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A NEW SPECIES OF *BOKERMANNOHYLA* FROM THE ESPINHAÇO RANGE, STATE OF MINAS GERAIS, SOUTHEASTERN BRAZIL

FELIPE SÁ FORTES LEITE[1,3], TIAGO LEITE PEZZUTI[1], AND LEANDRO DE OLIVEIRA DRUMMOND[2]

[1]*Laboratório de Herpetologia, Instituto de Ciências Biológicas, Departamento de Zoologia, Universidade Federal de Minas Gerais, Avenida Antônio Carlos, 6627 Pampulha, 31270-901 Belo Horizonte, Minas Gerais, Brazil*
[2]*Laboratório de Zoologia dos Vertebrados, Instituto de Ciências Exatas e Biológicas, Universidade Federal de Ouro Preto, Campus Morro do Cruzeiro, 35400-000 Ouro Preto, Minas Gerais, Brazil*

ABSTRACT: A new species of the *Bokermannohyla pseudopseudis* group similar to *B. alvarengai* and *B. itapoty* is described from Serra do Cabral, Espinhaço Range, Minas Gerais, southeastern Brazil. It is diagnosed by having a medium size (male 47.3–54.8 mm; female 44.5–48.6 mm); short snout, truncate in lateral and dorsal views; head 1.01–1.07 times wider than long; tympanum 0.08–0.09 times snout–vent length (SVL); hypertrophied forearm; well-developed prepollex; nuptial pad small, with two separate areas covered with small keratinized spiculae, on medial and lateral edge of the base of the prepollex; dorsal color pattern composed of dark gray blotches of irregular shape on a light gray background, without a central light spot, resembling lichens incrusted on rocks; dark gray perpendicular bars covering the whole dorsal surface of thighs, rarely branched, without light spots, highly contrasted with the background color; and the lack of a white stripe over the vent.

Key words: Amphibia; *Bokermannohyla pseudopseudis* species group; *Bokermannohyla sagarana*; Endemism; New species; Taxonomy

ON THE BASIS of a phylogenetic analysis based mostly on molecular data, Faivovich et al. (2005) erected *Bokermannohyla* to accommodate the former *Hyla circumdata*, *H. claresignata*, *H. martinsi*, and *H. pseudopseudis* species groups. The genus occurs only in the Brazilian Atlantic Forest, Cerrado and Caatinga biomes and currently comprises 29 species. The *Bokermannohyla pseudopseudis* species group was first suggested by Pombal and Caramaschi (1995) to allocate *B. pseudopseudis* and *B. saxicola*. It was formerly recognized by Caramaschi et al. (2001), in which *B. ibitiguara* was removed from the *B. circumdata* species group to the *B. pseudopseudis* species group. Faivovich et al. (2005) recognized a *B. pseudopseudis* species group including *B. alvarengai*, *B. ibitiguara*, *B. pseudopseudis*, and *B. saxicola*. Subsequently, Lugli and Haddad (2006*a*) proposed the *B. alvarengai* species group to allocate *B. alvarengai* and *B. itapoty*, based on their similar morphological and behavioral characteristics. Faivovich et al. (2009) argued that as there are no known synapomorphies for the remaining species of the *B. pseudopseudis* group (*B. ibitiguara*, *B. oxente*, *B. pseudopseudis*, and *B. saxicola*) and that a *B. alvarengai* species group has the potential of making the *B. pseudopseudis* species group paraphyletic. Therefore, we prefer to recognize the *B. pseudopseudis* species group as proposed by Faivovich et al. (2009) containing all species included by Faivovich et al. (2005) and Lugli and Haddad (2006*b*) plus *B. itapoty*.

The *B. pseudopseudis* species group is distributed in mountains of the Espinhaço Range in the States of Minas Gerais (*B. alvarengai* and *B. saxicola*) and Bahia (*B. itapoty* and *B. oxente*), Serra da Canastra in the State of Minas Gerais (*B. ibitiguara*), and Planalto Central in the State of Goiás and Federal District (Brasília; *B. pseudopseudis*), Brazil. During fieldwork in the Serra do Cabral, a regional designation of the Espinhaço Range, State of Minas Gerais, southeastern Brazil, we collected specimens of a new species of *Bokermannohyla* similar to *B. alvarengai* and *B. itapoty*. The new species is described herein.

MATERIALS AND METHODS

Specimens used in the description or examined for comparisons are deposited in the following Brazilian institutions: UFMG (Universidade Federal de Minas Gerais, Belo Horizonte, Minas Gerais), MZUFV (Museu

[3] CORRESPONDENCE: e-mail, fsfleite@gmail.com

de História Natural João Moojen, Universidade Federal de Viçosa, Viçosa, Minas Gerais), LZV (Laboratório de Zoologia dos Vertebrados, Universidade Federal de Ouro Preto, Ouro Preto, Minas Gerais), and MNRJ (Museu Nacional, Rio de Janeiro, Rio de Janeiro). Webbing formula notation follows Savage and Heyer (1967), as modified by Myers and Duellman (1982). Measurements of adult specimens were taken with a Mytutoyo digital caliper to the nearest 0.01 mm, and follow Duellman (1970), with the exception of thigh length. Abbreviations used in the measurements are SVL (snout–vent length), HL (head length), HW (head width), ED (eye diameter), TD (tympanum diameter), IOD (interorbital distance), END (eye–nostril distance), IND (internarial distance), THL (thigh length), TBL (tibia length), and FL (foot length, excluding tarsus length, following Duellman, 1970). Characters used for species comparisons were taken from Bokermann (1956), Lugli and Haddad (2006*a*), Sazima and Bokermann (1977) for *B. alvarengai*; Bokermann (1956), Lugli and Haddad (2006*b*), Pombal and Caramaschi (1995) for *B. saxicola*; Lugli and Haddad (2006*b*), Pombal and Caramaschi (1995) for *B. pseudopseudis*; Cardoso (1983), Lugli and Haddad (2006*b*) for *B. ibitiguara*; Lugli and Haddad (2006*a*) for *B. itapoty*; Lugli and Haddad (2006*b*) for *B. oxente*, and from specimens listed in Appendix I. Morphometric features from literature were often not available as individual measurements; sometimes showing only average values, a range or a nonspecific sample size (n). In these cases measurements were presented as range (min–max) and ratios were calculated by dividing average values and therefore they are shown without range or sample size. Sex was determined by presence or absence of secondary sexual characters (forearm hypertrophy, prepollical spine, vocal slits). The datum used for geographic coordinates was WGS84.

Species Description

Bokermannohyla **sagarana** *sp. nov.*
(Figs. 1–3, Table 1)

Holotype.—UFMG 4246, adult male, 16 December 2007, Serra do Cabral (17°40′37,4″S, 44°20′20,4″W, 1185 m above sea level), Municipality of Joaquim Felício, State of Minas Gerais, Brazil, T. L. Pezzuti and L. O. Drummond (Figs. 1, 2, 4B).

Paratopotypes.—UFMG 4238, adult male, 17°42′15.2″S, 44°17′50.3″W, 1180 m above sea level (Fig. 3). UFMG 4240–41, adult females; UFMG 4239; 4242–4245, adult males, 17°41′23″S, 44°17′13.1″W, 1185 m elevation. All collected by T. L. Pezzuti and L. O. Drummond on 16 December 2007.

Paratypes.—UFMG8614–19, adult males, 08 December 2010, 17°53′30.6″S, 44°17′50″W, 1225 m above sea level; UFMG8620–21, adult males, 10 December 2010, 17°51′46.8″S, 44°17′49.2″W, 1222 m above sea level. All collected at Fazenda Bimbarra, Serra do Cabral, Municipality of Buenópolis, State of Minas Gerais, Brazil, L. O. Drummond and A. J. R. Cruz.

Diagnosis.—The dorsal color pattern composed by dark gray blotches in a light gray background, resembling to lichens encrusted on rocks, distinguishes *B. sagarana* (Fig. 1A) from all species of the *B. circumdata* group, which have brown dorsum, and from all species of the *B. claresignata* group, which have yellow to beige dorsum. The absence of a ventral humeral crest developed as a spine in males promptly distinguishes *B. sagarana* from all species of the *B. martinsi* group.

Individuals of *B. sagarana* (male SVL 47.3–54.8 mm, $n = 7$; female SVL 44.5–48.6 mm, $n = 2$; Table 1) are much smaller than *B. alvarengai* (male SVL 60.7–140.9 mm; female SVL 78–87.6 mm); males of *B. sagarana* are larger than males of *B. itapoty* (SVL 37.8–46.3 mm, $n = 12$) and *B. oxente* (SVL 38.8–43.4 mm, $n = 14$). *Bokermannohyla sagarana* have heads 1.01–1.07 ($n = 9$) times wider than long (Table 1), as the remaining species of the *B. pseudopseudis* group, with the exception of *B. oxente* and *B. saxicola*, in which the heads are as long as wide (1.0 times wider than long; based on the average measures of 14 male specimens; Lugli and Haddad, 2006*b*) and 1.14 longer than wide (based on average measures of 13 male specimens; Pombal and Caramaschi, 1995), respectively. The new species has a larger tympanum (TD/SVL 0.08–0.09; $n = 9$) than *B. itapoty* (TD/SVL 0.06; based on the average measures of 12 male specimens; Lugli and Haddad, 2006*a*)

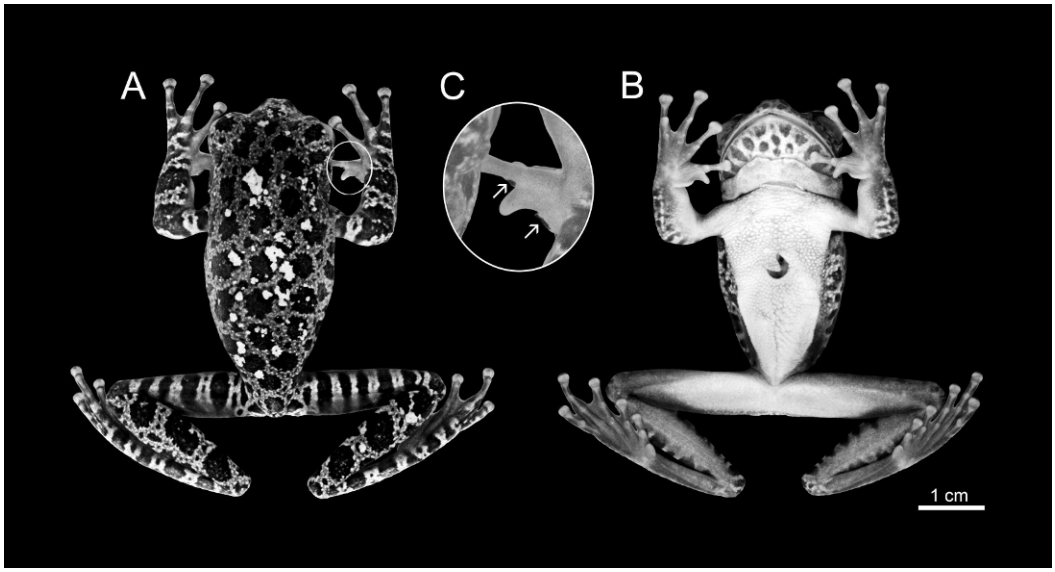

FIG. 1.—Dorsal (A), ventral (B), and close-up dorsal (C) view of the right hand of the holotype of *Bokermannohyla sagarana* sp. nov., UFMG 4246; arrows indicate the nuptial pad with two separate areas covered with small keratinized spiculae, on medial and lateral edge of the base of the prepollex. Adult male from Serra do Cabral, Municipality of Joaquim Felício, State of Minas Gerais, Brazil; SVL 47.4 mm.

and *B. saxicola* (TD/SVL 0.05; based on the average measures of 13 male specimens; Pombal and Caramaschi,1995).

The presence of macroscopically evident glandular tissue irregularly distributed on the mental area, extending backwards up to the beginning of the gular region distinguishes *B. sagarana* from *B. alvarengai* and *B. oxente*, in which these glands have been not found (Faivovich et al., 2009).

Males of *B. sagarana* have less hypertrophied forearms and less developed prepollex than *B. alvarengai*; more hypertrophied forearms and more developed prepollex than *B. itapopy*, *B. oxente*, and *B. saxicola*; and forearms and prepollex of similar proportions in relation with *B. ibitiguara* and *B. pseudopseudis* (Fig. 4).

The new species has nuptial pads with two separated areas covered with small keratinized spiculae on medial and lateral edge of the base of the prepollex (Fig. 1C), a character not found in the remaining species of the *B. pseudopseudis* group, although it is present in some species of the *B. circumdata* group (i.e., *B. lucianae*, *B. hylax*, *B. gouveai*, *B. circumdata*, *B. caramaschi*; A. C. Calijorne, personal communication).

In life, the dorsum color pattern that looks like lichens encrusted on rocks (Figs. 1A, 3) resembles *B. sagarana* to *B. itapoty* and *B. alvarengai*, although there are some differences in coloration. The dorsum of the new species is light gray (background) with dark gray blotches (without a central light spot) and white blotches scattered irregularly, whereas in *B. itapoty* the background is yellow to white–cream with black blotches of irregular shape that possess central light spots (Fig. 5C), and in *B. alvarengai* the dorsum varies from gray, with dark brown blotches similar to those of *B. itapoty* (with a central light spot) to uniformly gray (Fig. 5A). Although *B. ibitiguara*, *B. oxente*, *B. pseudopseudis*, and *B. saxicola* may have irregularly shaped blotches in their dorsum (giving them sometimes a lichenous aspect); they are usually less numerous and the background color tends to be brown or yellow and not to gray as in *B. sagarana* (Fig. 5).

Additionally, the new species differs from *B. itapoty*, *B. ibitiguara*, *B. saxicola*, *B. oxente*, and *B. pseudopseudis* by having dark gray perpendicular bars on the whole dorsal surface of thighs, rarely branched, without light spots, highly contrasted with the background color

FIG. 2.—Holotype of *Bokermannohyla sagarana* sp. nov., UFMG 4246: (A) head in lateral view, (B) head in dorsal view, (C) left hand in ventral view, (D) left foot in ventral view. Horizontal line equals 10 mm.

(with light spots in *B. itapoty*; branched in *B. ibitiguara* and *B. saxicola*; occurring only in the median portion of dorsal surface and less evident in *B. oxente*, and less evident in *B. pseudopseudis*; Fig. 5). A white stripe over the vent distinguishes *B. saxicola* and *B. oxente* from *B. sagarana*, which lacks such stripe.

Description.—A species of the *B. pseudopseudis* group characterized by the following combination of traits: male SVL 48.9 ± 2.6 (range = 47.3–54.8 mm, $n = 7$), female SVL 46.6 ± 2.9 (range = 44.5–48.6 mm, $n = 2$), short snout, truncate in lateral and dorsal views; head 1.03 ± 0.02 times wider than long

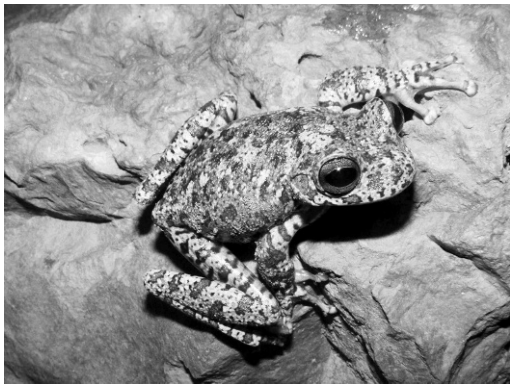

FIG. 3.—Living adult male of *Bokermannohyla sagarana* sp. nov. Paratopotype, UFMG 4238, SLV 47.9 mm, from Serra do Cabral, Municipality of Joaquim Felício, State of Minas Gerais, Brazil. Photo by: L. O. Drummond.

on average (range = 1.01–1.07, $n = 9$); tympanum diameter 0.08 ± 0.01 times SVL on average (range = 0.08–0.09; $n = 9$); hypertrophied forearm; well developed prepollex; nuptial pad small, with two separate areas covered with small keratinized spiculae, on medial and lateral edge of the base of the prepollex; dorsal color pattern composed of dark-gray blotches of irregular shape on a light gray background, without a central light spot, resembling lichens incrusted on rocks; dark-gray perpendicular bars covering the whole dorsal surface of thighs, rarely branched, without light spots, highly contrasted with the background color; and the lack of a white stripe over the vent.

Description of the holotype.—Adult male of moderate size for the *Bokermannohyla pseudopseudis* species group, SVL 47.4 mm (Fig. 1). Head 0.9 times wider than long, and as wide as trunk; head width 37.5% SVL; head length 36.6% SVL. Snout short and truncate in dorsal and lateral views (Fig. 2A,B). Canthus rostralis weakly evident. Loreal region slightly concave. Lips not flared. Nares slightly protuberant, directed laterally. Internarial region and top of head flat. Interorbital distance shorter than upper eyelid. Eye prominent, anterolaterally oriented, its diameter larger than eye–nostril distance. Tympanum evident, rounded, slightly deflected posteriorly toward the longitudinal body axis and dorsally, so the whole tympanum is nearly visible from above, its diameter 72% of eye diameter. Supratympanic fold distinct from posterior corner of eye to shoulder, covering dorsal margin of tympanic membrane.

Vomerine teeth in two contiguous slightly curved series, making an obtuse angle, posteriorly and between the choanae; each series bears 10 (right) and 8 (left) teeth. Choanae kidney shaped, separated by a distance slightly larger than two times maximum diameter. Tongue ovoid, attached overall (narrowly free around lateral and posterior margin). Vocal slits present, longitudinal, originating on the sides of the tongue and extending to the corner of the mouth. Vocal sac evident, single and subgular, slightly differentiated externally (Fig. 1B). Macroscopically evident glandular tissue irregularly distributed on the mental area, extending backwards up to the beginning of the gular region.

Forearms hypertrophied in relation to upper arms (Figs. 1, 2C, 4B). A row of small, low and almost continuous granules along

TABLE 1.—Measurements (in millimeters) of males and females of *Bokermannohyla sagarana* paratopotypes from Serra do Cabral, Espinhaço Range, State of Minas Gerais, Brazil.

	Males ($n = 7$)		Females ($n = 2$)
	Mean ± SD	Range	Range
Snout–vent length	48.9 ± 2.6	47.0–54.8	44.5–48.6
Head length	17.9 ± 0.5	17.4–18.8	16.0–16.3
Head width	18.3 ± 0.5	17.8–19.0	16.8–17.1
Eye diameter	5.6 ± 0.3	5.2–6.0	5.2–5.4
Tympanum diameter	4.1 ± 0.1	3.9–4.3	3.4–3.8
Interorbital distance	6.2 ± 0.4	5.6–7.0	5.6–5.9
Eye–nostril distance	4.8 ± 0.2	4.6–5.0	4.0–4.5
Internarial distance	3.9 ± 0.2	3.6–4.3	2.9–3.0
Thigh length	25.3 ± 0.9	24.3–26.8	24.8–25.2
Tibia length	25.7 ± 0.7	24.7–26.6	24.8–25.0
Foot length	19.1 ± 0.8	17.8–20.1	17.2–17.5

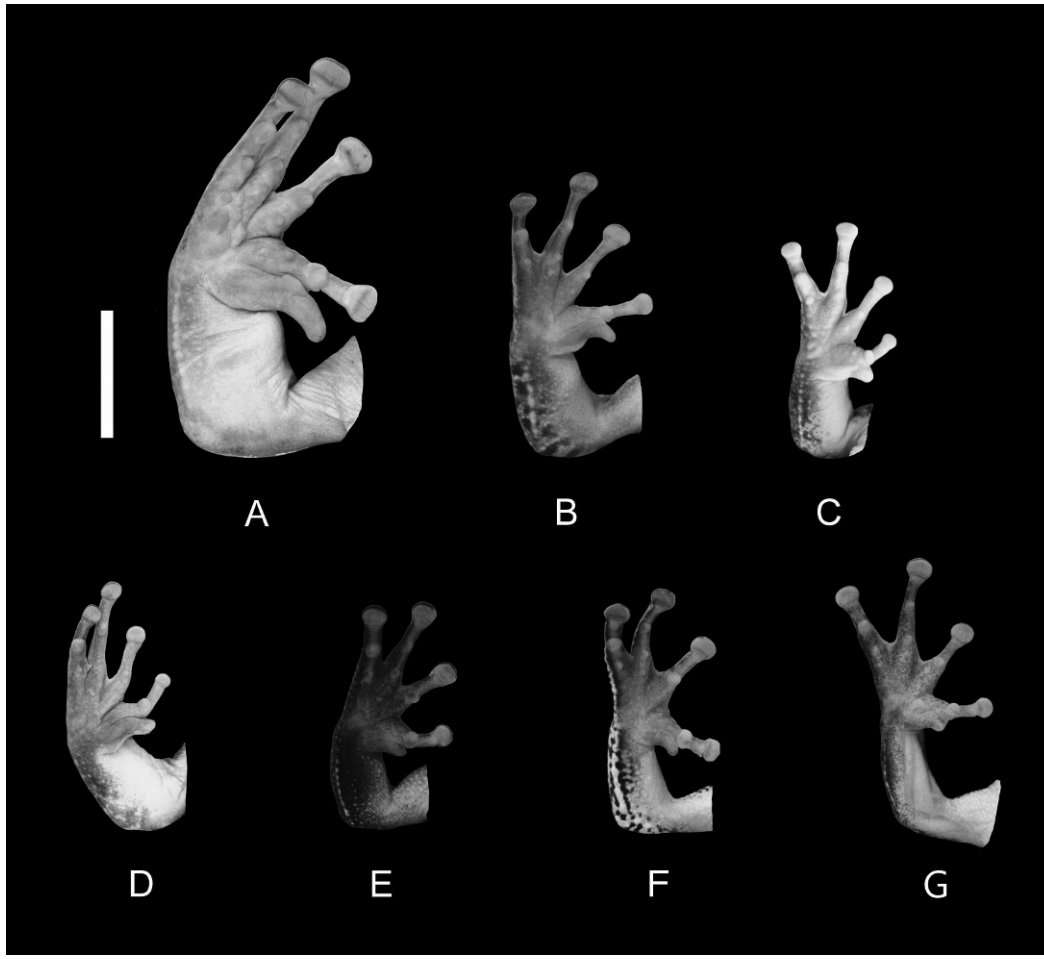

FIG. 4.—Development of forearm and prepollex of males of *Bokermannohyla pseudopseudis* species group. (A) *Bokermannohyla alvarengai* UFMG 5581, (B) *B. pseudopseudis* MNRJ 35096, (C) *Bokermannohyla sagarana* UFMG 4246 (holotype), (D) *Bokermannohyla ibitiguara* MZUFV 4588, (E) *Bokermannohyla oxente* UFMG 6255, (F) *Bokermannohyla itapoty* UFMG 4231, (G) *Bokermannohyla saxicola* UFMG 7678. Horizontal line equals 10 mm.

ventrolateral edge of forearm, from the base of hand to elbow. Fingers with elliptical discs; width of disc of Finger III equals to 54% tympanum diameter. Relative lengths of Fingers I < II < IV < III. Fingers webbed basally, with a slight dermal fringe; webbing formula of outer Fingers I–II 2^{+}–3^{+} III 3–$2^{1/2}$ IV. Subarticular tubercles rounded and well developed; distal tubercles on Fingers I, III, and IV ovoid, distal tubercle of Finger II conical. Supernumerary tubercles distinct, numerous. Outer metacarpal tubercle differentiated, nearly cordiform and bifid. Inner metacarpal tubercle large, its shape contouring the underlying distal prepollex that is modified into a well-developed, curved, protruding, and simple spine; fringe of skin joins the inner margin of the distal free section of the prepollex and the base of Finger I at the level of the subarticular tubercle. Nuptial pad small, with two discontinuous areas covered with small keratinized spiculae, on medial and lateral edge of the base of the prepollex.

Tibia length 54% SVL; foot length 38% SVL. Calcar absent; tarsal fold absent; subtle dermic ridge along the inner margin of the tarsus, starting in the tibiotarsal articulation and reaching the base of inner metatarsal tubercle; low granules discontinuously spaced

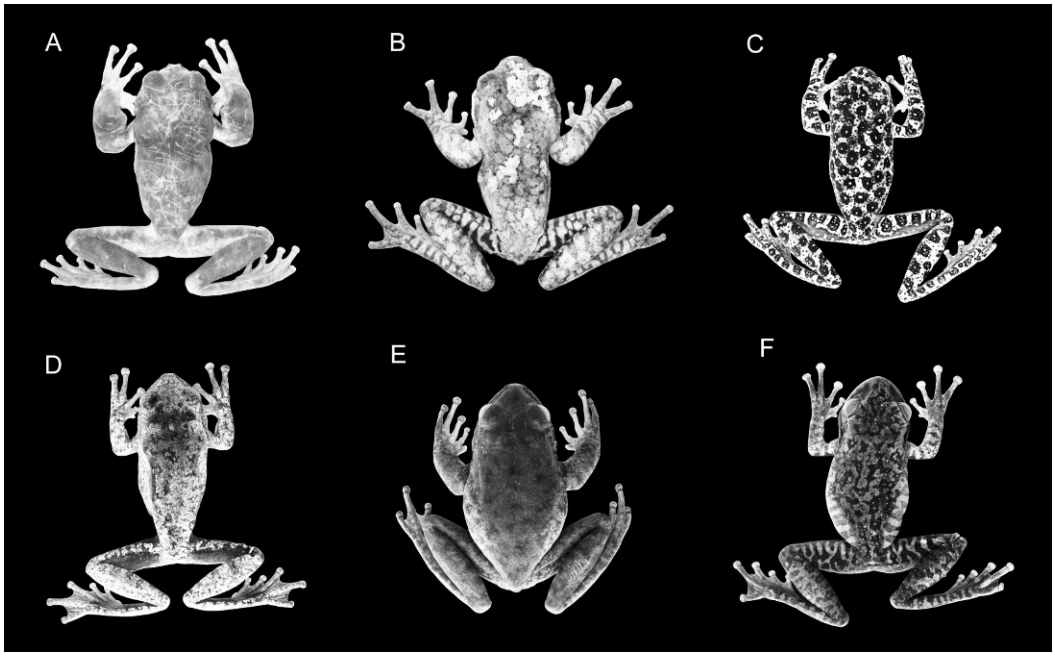

FIG. 5.—Dorsal view of the species of the *Bokermannohyla pseudopseudis* group. (A) *Bokermannohyla alvarengai* male UFMG 5143, SVL 76.0 mm; (B) *Bokermannohyla ibitiguara* male MZUFV 4588, SVL 35.9 mm; (C) *Bokermannohyla itapoty* male UFMG 4231, SVL 38.70 mm; (D) *Bokermannohyla oxente* male UFMG 7813, SVL 43.1 mm; (E) *Bokermannohyla pseudopseudis* male MNRJ 35096, SVL 44.1 mm; (F) *Bokermannohyla saxicola* male UFMG 6674, SVL 51.8 mm.

along outer edge of tarsus, from the first phalange of Toe V to heel. Inner metatarsal tubercle distinct, elliptical; outer metatarsal tubercle small, round. Toes bearing discs smaller than those on fingers; relative length $I < II < III \approx V < IV$; webbing formula I 2^{-}–2^{+} II 1^{+}–2 III $1^{1/2}$–3^{-} IV 2^{+}–$1^{1/2}$ V. Subarticular tubercles distinct, round; supernumerary tubercles evident, numerous. Cloacal opening directed posteriorly at upper level of thighs; some flat, irregular, whitish tubercles scattered around and below cloaca. Texture of dorsal skin finely granular to granular in the dorsolateral region; throat, ventral surface of tibia, and posterior face of thigh smooth; chest, belly, and ventral surface of thighs granular. Ventral surface of arm slightly granular. Pectoral fold absent.

Measurements of the holotype (mm).—SVL 47.4; HL 17.4; HW 17.8; ED 5.9; TD 4.3; IOD 6.4; END 5.0; IND 3.7; THL 24.6; TBL 25.8; FL 18.7.

Color in life.—Dorsum background of the holotype color gray with irregularly shaped dark gray blotches, evenly distributed (Fig. 1). Few irregularly shaped light gray blotches irregularly distributed on head and dorsum. Upper surfaces of arms, legs, Fingers III and IV, and Toes IV and V with the same color pattern of dorsum. Granules along ventrolateral edge of forearm and outer edge of tarsus white. Dark-gray perpendicular bars covering the whole dorsal surface of thighs with thin dark gray stripes broken or not between bars, rarely branched, without light spots, highly contrasted with the background color. Fingers I and II and Toes I, II and III, posterior surface of thigh, and ventral surfaces of hand, foot, tarsus, and tibia grayish brown. Flanks gray with dark gray vertical blotches tending to form stripes. Venter and ventral surfaces of thighs and arms white–cream. Throat white–cream with gray blotches. Vocal sac cream. Tympanum gray. Iris golden yellow with black vermiculation.

Color in alcohol (70%).—In preservative, coloration is very similar to that of living adult, with colors becoming faded.

Variation.—Measurements of seven adult males and two adult females are presented in Table 1. Males are larger than females. Adult males with forearm more robust than adult females. The female prepollex is smaller and not sharp when compared to males. Throat of females with fewer spots than males. All individuals with light gray blotches on dorsum, but they vary in shape, size, number, and position. Two males (UFMG 4242, 4244) have the flanks with small rounded spots instead of vertical blotches. In one male (UFMG 4244) the thigh pattern is not composed of well-defined dark gray bars, but of small rounded spots instead. Gray blotches of the gular region can vary in number and intensity of color. The largest adult male (UFMG 4245) holds a more pigmented nuptial pad.

Etymology.—The specific name, a noun in apposition, honors the literary work of João Guimarães Rosa, a Brazilian novelist born in the 20th century. Sagarana was his first published book in which he exposed his innovative language and its themes associated to the Sertão (semiarid Brazilian backlands) life in the State of Minas Gerais, Brazil. Sagarana is a vocabulary made up by the author with the elements *saga* (common designation to prose narratives, historical or legendary, Nordic, written mainly in Iceland, in the 13th and 14th centuries), and *rana* (Tupi suffix that expresses similarity), meaning narratives similar to legends, sagas (Martins, 2001). Sagarana is cited by its author as an example of the expressive strength of a neologism, as it is totally new, for any reader and not explained yet, virgin of sight and understanding. We appropriated the innovative features of a neologism to name the new species.

Geographic distribution.—*Bokermannohyla sagarana* is known from the Municipalities of Joaquim Felício and Buenópolis, both from the Serra do Cabral, Espinhaço Range, State of Minas Gerais, southeastern Brazil. The species was recorded at the Parque Estadual da Serra do Cabral (Serra do Cabral State Park), Municipality of Buenópolis, State of Minas Gerais, Brazil, based on its advertisement call.

Natural History.—*Bokermannohyla sagarana* occurs in rocky mountain meadows called Campo Rupestre, a typical phytophysiognomy of the Espinhaço Range. For a characterization of the Campo Rupestre flora see Giulietti et al. (1987) and Harley (1995). For a characterization of the Espinhaço Range anurofauna see Leite et al. (2008). Adults were active at night, mainly close to small temporary rocky streams, but also on wet rock outcrops and in gallery forests of permanent streams. Males called on stones or in rock crevices and were founded in high densities during the beginning of rainy season (December). Calling activity began at sunset and continued throughout the night.

Conservation.—The Espinhaço Range is characterized by high species richness and a great degree of endemism of anuran species (Leite et al., 2008). It harbors five of seven known species of the *B. pseudopseudis* group and possibly is the most diverse area for this group. Although well sampled in some localities (e.g., Serra do Cipó; see Eterovick and Sazima, 2004; Leite et al., 2008, and references therein), most of its area, including the Serra do Cabral, remains virtually unexplored for amphibians (Leite et al., 2008). Despite the incipient sampling, the Serra do Cabral already harbors two recently described endemic amphibian species (*Scinax cabralensis*; Drummond et al., 2007; and *B. sagarana*). In the past few decades much of the natural landscapes of Serra do Cabral have been replaced by *Eucalyptus* and *Pinus* plantations. As silviculture is an economic activity that is increasingly common in the region, populations of the endemic anurans of Serra do Cabral will probably be affected by habitat loss and fragmentation. The only conservation unit of the region is the recently created (2005) and poorly structured Parque Estadual da Serra do Cabral. It has only 22,494 ha and protects a small portion of the local landscape.

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permits. Specimens were collected under Instituto Chico Mendes de Conservação da Biodiversidade—ICMBio collection permits number 21185–1.

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Appendix I
Specimens Examined

Bokermannohyla alvarengai: All from the State of Minas Gerais, Brazil. UFMG 666–667, 674 (males), Municipality of Catas Altas; UFMG 671 (male), 672 (female), Municipality of Santana do Riacho; UFMG 5143 (male), Municipality of Ouro Branco; LZV 632–633, 460–462 (males), Municipality of Ouro Branco; UFMG 5581 (male), Municipality of Rio Pardo de Minas; MNRJ 37275–76, 39026, 45359, Serra do Cipó, Municipality of Santana do Riacho.

Bokermannohyla ibitiguara: MZUFV 4586–4589 (males), Parque Nacional da Serra da Canastra, Municipality of São Roque de Minas, State of Minas Gerais, Brazil.

Bokermannohyla itapoty: UFMG 4601–02, 4604–05, 4231–36 (males), Municipality of Ibicoara, State of Bahia, Brazil.

Bokermannohyla oxente: All from the State of Bahia, Brazil. UFMG 5957 (male), Municipality of Rio de Contas; UFMG 6221–23, 6246, 6249, 6254–56, 6263, 6265 (males), Municipality of Campo Formoso; UFMG 7813 (male), Municipality of Rio de Contas.

Bokermannohyla pseudopseudis: All from the Goiás, Brazil. MNRJ 35096 (male), Municipality of Silvânia; MNRJ 3001 (male), 13024 (female), Municipality of Amaro Leite.

Bokermannohyla saxicola: all from the State of Minas Gerais, Brazil. UFMG 828, 830 (males), 818 (females), Municipality of Santana do Riacho; UFMG 840 (male), Municipality of Presidente Kubichek; UFMG 829 (male), Municipality of Serro; UFMG 3801 (female), Municipality of Botumirim; UFMG 7678 (male), Municipality of Joaquim Felício; UFMG 6674 (male), Municipality of Congonhas do Norte; MNRJ 3974, 14204 (paratypes), 17169–71, 17302, 38727, 39336–37, Serra do Cipó, Municipality of Santana do Riacho; MNRJ 17022, Municipality of Santa Luzia; MNRJ 17269–71, Municipality of Botumirin; MNRJ 17302–04, Municipality of Berilo.