*Scinax* aff. *trilineatus*: BRAZIL: PARÁ: Belém MNRJ 60207-10.

*Scinax wandae*: COLOMBIA: META: Villavicencio USNM 151965-66 (topotypes).