

New Species of *Stenocercus* (Squamata: Iguania) from the Andes of Central Peru with a Redescription of *Stenocercus variabilis*

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ABSTRACT.—A new species of *Stenocercus* is described from the eastern slopes of the Andes in central Peru, Departamentos Ayacucho and Huancavelica. It differs from other *Stenocercus* by the combination of the following characters: scales on posterior surface of thighs granular, lateral body scales imbricate and keeled, vertebral row of enlarged scales present, gular scales unnotched, neck folds present, three caudal whorls per autotomic segment, postfemoral mite pocket absent, dorsal ground color gray or brown, without a black shoulder patch in males. Specimens of the new species have been misidentified as *Stenocercus variabilis*, which occurs allopatrically in Departamento Junín.

RESUMEN.—Se describe una especie nueva de *Stenocercus* de las estribaciones orientales de los Andes centrales de Perú, Departamentos de Ayacucho y Huancavelica. Esta especie se distingue de otras especies de *Stenocercus* por la combinación de los siguientes caracteres: escamas granulares en la superficie posterior de los muslos, escamas laterales del cuerpo quilladas e imbricadas, hilera vertebral de escamas agrandada (cresta vertebral), escamas gulares sin muesca, pliegues nucales presentes, tres anillos caudales por segmento autotómico, bolsillo postfemoral ausente, coloración dorsal café o gris, parche negro en el hombro de los machos ausente. Los especímenes de la nueva especie habían sido erróneamente identificados como *Stenocercus variabilis*, una especie distribuida alopatricamente en el Departamento Junín.

The Neotropical lizard genus *Stenocercus* Duméril and Bibron (1837) is among the most speciose reptile genera in South America. It includes more than 50 species, most of which occur in the Andes and adjacent lowlands from northern Colombia and Venezuela to central Argentina at elevations of 0–4000 m (Frost, 1992; Harvey et al., 2004). Careful examination of recent collections, as well as older material has led to the discovery of a considerable number of new species during the last 15 years (Cadle, 1991, 1998, 2001; Avila-Pires, 1995; Torres-Carvajal, 2000, 2005).

Herein, I describe a new species of *Stenocercus* discovered upon examination of specimens previously identified (Fritts, 1974) as *Stenocercus variabilis*. Most of these lizards were collected in the Andes of central Peru in 1969 by T. H. Fritts, who later published a revision of the genus *Stenocercus* (Fritts, 1974). In that revision, Fritts (1974) misidentified the specimens of the new species as *S. variabilis* based on similarities in morphology and distribution. Fritts (1974) mentioned that the specimens of the new species described herein differed from other *S. variabilis* by lacking a postfemoral mite pocket. However, the presence and shape of mite pockets in adult *Stenocercus* do not vary intraspecifically and they represent useful taxonomic characters to distinguish among species in this genus (e.g., Cadle, 1991; Torres-Carvajal, 2005). Absence of a postfemoral pocket is one of the most relevant

diagnostic characters used to describe the new species in this paper.

MATERIALS AND METHODS

All type specimens of the new species are deposited in the herpetological collections of the Natural History Museum and Biodiversity Research Center, University of Kansas, and the National Museum of Natural History, Smithsonian Institution. Museum abbreviations follow Leviton et al. (1985). Measurements of snout–vent length (SVL) and tail length (TL) were taken with a ruler and recorded to the nearest 1 mm. All other measurements were made with digital calipers and recorded to the nearest 0.1 mm. Osteological characters were examined from two cleared-and-double-stained adult males (KU 134213, 134198). Sex was determined either by dissection, or by noting the presence of hemipenes. I follow the terminology of Cadle (1991) and Torres-Carvajal (2000, 2004) for characters included in the description. Most localities were geo-referenced with Global Gazetteer Version 2.1 (Falling Rain Geomatics, Inc.).

Stenocercus frittsi sp. nov.

Stenocercus variabilis; Fritts (part), 1974:65.

Holotype.—KU 134181, an adult male, from Mariscal Cáceres (12°34'S, 74°57'W, 3966 m),

TABLE 1. Summary of morphological characters and measurements of *Stenocercus frittsi* and *Stenocercus variabilis*. Range followed by mean \pm SD or range followed by mode are given for quantitative characters.

Character	<i>S. frittsi</i> N = 46	<i>S. variabilis</i> N = 19
	Range Mean \pm SD	Range Mean \pm SD
Scales around midbody	60–76 65.14 \pm 3.7	61–86 71.29 \pm 6.94
Vertebrales	48–71 57.24 \pm 5.07	50–60 57.41 \pm 2.85
Paravertebrals	59–90 70.16 \pm 6.74	70–81 75.71 \pm 4.21
Gulars	20–28 22.63 \pm 1.77	26–33 28.29 \pm 2.14
Supraoculars	4–6 6	5–7 6
Internasals	4–5 4	3–4 4
Subdigitals finger IV	16–22 19.02 \pm 1.39	19–24 21.47 \pm 1.07
Subdigitals toe IV	24–29 26.98 \pm 1.65	26–35 30.00 \pm 2.15
Tail length/total length	0.59–0.65 0.64 \pm 0.02 N = 14	0.60–0.67 0.65 \pm 0.02 N = 11
Maximum SVL males (mm)	79	94
Maximum SVL females (mm)	66	76
Posthumeral pocket	shallow, with vertical fold	shallow, with vertical fold
Postfemoral pocket	absent	deep

Departamento Huancavelica, Peru, collected on 18 October 1969 by T. H. Fritts.

Paratypes.—PERU: Ayacucho: KU 134198–207, 134215–23, Ayacucho (13°09'S, 74°13'W, 2804 m), collected on 4 November 1969; KU 134208–10, 20 km north of Ayacucho, and KU 134211–13, 4 km north of Ayacucho, collected on 5 November 1969; USNM 306935–40, vicinity of Ayacucho, collected in 1972; Huancavelica: KU 134180, 134182–90, same locality data as holotype, collected between 18 and 19 October 1969; KU 134191–92, Izcuchaca (12°29'S, 75°01'W, 3327 m), collected on 20 October 1969; KU 134193–97, Villa Azul (2350–2400 m), northeast of Colcabamba, collected on 26 October 1969.

Diagnosis.—*Stenocercus frittsi* is distinguished from all species of *Stenocercus* except *S. variabilis* in having granular scales on the posterior surface of thighs, imbricate, keeled lateral body scales, a distinct row of enlarged vertebral scales, unnotched gular scales, neck folds, three caudal whorls per autotomic segment, gray or brown dorsal ground color, and no black patch on shoulder in males. The main difference between *S. frittsi* and *S. variabilis* is that the former species

lacks a postfemoral mite pocket (distinct, deep pocket in *S. variabilis*). In addition, *S. frittsi* is smaller than *S. variabilis* and it has on average fewer scales around the midbody, as well as fewer gulars, paravertebrals, and subdigitals (Table 1).

Characterization.—(1) Maximum total length in males 79 mm (N = 23); (2) maximum total length in females 66 mm (N = 21); (3) vertebrales 48–71; (4) paravertebrals 59–90; (5) scales around midbody 60–76; (6) supraoculars 4–6; (7) internasals 4–5; (8) postrostrals 5–7; (9) loreals 2–4; (10) gulars 20–28; (11) lamellae on Finger IV 16–22; (12) lamellae on Toe IV 24–29; (13) posthumeral pocket shallow, Type 2 of Cadle (1991); (14) postfemoral pocket absent; (15) parietal eye not visible; (16) occipital scales small, smooth, juxtaposed; (17) no projecting angulate temporals; (18) supraoculars subequal in size; (19) scales in frontonasal region weakly imbricate anteriorly; (20) short preauricular fringe present; (21) antegular, antehumeral, gular, longitudinal, oblique, postauricular, and supra-auricular neck folds present; (22) lateral nuchals less than half size of dorsal nuchals; (23) posterior gulars in adults smooth, imbricate, not mucronate; (24) lateral scales reduced in size, approximately half size of dorsal body scales; (25) vertebral crest prominent; (26) dorsolateral crest absent; (27) ventrals in adults smooth, imbricate, not mucronate; (28) scales on posterior surfaces of thighs granular; (29) prefemoral fold absent; (30) inguinal groove absent; (31) preanals not projecting; (32) tail not compressed laterally in adult males; (33) tail length 59–65% of total length; (34) caudal whorls per autotomic segment three; (35) caudals not spinose; (36) dark stripe extending anterodorsally from subocular region to supraclaviculars absent; (37) gular region of adult females dark or densely pigmented in some specimens; (38) gular region of adult males dark or densely pigmented in some specimens; (39) black blotch on ventral surface of neck in adult males absent; (40) thin black or dark brown midventral line absent; (41) black patch on ventral surface of thighs absent; (42) dorsal ground color gray or dark brown in females and males; and (43) postxiphisternal inscriptional ribs not articulating midventrally, Pattern 2B of Torres-Carvajal (2004). Sexual variation in measurements and scutellation of *S. frittsi* is presented in Table 2.

Description of holotype.—Male (Figs. 1A, 2); SVL = 75 mm; TL = 141 mm; maximum head width = 15.3 mm; head length = 18.6 mm; head height = 12.2 mm; scales on parietal and occipital regions small, smooth, juxtaposed; parietal eye not visible; supraoculars in six rows, smooth, slightly imbricate, subequal in size; canthals two; anterior most canthal separated from nasal by two minute scales; scales in frontonasal region

TABLE 2. Sexual variation in scutellation and measurements (mm) of *Stenocercus frittsi*.

Character	Males	Females
	Range (N) Mean \pm SD	Range (N) Mean \pm SD
Scales around midbody	60–76 (22) 65.32 \pm 3.54	60–76 (20) 65.20 \pm 3.96
Vertebrales	48–70 (22) 56.41 \pm 5.46	52–71 (21) 58.38 \pm 4.74
Paravertebrals	62–89 (22) 70.41 \pm 5.70	59–90 (21) 70.24 \pm 8.01
Gulars	21–28 (23) 23.22 \pm 1.78	20–26 (21) 22.19 \pm 1.57
Supraoculars	4–6 (23) 5.70 \pm 0.56	5–6 (21) 5.33 \pm 0.48
Internasals	4–5 (23) 4.04 \pm 0.21	4 (21) 4
Subdigitals Finger IV	17–22 (23) 19.57 \pm 1.38	16–21 (20) 18.45 \pm 1.23
Subdigitals Toe IV	26–29 (23) 28.09 \pm 0.95	24–29 (21) 25.81 \pm 1.50
Tail length/total length	0.63–0.65 (8) 0.64 \pm 0.01	0.59–0.65 (6) 0.62 \pm 0.02
Maximum SVL	79	66

slightly imbricate; internasals four; postrostrals six, two most lateral wider than long on each side, medial postrostrals longer than wide; supralabials four; infralabials six; loreals four; lorilabials in one row; preocular not divided, in contact with posterior canthal; lateral temporals imbricate, moderately keeled; gulars in 28 rows between tympanic openings; all gulars smooth, imbricate, each bearing one apical pit; second infralabial in contact with first two sublabials; mental in contact with first pair of infralabials and first pair of postmentals; lateral and dorsal scales of body and dorsal scales of neck keeled, imbricate; lateral scales of neck granular; scales around midbody 64; vertebrales large, in 53 rows, forming a prominent serrate vertebral crest; paravertebrals 66; ventrals smooth, imbricate; preauricular fringe short, composed of five enlarged scales, of which the second from below is largest; antegular, antehumeral, gular, longitudinal, oblique, postauricular, and supra-auricular neck folds present; limb scales keeled, imbricate; ventral scales of hind limbs and upper arms smooth; lamellae on Finger IV 19; lamellae on Toe IV 29; tail not compressed laterally; caudals keeled, imbricate; basal subcaudals smooth, imbricate; vertebral crest extending more than half length of tail; tail length 1.8 times SVL; posthumeral pocket shallow (Type 2 of Cadle, 1991) with vertically oriented fold approximately 4 mm long (Fig. 3); postfemoral pocket absent; postfemoral region composed of imbricate, smooth scales that become smaller toward insertion of hind limb (Fig. 4).

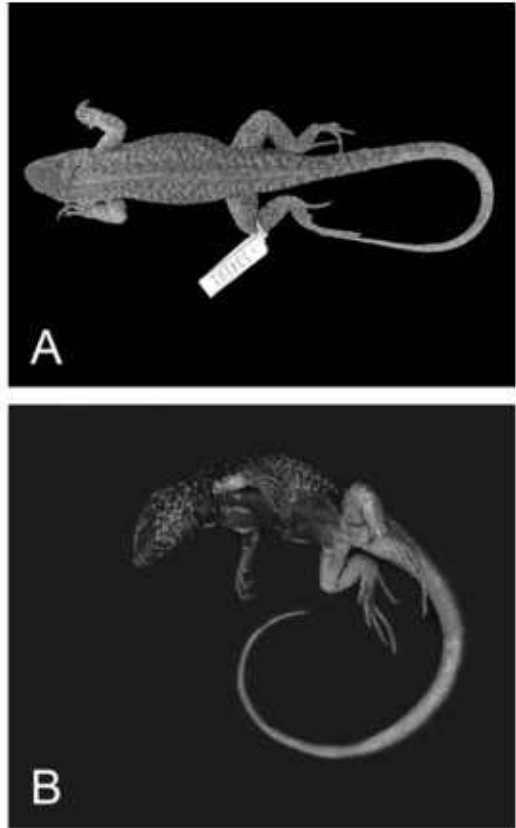


FIG. 1. (A) *Stenocercus frittsi*, holotype, KU 134181, male, 75 mm SVL; (B) *Stenocercus variabilis*, syntype, BMNH 1946.8.11.89, male, 83 mm SVL.

Color in Life of Holotype.—Dorsum dark gray with extensive black reticulations; scales on dorsal surface of head black with white centers; chin white with black reticulations; ventral surface of body, hind limbs, and tail pale yellow; dorsal aspect of hind limbs light gray with dark blotches; angle of jaw and posttympanic area tan (T. H. Fritts, field notes, 18 October 1969).

Color Variation.—In life, an adult male (KU 134195) differed in coloration from the holotype in having a black chin, light blue midventral stripe with a bright pink stripe on each side, and orange posterior surface of thighs and ventral aspect of tail. An adult female (KU 134184) had the following coloration in life: dorsum grayish-beige with paired dull black blotches on body and tail; head brown; posttympanic area and angle of jaw gray; infralabial region charcoal; chin and ventral surface of body light gray without reticulations. Two young males (KU 134180, 134182) had the following coloration in life: dorsum gray with dull black blotches; dorsal surface of head brown with white flecks; lateral surface of body light gray with black markings;

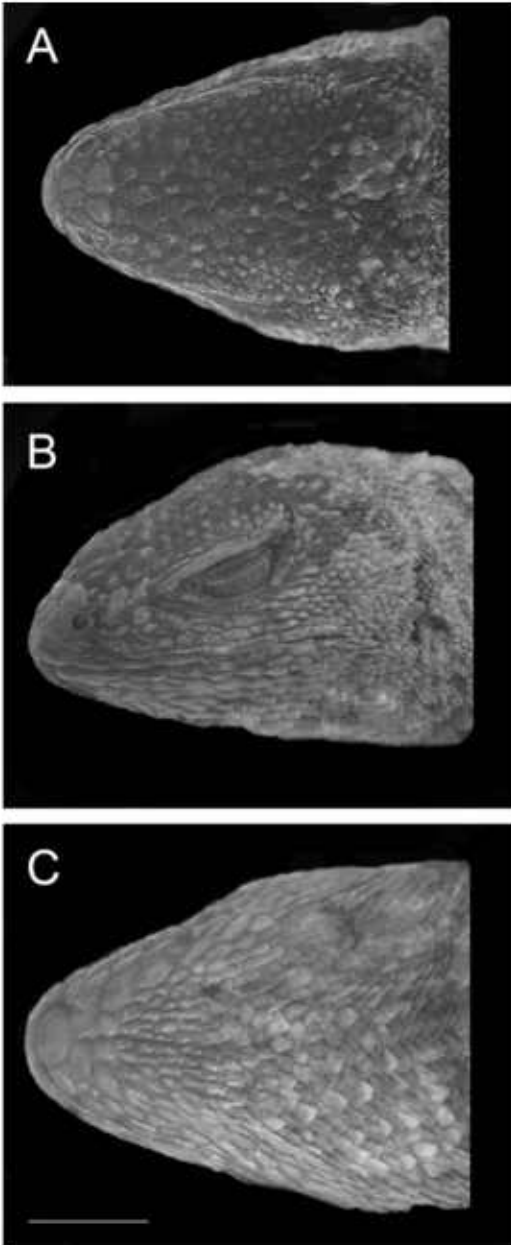


FIG. 2. Dorsal (A), lateral (B), and ventral (C) views of the head of *Stenocercus frittsi*. Holotype, KU 134181, male. Scale bar = 5 mm.

infralabial region, angle of jaw, and posttympanic area charcoal; chin and gular region antique white with black reticulation; ventral surface of body antique white; ventral aspect of hind limbs and tail pale yellow (T. H. Fritts, field notes, 19–26 October 1969). As mentioned by Fritts (1974), there is considerable variation in the amount of dark pigment on the chin of both

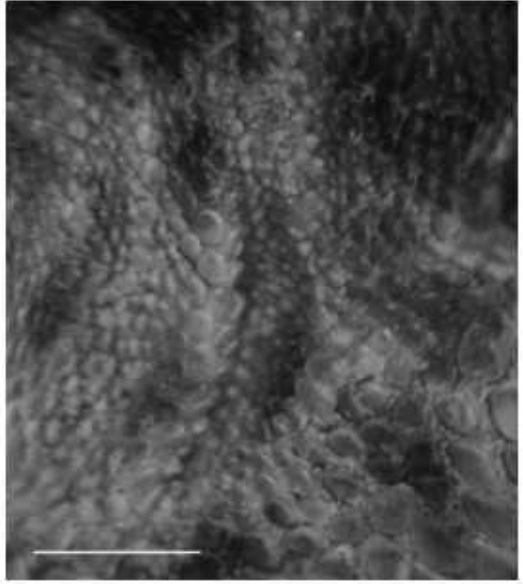


FIG. 3. Lateral view of left axilla of *Stenocercus frittsi*. Holotype, KU 134181, male. Scale bar = 2 mm.

males and females. More than half of the specimens examined (56%) have a gray or black patch on the ventral portion of the tympanic area (Fig. 5); this patch extends onto the chin in 60% of these specimens.

Distribution and Ecology.—*Stenocercus frittsi* inhabits the upper valleys of Río Mantaro on the eastern slopes of the Andes in central Peru (Fig. 6). It occurs at elevations of 2350–3966 m in Departamentos Huancavelica and Ayacucho. Specimens were collected in xeric areas with *Agave* and several species of cactus as prevalent plants (T. H. Fritts, field notes). Fritts (1974) reported Villa Azul (Departamento Huancavelica), 17 km east-southeast Colcabamba, 1200 m, as the lowest elevation within the distribution of the species described herein. However, in his field journal Fritts provides a different altitude (1600 m) and does not mention the location of Villa Azul relative to Colcabamba. According to a 1:100000 map from the National Geographic Institute of Peru, Villa Azul lies northeast of Colcabamba at 2350–2400 m. Therefore, it is likely that the Villa Azul data provided by Fritts (1974) are inaccurate, and I consider 2350 m as the lowest elevation record of *S. frittsi*. No other species of *Stenocercus* is known to occur in sympatry with *S. frittsi*.

Etymology.—The specific name is a noun in the genitive case and is a patronym for Thomas H. Fritts, who collected most of the type specimens of the new species described herein. During his graduate research on the ecology and systematics of this genus (Fritts, 1972, 1974), Fritts made

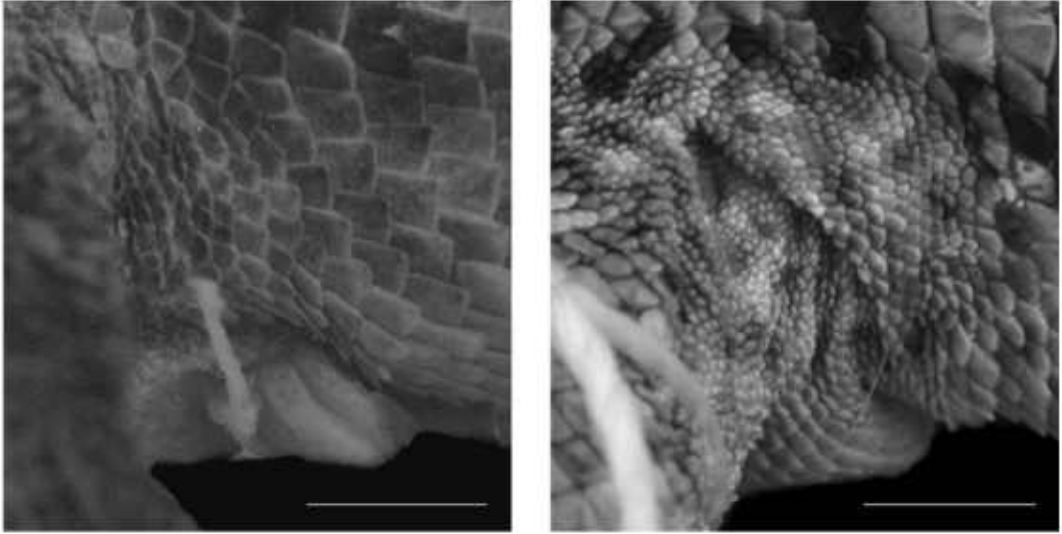


FIG. 4. Lateral view of left postfemoral region of *Stenocercus frittsi* (left) and *Stenocercus variabilis* (right). KU 134181 (Holotype, male) and BMNH 1946.8.11.89 (Syntype, male), respectively. Scale bars = 3 mm.

important collections of *Stenocercus* from Peru and Ecuador.

Stenocercus variabilis Boulenger

Stenocercus variabilis Boulenger, 1901:546.

Syntypes: BMNH 1946.8.11.89–91, from Palca, 1000 ft., Bolivia (restricted to Palca [2875 m], Departamento Junín, Peru by Fritts [1974:65]). Fritts (part), 1974:65.

Stenocercus juninensis Shreve, 1941:75. Holotype: MCZ 45820, from Huasqui [3822 m], near Tarma, Departamento Junín, Peru. Synonymy fide Fritts (1974:65).

Specimens Examined.—PERU: JUNÍN: Huasqui, near Tarma, MCZ 45820–21; Huacapistana, 2400 m, FMNH 40617; Palca, 2875 m, BMNH 1946.8.11.89–91 [syntypes]; 4 km west of Palca, 3000 m, KU 134175; 5 km west of Palca, 3000 m,

KU 134176–79; 16 km north-northeast Palca by road, 2540 m, MCZ 178166, USNM 299545–49; 28 km southwest of San Ramón by road, 2070 m, KU 299612; Tarma, 3500 m, FMNH 134425.

Diagnosis.—*Stenocercus variabilis* is distinguished from all species of *Stenocercus* except *S. frittsi* in having granular scales on the posterior



FIG. 5. Lateral view of head of *Stenocercus frittsi*. KU 134195, male. Scale bar = 5 mm.

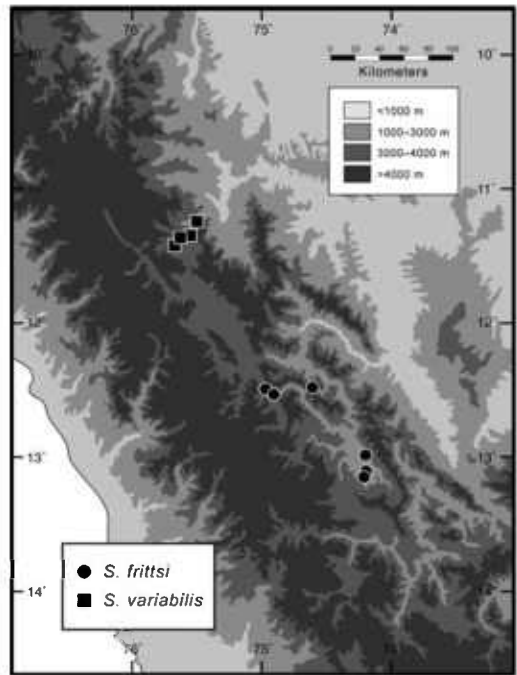


FIG. 6. Distribution of *Stenocercus frittsi* and *Stenocercus variabilis*.

TABLE 3. Sexual variation in scutellation and measurements (mm) of *Stenocercus variabilis*.

Character	Males	Females
	Range (N) Mean \pm SD	Range (N) Mean \pm SD
Scales around midbody	61–86 (13) 71.46 \pm 7.57	63–74 (4) 70.75 \pm 5.25
Vertebrales	50–60 (13) 57.85 \pm 2.73	52–59 (4) 56.00 \pm 3.16
Paravertebrales	70–81 (13) 76.31 \pm 4.53	72–77 (4) 73.75 \pm 2.36
Gulars	26–33 (13) 28.38 \pm 2.33	26–30 (4) 28.00 \pm 1.63
Supraoculars	5–7 (13) 5.77 \pm 0.60	5–6 (4) 5.25 \pm 0.50
Internasals	3–4 (13) 3.92 \pm 0.28	4 (4) 4
Subdigitals Finger IV	21–24 (13) 21.77 \pm 0.93	19–21 (4) 20.50 \pm 1.00
Subdigitals Toe IV	26–35 (13) 29.85 \pm 2.30	28–32 (4) 30.50 \pm 1.73
Tail length/total length	0.64–0.67 (7) 0.65 \pm 0.01	0.60–0.67 (4) 0.64 \pm 0.03
Maximum SVL	94	76

surface of thighs, imbricate, keeled lateral body scales, a distinct vertebral row of enlarged scales, unnotched gular scales, neck folds, three caudal whorls per autotomic segment, gray or brown dorsal background, and no black patch on shoulder in males. The main difference between *S. variabilis* and *S. frittsi* is that the former species has a distinct, deep postfemoral mite pocket (pocket absent in *S. frittsi*; Fig. 4). In addition, *S. variabilis* is larger than *S. frittsi*, and it has on average more scales around midbody, as well as more gulars, paravertebrales, and subdigitals (Table 1).

Characterization.—(1) Maximum total length in males 94 mm ($N = 15$); (2) maximum total length in females 76 mm ($N = 4$); (3) vertebrales 50–60; (4) paravertebrales 70–81; (5) scales around midbody 61–86; (6) supraoculars 5–7; (7) internasals 3–4; (8) postrostrals 6; (9) loreals 2–4; (10) gulars 26–33; (11) lamellae on Finger IV 19–24; (12) lamellae on Toe IV 26–35; (13) posthumeral pocket shallow, Type 2 of Cadle (1991); (14) postfemoral pocket deep, Type 5 of Cadle (1991); (15) parietal eye not visible; (16) occipital scales small, smooth, juxtaposed; (17) no projecting angulate temporals; (18) supraoculars subequal in size; (19) scales on frontonasal region weakly imbricate anteriorly; (20) short preauricular fringe present; (21) antegular, antehumeral, gular, longitudinal, oblique, postauricular, supra-auricular, and transverse antegular neck folds present; (22) lateral nuchals less than half the size of dorsal nuchals; (23) posterior gulars in adults smooth, imbricate, not mucronate; (24) lateral

scales reduced in size, approximately half the size of dorsal body scales; (25) vertebral crest prominent; (26) dorsolateral crest absent; (27) ventrals in adults smooth, imbricate, not mucronate; (28) scales on posterior surfaces of thighs granular; (29) prefemoral fold present; (30) inguinal groove present; (31) preanals not projected; (32) tail not compressed laterally in adult males; (33) tail length 60–67% of total length; (34) three caudal whorls per autotomic segment; (35) caudals not spinose; (36) dark stripe extending anterodorsally from subocular region to supraciliaries absent; (37) gular region of adult females with dark reticulation in some specimens; (38) gular region of adult males with blue reticulation in some specimens; (39) no black blotch on ventral surface of neck in adult males; (40) no thin black or dark brown midventral line; (41) no black patch on ventral surface of thighs; (42) background color of dorsum brown; (43) pattern of inscriptional rib attachment unknown. Sexual variation in measurements and scutellation of *Stenocercus variabilis* is presented in Table 3.

Description of Syntype BMNH 1946.8.11.89.—Male (Fig. 1B); SVL = 83 mm; TL = 168 mm; maximum head width = 14.29 mm; head length = 20.52 mm; head height = 13.24 mm; scales on parietal and occipital regions small, smooth, juxtaposed; parietal eye not visible; supraoculars in six rows, smooth, slightly imbricate, subequal in size; canthals two; scales in frontonasal region juxtaposed; internasals four; postrostrals six; supralabials five; infralabials six; loreals four; lorilabials in one row; preocular not divided, in contact with posterior canthal; lateral temporals imbricate, moderately keeled; gulars in 27 rows between tympanic openings; all gulars smooth, imbricate, each bearing one apical pit; second infralabial in contact with first two sublabials; mental in contact with first pair of infralabials and first pair of postmentals; lateral and dorsal scales of body and dorsal scales of neck keeled, imbricate; lateral scales of neck granular; scales around midbody 61; vertebrales large, in 60 rows, forming a prominent serrate vertebral crest; paravertebrales 81; ventrals smooth, imbricate; preauricular fringe short; antegular, antehumeral, gular, longitudinal, oblique, postauricular, supra-auricular, and transverse antegular neck folds present; limb scales keeled, imbricate; ventral scales of hind limbs and upper arms smooth; lamellae on Finger IV 21; lamellae on Toe IV 29; tail not compressed laterally; caudals keeled, imbricate; basal subcaudals smooth, imbricate; tail length 2.02 times SVL; posthumeral pocket shallow with vertically oriented fold (Type 2 of Cadle, 1991); postfemoral pocket lined with granular scales, deep (Type 5 of Cadle, 1991), and with posteroventrally oriented slit-like opening (Fig. 4). The specimens used by

Torres-Carvajal (2004) to determine the pattern of inscriptional rib attachment in *S. variabilis* correspond to *S. frittsi*.

Color in Preservative of Syntypes.—Dorsal ground color green with white spots laterally, or gray with black spots dorsally or laterally; venter whitish; throat marbled with olive; one specimen (BMNH 1946.8.11.89) with a black bar across scapular region and black throat and belly (Fig. 1B; Boulenger, 1901).

Color Variation.—An adult female (KU 134175) had the following coloration in life: dorsum medium brown with light tan dorsolateral area; middorsal irregular dark brown transverse bands extending onto base of tail; dorsal dark brown, narrow, transverse band anterior to forelimbs; ventral surface of body light gray anteriorly and yellow posteriorly; ventral surface of hind limbs yellow; iris bronze (T. H. Fritts, field notes, 7 October 1969). An adult male (KU 134178) had the following coloration in life: dorsum variegated dull brown and yellowish brown; flanks variegated pale blue and pale medium brown, with small clusters of black scales; head medium brown with whitish spots; chin grayish-white with pale blue reticulations; ventral surface of body whitish-beige with pale yellow midventral stripe; ventral surface of limbs and tail pale yellow, iris bronze (T. H. Fritts, field notes, 8 October 1969).

Distribution and Ecology.—*Stenocercus variabilis* inhabits the upper valleys of Río Perene on the eastern slopes of the Andes in central Peru (Fig. 6). It occurs at elevations of 1557–3822 m in Departamento Junín. Some specimens were collected in rock piles, under solitary rocks, and on the ground at the bases of shrubs in moderately mesic areas with *Agave*, grass, and shrubs (T. H. Fritts, field notes). The lowest elevation within the distribution of *S. variabilis* reported by Fritts (1974) corresponds to one of the locality records for *S. frittsi* (see distribution of *S. frittsi* above.) The highest altitude limit was reported by Fritts (1974) as 3000 m, probably because he lacked altitude data for Huasqui, 11°25'33"S, 75°45'15"W, 3822 m. No other species of *Stenocercus* is known to occur in sympatry with *S. variabilis*. However, other species of *Stenocercus* inhabiting adjacent areas in the upper valleys of Río Perene are *Stenocercus boettgeri*, *Stenocercus* cf. *crassicaudatus*, *Stenocercus formosus*, *Stenocercus praeornatus*, and *Stenocercus scapularis*. Future collections may reveal sympatry between *S. variabilis* and one or more of these species.

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