

A NEW SPECIES OF THE *BOKERMANNOHYLA PSEUDOPSEUDIS* GROUP FROM THE ESPINHAÇO RANGE, CENTRAL BAHIA, BRAZIL (ANURA: HYLIDAE)

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ABSTRACT: We describe a new species of the *Bokermannohyla pseudopseudis* group from Chapada Diamantina, Espinhaço Range, central Bahia, northeastern Brazil. It is characterized by the following combination of traits: male snout–vent length (SVL) 60.0 ± 3.3 (51.9–65.3 mm, $n = 14$); female SVL (60.2–61.6 mm, $n = 2$); short snout, rounded in dorsal view, rounded to truncate in lateral view; head 1.07 ± 0.04 (1.01–1.14 mm, $n = 14$) times wider than long; tympanum diameter 0.07 ± 0.01 (0.06–0.08 mm, $n = 14$) times SVL; macroscopically evident glandular tissue irregularly distributed on the mental area; hypertrophied forearm; well-developed prepollex; nuptial pad between the distal free section of the prepollex and the base of finger I; dorsum light gray to light brown (background) with irregular-shaped brown marbled blotches (without a central light spot) formed by small dark brown dots; in life, small yellow dots on upper and lower lips, eyelids, loreal and gular regions, supratympanic fold, fingers, arms, forearms, flanks, feet, tibiae, thighs, and cloacal region.

Key words: Amphibia; *Bokermannohyla flavopicta*; Campos Rupestres; Chapada Diamantina; Cophomantini; Endemism; Taxonomy

THE GENUS *Bokermannohyla* occurs only in the Brazilian Atlantic Forest, Cerrado, and Caatinga biomes, and currently comprises 30 species (Leite et al., 2011). Based on a phylogenetic analysis and hypotheses by previous authors, Faivovich et al. (2005) recognized four species groups in this genus (*Bokermannohyla circumdata*, *B. claresignata*, *B. martinsi*, and *B. pseudopseudis*). Faivovich et al. (2005) recognized a *B. pseudopseudis* species group that includes *B. alvarengai*, *B. ibitiguara*, *B. pseudopseudis*, and *B. saxicola*. Lugli and Haddad (2006a) proposed the *B. alvarengai* species group for *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, the recognition of a *B. alvarengai* species group has the potential to make the *B. pseudopseudis* species group paraphyletic. Therefore, we prefer not to recognize the *B. alvarengai* species group.

The *Bokermannohyla pseudopseudis* species group currently includes *B. alvarengai*, *B.*

ibitiguara, *B. pseudopseudis*, *B. saxicola*, *B. oxente*, *B. itapoty*, and *B. sagarana* (Leite et al., 2011). It is distributed in mountains of the Espinhaço Range in the states of Minas Gerais (*B. alvarengai*, *B. saxicola*, and *B. sagarana*) and Bahia (*B. itapoty* and *B. oxente*), Serra da Canastra in the state of Minas Gerais (*B. ibitiguara*), and Planalto Central (Central Plateau) in the state of Goiás and Federal District (Brasília; *B. pseudopseudis*), Brazil. During field expeditions to the summits of Chapada Diamantina, a regional designation of the Espinhaço Range in the state of Bahia, northeastern Brazil, we collected specimens of a new species of the *B. pseudopseudis* group, which we describe in this study.

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 de História Natural João Moojen de Oliveira, Universidade Federal de Viçosa, Viçosa, Minas Gerais); LZV (Laboratório de Zoologia dos Vertebrados, Universidade Federal de Ouro Preto, Ouro Preto, Minas Gerais); and

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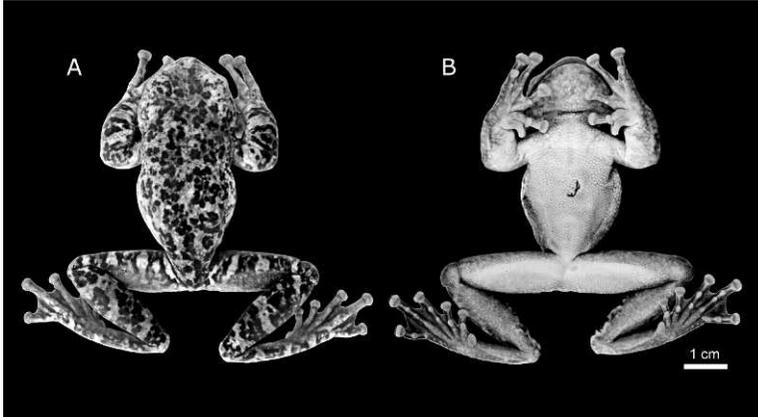


FIG. 1.—Dorsal (A) and ventral (B) views of the holotype of *Bokermannohyla flavopicta* sp. nov., UFMG 4989. Adult male from Serra das Almas, municipality of Rio de Contas, state of Bahia, Brazil. Snout–vent length 63.9 mm.

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 Mitutoyo digital calipers to the nearest 0.1 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), as in Duellman, 1970). Characters used for species comparisons were taken from Bokermann (1956), Sazima and Bokermann (1977), Lugli and Haddad (2006a) for *B. alvarengai*; Bokermann (1956), Pombal and Caramaschi (1995), Lugli and Haddad (2006b) for *B. saxicola*; Pombal and Caramaschi (1995), Lugli and Haddad (2006b) for *B. pseudopseudis*; Cardoso (1983), Lugli and Haddad (2006b) for *B. ibitiguara*; Lugli and Haddad (2006a) for *B. itapoty*; Lugli and Haddad (2006b) for *B. oxente*; Leite et al. (2011) for *B. sagarana*; and from specimens listed in the Appendix. Morphometric features from the literature were often not available as individual measurements, instead showing only average values, ranges, or not mentioning sample sizes (n). In these cases, measurements were presented as ranges (min–max), and ratios were calculated by

dividing average values; therefore they are shown without ranges or sample sizes. We determined sex by the presence or absence of secondary sexual characters (forearm hypertrophy, prepollical spine, and vocal slits). The datum used for geographic coordinates was WGS84.

SPECIES DESCRIPTION

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

Holotype.—UFMG 4989, adult male, Serra das Almas, 13°31'13.9"S, 41°57'31.2"W, 1581 m above sea level, municipality of Rio de Contas, state of Bahia, Brazil, 13 January 2010, F.S.F. Leite; M.R. Lindemann, and R.B. Mourão (Figs. 1 and 2).

Paratypes.—UFMG 4984, adult male, 13°31'27.1"S, 41°57'27.9"W, 1559 m above sea level; UFMG 4985–4988, 4990, adult males, 13°31'13.9"S, 41°57'31.2"W, 1581 m above sea level; all collected at the type locality by F.S.F. Leite, M.R. Lindemann, and R.B. Mourão on 09 13 January 2010. UFMG 4506, adult male, 12 December 2009, 13°22'13.1"S, 41°52'40.8"W, 1616 m above sea level (Fig. 3); UFMG 4538, adult female, 15 December 2009, 13°22'30.1"S, 41°53'38.7"W, 1597 m above sea level; both collected at Serra do Itobira, municipality of Rio de Contas, state of Bahia, Brazil, by F.S.F. Leite; P.P.D. Pinheiro, and F. Fernandes. UFMG 7902–7903, 7905–7908, adult males, and UFMG 7904, adult

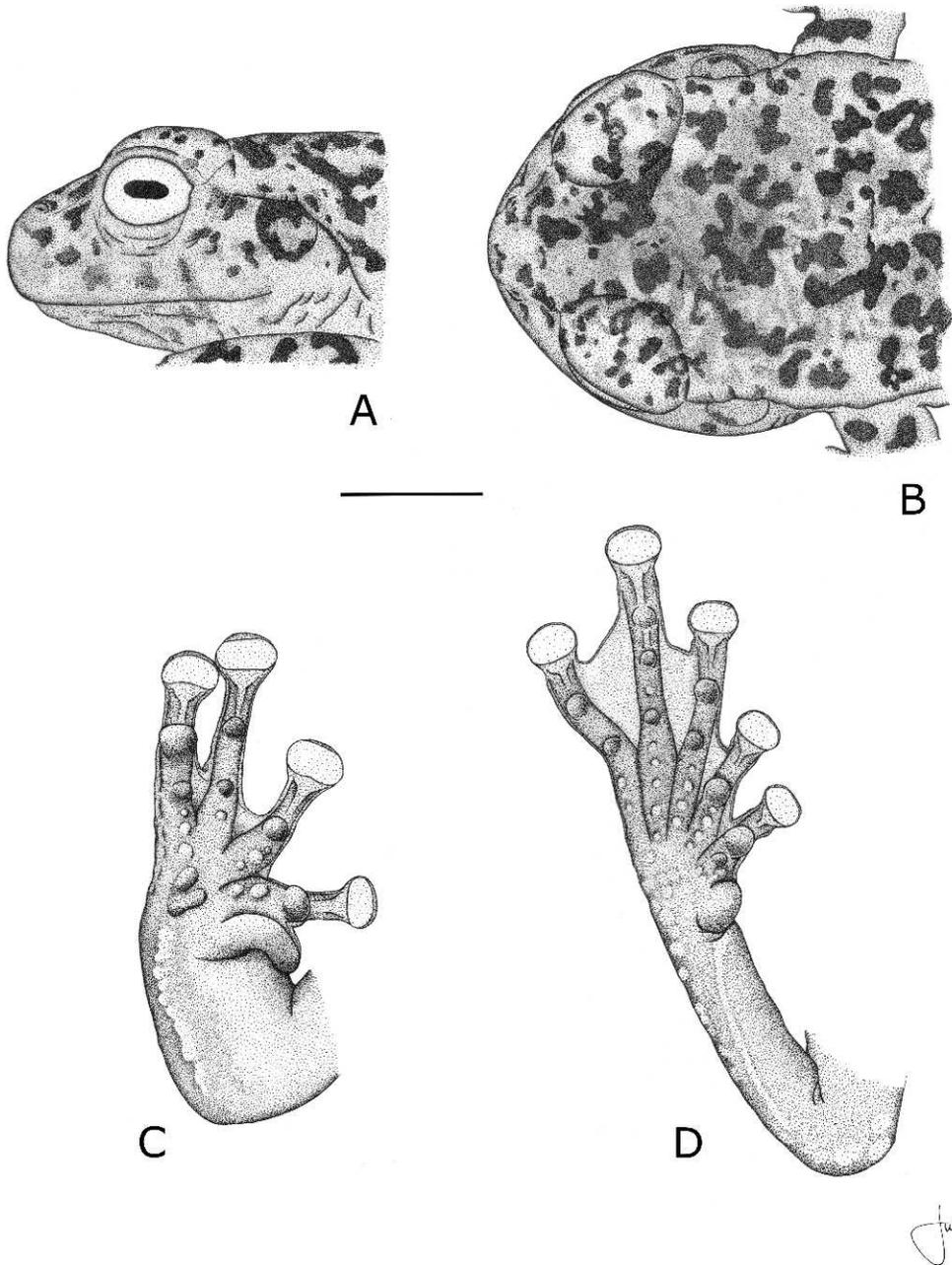


FIG. 2.—Holotype of *Bokermannohyla flavopicta* sp. nov., UFMG 4989: (A) Head in lateral view; (B) head in dorsal view; (C) right hand in ventral view; (D) right foot in ventral view. Horizontal line equals 10 mm.

female, 16 January 2010, Serra do Bastião, 13°04'39.5"S, 41°38'36.2"W, 1473 m above sea level, municipality of Mucugê, state of Bahia, Brazil, by T.L. Pezzuti; L.O. Drummond, B. Imai, and L. Rodrigues.

Diagnosis.—The dorsal color pattern composed of small dark brown blotches in a light gray to light brown (background), resembling lichens encrusted on rocks, distinguishes *B. flavopicta* (Figs. 1 and 3) from all species of



FIG. 3.—Living adult male of *Bokermannohyla flavopicta* sp. nov. Paratype, UFMG 4506, snout-vent length 59.7 mm, from Serra das Almas, municipality of Rio de Contas, state of Bahia, Brazil. Photograph by F.S.F. Leite.

the *B. circumdata* group, which have a brown dorsum (without or with few blotches), and from all species of the *B. claresignata* group, which have a yellow to beige dorsum. The absence of a ventral humeral crest developed as a spine in males distinguishes *B. flavopicta* from all species of the *B. martinsi* species group.

Males of *B. flavopicta* (SVL 51.9–65.3 mm, $n = 14$) are larger than males of *B. itapoty* (SVL 37.8–46.3 mm, $n = 12$), *B. oxente* (SVL 38.8–43.4 mm, $n = 14$), and *B. ibitiguara* (SVL 31.1–44.1 mm, $n = 8$); are generally larger

than males of *B. sagarana* (SVL 47.3–54.8 mm, $n = 7$) and *B. saxicola* (SVL 39.6–55.0 mm, $n = 8$), although there is some overlap; and are smaller than males of *B. alvarengai* (SVL 86.0–105.0 mm, $n = 9$). Females of *B. flavopicta* (SVL 60.2–61.6 mm, $n = 2$) are larger than females of *B. pseudopseudis* (SVL 41.0–43.0 mm; $n = 2$), *B. ibitiguara* (SVL 43.4–43.5 mm, $n = 2$), *B. oxente* (SVL 39.5–44.5 mm, $n = 5$), *B. sagarana* (SVL 44.5–48.6 mm, $n = 2$), *B. itapoty* (SVL 43.4–50.2 mm, $n = 3$), and *B. saxicola* (SVL 40.0–50.9 mm, $n = 5$), and smaller than females of *B. alvarengai* (SVL 68.0–82.0 mm, $n = 5$).

Bokermannohyla flavopicta have heads 1.01–1.14 times wider than long ($n = 14$; Table 1), as do the remaining species of the *B. pseudopseudis* group, with the exception of *B. oxente*, 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, 2006b), and *B. saxicola*, in which the heads are 1.14 times longer than wide (based on average measures of 13 male specimens; Pombal and Caramaschi, 1995).

The new species appears to have a slightly larger tympanum (TD/SVL 0.06–0.08; $n = 14$) than *B. saxicola* (TD/SVL 0.05, based on an average of 13 male specimens; Pombal and Caramaschi, 1995), although the values are very similar.

TABLE 1.—Measurements (in millimeters) of *Bokermannohyla flavopicta* sp. nov., type series from Serra das Almas, Serra do Itobira, and Serra do Bastião, state of Bahia, Brazil.

	Males ($n = 14$)		Females ($n = 2$)
	Mean \pm SD	Range	Range
Snout-vent length	60.0 \pm 3.3	51.9–65.3	60.2–61.6
Head length	20.8 \pm 0.9	19.4–23.1	20.7–21.6
Head width	22.0 \pm 0.7	21.1–23.2	21.5–23.9
Eye diameter	6.1 \pm 0.6	4.3–6.7	6.0–6.5
Tympanum diameter	4.1 \pm 0.4	3.4–4.9	4.0–4.4
Interorbital distance	7.9 \pm 0.5	7.0–8.5	7.7–8.3
Eye-nostril distance	5.1 \pm 0.5	4.3–5.8	4.6–4.9
Internarial distance	5.1 \pm 0.4	4.5–5.7	5.1–5.8
Thigh length	33.7 \pm 1.5	31.5–35.8	34.7–35.7
Tibia length	34.5 \pm 2.0	30.5–36.9	36.1–36.6
Foot length	26.1 \pm 1.1	24.3–28.0	25.7–27.0

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

Males of *B. flavopicta* have less-hypertrophied forearms and a less-developed prepollex than *B. alvarengai*; more-hypertrophied forearms and a more-developed prepollex than *B. itapopy*, *B. oxente*, and *B. saxicola*; and forearms and prepollex of similar proportions to those of *B. ibitiguara*, *B. pseudopseudis*, and *B. sagarana* (Figs. 1 and 2C; see Fig. 4 of Leite et al., 2011, for comparison).

The presence of a nuptial pad between the distal free section of the prepollex and the base of finger I distinguishes the new species from *B. saxicola*, *B. pseudopseudis*, and *B. ibitiguara*, which lack this structure, and from *B. sagarana*, in which the nuptial pad has two discontinuous areas covered with small keratinized spiculae on the medial and lateral edges of the base of the prepollex.

In life, the presence of small yellow dots on upper and lower lips, eyelids, loreal and gular regions, supratympanic fold, fingers, arms, forearms, flanks, feet, tibiae, thighs, and cloacal region distinguishes *B. flavopicta* from all species of the *B. pseudopseudis* group, in which yellow dots are absent. The dorsal color pattern that looks like lichens encrusted on rocks (Figs. 1A and 3) is similar in *B. flavopicta*, *B. sagarana*, *B. itapoty*, and *B. alvarengai*, although there are some differences among these species. The dorsum of the new species is light gray to light brown (background) with irregularly shaped brown marbled blotches (without a central light spot) formed by small dark brown dots, whereas the dorsum in *B. sagarana* is light gray (background) with dark gray blotches (without a central light spot) and white blotches scattered irregularly, the background color in *B. itapoty* is yellow to white-cream with black blotches of irregular shape that possess central light spots, and the dorsum in *B. alvarengai* varies from gray with dark brown blotches similar to those of *B. itapoty* (with a central light spot) to uniformly gray (see Fig. 5 of Leite et al., 2011, for comparison). Although

B. ibitiguara, *B. oxente*, *B. pseudopseudis*, and *B. saxicola* may have irregularly shaped blotches on their dorsum (giving them sometimes a lichenous appearance), they are usually less numerous than in *B. flavopicta* (see Fig. 5 of Leite et al., 2011).

Description.—A species of the *B. pseudopseudis* group characterized by the following combination of traits: male SVL 60.0 ± 3.3 (51.9–65.3 mm, $n = 14$); female SVL (60.2–61.6 mm, $n = 2$); short snout, rounded in dorsal view, rounded to truncate in lateral view; head 1.07 ± 0.04 (1.01–1.14, $n = 14$) times wider than long; tympanum diameter 0.07 ± 0.01 (0.06–0.08; $n = 14$) times SVL; macroscopically evident glandular tissue irregularly distributed on the mental area; hypertrophied forearm; well-developed prepollex; nuptial pad between the distal free section of the prepollex and the base of finger I; dorsum light gray to light brown (background) with irregularly shaped brown marbled blotches (without a central light spot) formed by small dark brown dots; in life, small yellow dots on upper and lower lips, eyelids, loreal and gular regions, supratympanic fold, fingers, arms, forearms, flanks, feet, tibiae, thighs, and cloacal region.

Description of the holotype.—Adult male, SVL 63.9 mm (Fig. 1). Head 1.02 times wider than long; head width 37.0% of SVL; head length 36.0% of SVL. Snout short, rounded in dorsal view, rounded to truncate in lateral view (Fig. 2A,B). Canthus rostralis weakly evident. Loreal region slightly concave. Nares slightly protuberant, directed laterally. Internarial region and top of head flat. Interorbital distance 1.65 times longer than upper eyelid. Eye prominent, anterolaterally oriented, its diameter 1.13 times larger than END. Tympanum evident, rounded, slightly deflected posteriorly toward the longitudinal body axis and dorsally such that almost the complete tympanum is visible from above, its diameter 74% of ED. 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, with each series bearing 9 (right) and 10 (left) teeth. Choanae kidney-shaped, separated by a dis-

tance larger than three times the 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 single, 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 and 2C). A row of small, low, and almost continuous granules along ventrolateral edge of forearm, from the base of hand to elbow (Figs. 1B and 2C). Fingers with elliptical discs; width of disc of finger III equals to 86% of tympanum diameter. Relative lengths of fingers $I < II < IV < III$. Fingers webbed basally, with a slight dermal fringe; webbing formula of outer fingers $I-II2-3^+III2^{2/3}-2^+VI$. Subarticular tubercles conical, well developed; distal tubercles on fingers II and V rounded, flat.

Supernumerary tubercles distinct, numerous. Outer metacarpal tubercle differentiated, divided. Inner metacarpal tubercle large, its shape contouring the underlying distal prepollex that is modified into a well-developed, curved, protruding, 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 present, dorsal, covered with keratinized spiculae, between the distal free section of the prepollex and the base of finger I.

Tibia length 56% of SVL; foot length 42% of SVL. Calcar and tarsal fold absent; subtle dermic ridge along the inner margin of the tarsus, starting in the tibio-tarsal articulation and reaching the base of inner metatarsal tubercle; low granules discontinuously spaced along outer edge of tarsus, from the first phalange of toe V to heel. Inner metatarsal tubercle distinct, elliptical; outer metatarsal tubercle absent. Toes bearing discs smaller than those on fingers; relative length $I < II < III \approx V < IV$; webbing formula $I2-2^+III1-2^+III1-2^+IV1^{1/2}-IV$. 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. Dorsal and ventral skin sparsely granular to granular. Pectoral fold absent.

Measurements of the holotype (millimeters).—Snout-vent length 63.9; HL 23.0; HW 23.4; ED 6.6; TD 4.9; END 5.8; IND 5.2; IOD 8.2; THL 35.8; TBL 35.9; FL 26.7.

Color in life.—The dorsum of the new species is light gray to light brown (background) with irregularly shaped brown marbled blotches (without a central light spot) formed by small dark brown dots. Small yellow dots on upper and lower lips, eyelids, loreal and gular regions, supratympanic fold, fingers, arms, forearms, flanks, feet, tibiae, thighs, and cloacal region. Tympanum, dorsal surfaces of forearms, arms, tibia, feet, finger IV and base of finger III, and toes V and IV with the same color pattern of dorsum, tending to form stripes on forearms and tibiae. Dark gray perpendicular bars, with light gray blotches, covering the dorsal surface of thighs, with little contrast with the background color. Gray fingers I and II, toes I, II, and III, posterior surface of thighs, and ventral surfaces of hand, foot, tarsus, and tibia. Flanks with color pattern similar to that of dorsum, with background color in lighter tones. White tubercles scattered around and below cloaca, tending to form a stripe over the vent. Venter and ventral surfaces of arms and thighs white-cream. Throat and vocal sac grayish white with few gray dots of diffuse margins. Iris silver with black vermiculation; silver ring around pupil.

Color in 70% alcohol.—In preservative, coloration is very similar to that of living adult, but with faded colors. Small yellow dots lose their color and become indistinguishable.

Variation.—Measurements of 14 adult males and two adult females are presented in Table 1. Adult males with forearm more robust than in adult females. The female prepollex is smaller and not sharp compared to that of males. Dorsal marbled blotches formed by small dark brown dots vary in disposal shape, size, and position, giving some individuals a leopard-like color pattern. White stripe over the vent not present in many specimens. In life, small yellow dots vary in density, size, position, and color intensity. Gray dots in gular region can vary in number,

contrast, and intensity of color. Webbing formula of outer fingers I–II(2, 2⁻)-(3⁺, 3, 3⁻)III2^{2/3}-2^{+VI} and toes I(2⁻, 1^{2/3})-2^{-III}-2III(1, 1⁻)-2IV(2-1^{1/2})-IV.

Etymology.—The specific epithet *flavopicta* derives from the combination of the Latin words *flavus* (yellow) and *pictus* (painted, colored), and refers to the small yellow dots of the new species in life.

Geographic distribution.—*Bokermannohyla flavopicta* is known from Serra das Almas, Serra do Itobira (municipality of Rio de Contas), and Serra do Bastião (municipality of Mucugê), southwestern Chapada Diamantina, Espinhaço Range, state of Bahia, northeastern Brazil. During extensive field trips conducted during two consecutive rainy seasons, we did not record *B. flavopicta* at the Parque Nacional da Chapada Diamantina (Chapada Diamantina National Park), on the eastern Chapada Diamantina, suggesting that its distribution is restricted to the highlands of southwestern Chapada Diamantina.

Natural History.—*Bokermannohyla flavopicta* occurs in high-elevation (above 1500 m above sea level) rocky mountain meadows called *Campos Rupestres*, a typical phytosociology of the Espinhaço Range. For a characterization of the Campos Rupestres flora, see Giulietti et al. (1987) and Harley (1995). For a characterization of the Espinhaço Range anuran fauna, see Heyer (1999) and Leite et al. (2008). Males called on steep rock outcrops or in rock crevices, mainly close to small streams without gallery forests, which required us to climb to collect the specimens. The advertisement call could be heard from a long distance. We found the frogs in low densities during the beginning of the rainy season (December–January).

Conservation.—The Espinhaço Range is characterized by high species richness of endemic anurans. Since the compilation of Espinhaço Range anuran endemics by Leite et al. (2008), seven new species have been described: *Hypsiboas botumirim* (Caramaschi et al., 2009), *Bokermannohyla juiju* (Faivovich et al., 2009), *Scinax tripui* (Lourenço et al., 2009), *Pleurodema alium* (Maciel and Nunes, 2010), *Physalaemus orophilus* (Cassini et al., 2010), *Proceratophrys minuta* (Napoli et al., 2011), and *B. flavopicta*. Baêta et al. (2009)

demonstrated that *Phyllomedusa itacolomi* is a junior synonym of *P. ayeaye*, and therefore it is neither a valid species nor an Espinhaço endemic. Taucce et al. (2012) showed that *Ischnocnema izecksohni* should no longer be considered an Espinhaço endemic because it also occurs in other Brazilian mountain ranges. Therefore, 33 anuran species should currently be considered endemic to the Espinhaço Range (Leite et al., 2008; this study).

The description of the new species corroborates the hypothesis suggested by Leite et al. (2011) that the Espinhaço Range is the richest area in species of the *B. pseudopsedis* group. It harbors six (all endemic) of eight known species of this group. Despite its importance for conservation, northern Espinhaço Range in the state of Bahia (Chapada Diamantina) remains virtually unexplored for amphibians. If compared to the current 26 anuran endemic species of the southern Espinhaço (mostly located in the state of Minas Gerais and bordering Bahia), Chapada Diamantina (entirely located in the state of Bahia) contains few endemic species (only eight). Part of this disparity in endemic species richness is due to incipient sampling and taxonomic research on the anuran fauna of Chapada Diamantina in relation to southern Espinhaço. Many northern Espinhaço endemic species need to be described (F. Leite, personal observation).

Bokermannohyla flavopicta was registered at Área de Relevante Interesse Ecológico Pico das Almas and Área de Proteção Ambiental Serra do Barbado (Serra do Itobira), both of which are state protected areas of sustainable use (equivalent to IUCN categories IV and V, respectively; IUCN, 2004), and Parque Municipal Natural Serra das Almas, a small protected area of the municipality of Rio de Contas. However, despite being protected areas, these sites currently have limited conservation activities, management, and supervision. Therefore, disorderly land use and occupation, fire (from criminals and from agriculture or native pasture management for cattle breeding), and unregulated tourism are constant threats to *B. flavopicta* habitat. The species is not known to occur in strictly protected reserves (e.g., national parks, biological reserves, etc.; equivalent to IUCN categories I and II; IUCN, 1994).

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APPENDIX

Specimens Examined

Bokermannohyla alcarengai: Brazil: state of Minas Gerais: UFMG 666–667, 674 (males), municipality of Catas Altas; UFMG 671 (male), 672 (female), municipality of Santana do Riacho; UFMG 3823 (female), municipality of Botumirim; UFMG 4018 (female), municipality of Congonhas do Norte; UFMG 5143 (male), municipality of Ouro Branco; UFMG 5385 (female), municipality of Morro do Pilar; LZV 632–633, 460–462 (males), municipality of Ouro Branco; UFMG 5581 (male), municipality of Rio Pardo de Minas; MNRJ 37275–37276, 39026, 45359 (males), Serra do Cipó, municipality of Santana do Riacho. ***Bokermannohyla ibitiguara***: Brazil: state of Minas Gerais: MZUFV 4586–4589 (males), Parque Nacional da Serra da Canastra, municipality of São Roque de Minas. ***Bokermannohyla itapoty***: Brazil: state of Bahia: UFMG 4601–4602, 4604–4605, 4231–4236 (males), municipality of Ibicoara. ***Bokermannohyla oxente***: Brazil: state of Bahia: UFMG 5957, 7813 (males), municipality of Rio de Contas; UFMG 6221–23, 6246, 6249, 6254–56, 6263, 6265 (males), municipality of Campo Formoso. ***Bokermannohyla pseudopseudis***: Brazil: state of Goiás: MNRJ 35096 (male), municipality of Silvânia; MNRJ 3001 (male), 13024 (female), municipality of Amaro Leite. ***Bokermannohyla sagarana***: Brazil: state of Minas Gerais: UFMG 4246 (holotype), 4238, 4240–4241 (paratypes), municipality of Joaquim Felício; UFMG 8614–8619, UFMG 8620–8621 (paratypes), municipality of Buenópolis. ***Bokermannohyla saxicola***: Brazil: state of Minas Gerais: UFMG 828, 830 (males), 818 (females), municipality of Santana do Riacho; UFMG 840 (male), municipality of Presidente Kubitschek; 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), 17169–17171, 17302, 38727, 39336–39337, Serra do Cipó, municipality of Santana do Riacho; MNRJ 17022, municipality of Santa Luzia; MNRJ 17269–17271, municipality of Botumirim; MNRJ 17302–17304, municipality of Berilo.