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TEIID LIZARDS RELATED TO *PROCTOPORUS LUCTUOSUS*,  
WITH THE DESCRIPTION OF A NEW SPECIES  
FROM VENEZUELA

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WHEN the teiid lizard currently known as *Proctoporus luctuosus* was originally described by Peters (1862), it was placed in a new subgenus, *Oreosaurus*, of the genus *Eupleopus*. This species and another, *striatus*, which Peters assigned to *Oreosaurus*, he characterized as having striate dorsal scales; those in the closely related subgenus *Proctoporus*, *pachyurus* and *unicolor*, as having smooth or keeled ones. In 1885 Boulenger elevated both subgenera to genera and modified the definitions somewhat. To *Oreosaurus* he added species with a wide band of small scales separating the ventral and dorsal ones, and to *Proctoporus*, species having the dorsal and ventral scales separated by a narrow continuous zone of granules. Boulenger, however, kept in *Oreosaurus* certain forms that have striate scales as well as a narrow continuous zone of granules. In the former feature they fitted Peters' definition of the group, but in the latter they failed to agree with Boulenger's new concept. After a study of these lizards, Andersson (1914) was unable to recognize two genera and merged *Oreosaurus* with *Proctoporus*. In this action he has been followed by many subsequent workers, including Burt and Burt (1931), who were the last to treat the entire group.

Until recently few of the species of *Proctoporus* were known from series. In fact more than half of the forms had been reported from less than five specimens. As a result of examination of most of the material in North American collections and 11 of the 16 recognized species, I am convinced that several natural groups can be distinguished. One of these groups, consisting of *P. luctuosus*, *P. laevis*, *P. oculatus*, *P. shrevei*, and a new form from Venezuela, is discussed in this paper.

*Proctoporus* Tschudi

DEFINITION.—Tongue with imbricate scalelike papillae. Head scales without striations or rugosities; single frontonasal, frontal, and inter-

parietal; paired frontoparietals and parietals; nostril pierced in a single nasal; nasals not in contact. Eyelids developed, lower with a translucent disc. Posterior gulars squarish. Limbs pentadactyl; digits clawed. Fore-foot with three enlarged platelike scales along inner margin of palm, between wrist and thumb. Underside of third and fourth digits of hind foot with paired scales on proximal part, the inner scales tuberculate. Dorsal scales elongate, quadrangular or hexagonal, smooth, keeled, or striate, juxtaposed or slightly overlapping. Ventrals large, smooth, quadrangular, juxtaposed, forming regular longitudinal and transverse series. Femoral pores present in males, usually present in females. Tail cylindrical.

#### *Proctoporus luctuosus* GROUP

DEFINITION.—Lateral scales smaller than dorsals and forming wide band between dorsals and ventrals, or poorly or not differentiated from dorsals; no continuous narrow zone of granules separating ventral and dorsal scales (Fig. 1). Males with ocelli in pattern. Four supraoculars, all separated from upper palpebrals by superciliary series; first superciliary not expanded onto dorsal surface of head. Translucent disc in lower eyelid composed of several scales. No median occipital. Pregulars (Ruibal, 1952:478) arranged in chevrons, the apices forward; not in transverse rows. Limbs overlapping when adpressed. Females with femoral pores, but fewer than males. The most striking feature of the *luctuosus* group is the absence of a continuous narrow granular band along the sides of the body. The other characters can be duplicated individually in species outside the group, but the combination is distinctive.

Although, as used in this paper, the *luctuosus* group is composed of the species which fit Boulenger's modified definition of *Oreosaurus*, I think that it is better to retain them within *Proctoporus* for the present. The name *Oreosaurus*, with *P. luctuosus* as type species by subsequent designation (Burt and Burt, 1931), remains available should later work indicate that generic status is warranted for this group of species. Because they have a continuous narrow granular band (Fig. 1C) along the sides of the body, the following forms, which have been referred to *Oreosaurus*, do not belong to the *luctuosus* group: *P. anomalus* (Barbour and Noble), *P. guentheri* (Boettger), *P. ocellifer* (Boulenger), *P. petersi* (Boettger) and *P. striatus* (Peters). Of the forms assigned to the *luctuosus* group, I have seen *P. shrevei* and the new Venezuelan form in series and two specimens of *P. luctuosus*. The holotypes of *P. oculatus* and *P. laevis* were examined for me by J. C. Battersby.

*Proctoporus luctuosus* (Peters)

Two males, UMMZ 117404-05, were examined. They are the first to be reported since the original description (Peters, 1862) and were collected, as were the two syntypes, in Venezuela. Peters gave no exact locality, but the recently secured individuals are from Rancho Grande, in Aragua, about 1100 m. above sea level (Map 1). The sex of the syntypes was not recorded, but presumably one of them is a male, since the original description mentions ocelli in the pattern and ocelli are absent or poorly developed in the females of the *luctuosus* group which I have examined. While, in general, the Rancho Grande specimens agree with Peters' account, they are described here in detail in order to emphasize certain differences from the syntypes and to supplement available information on variation in the species.

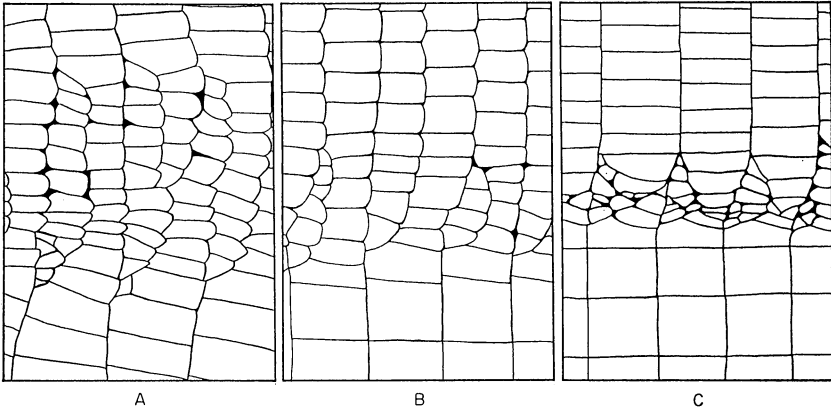
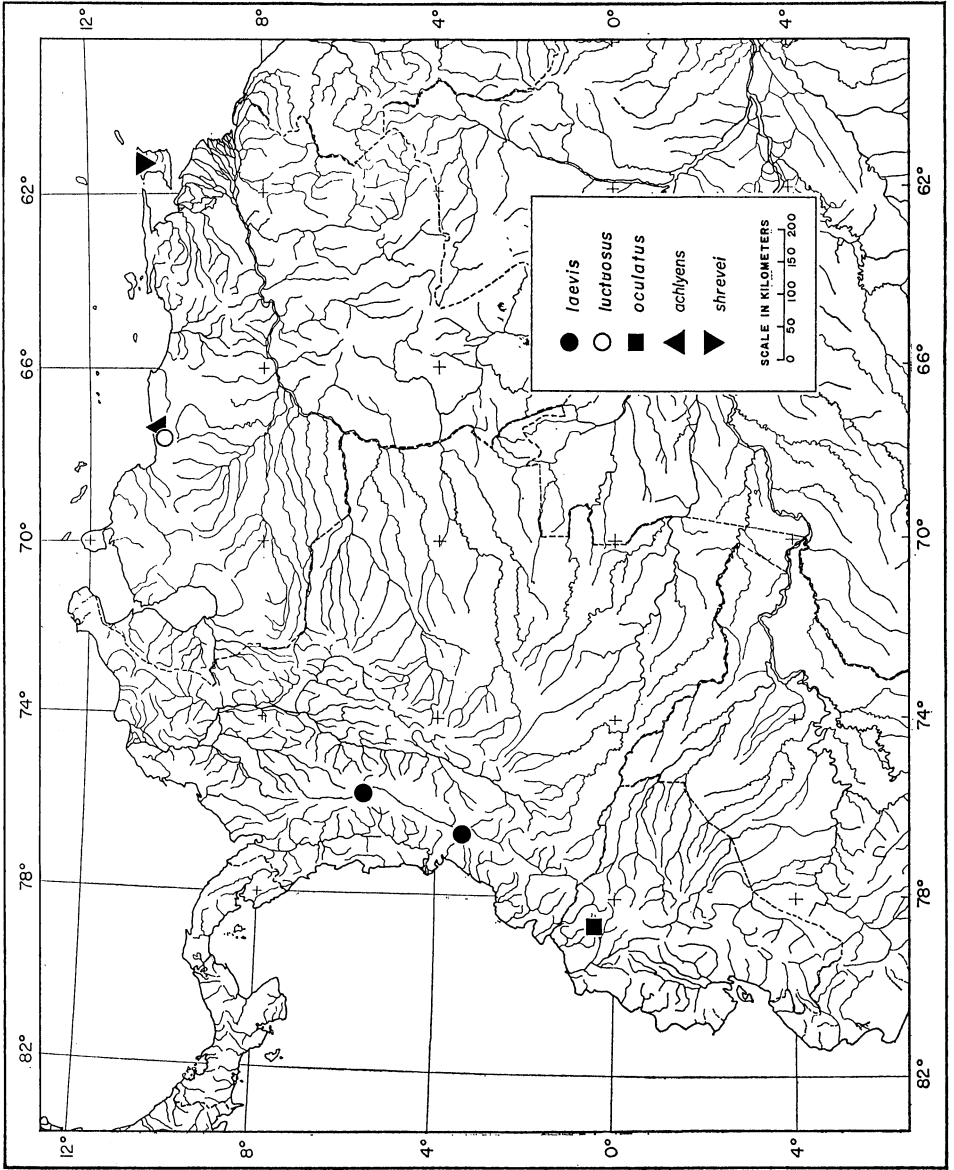


FIG. 1. Lateral view of scutellation of the midbody region of three species of *Proctoporus*: A, *P. luctuosus*; B, *P. achlyens*; C, *P. ocellifer*. The continuous narrow zone of granules between the dorsal and ventral scales characteristic of species of *Proctoporus* outside the *luctuosus* group is illustrated by *P. ocellifer*.

Frontonasal longer than broad, narrower anteriorly; loreal broadly in contact with frontonasal above, in contact with second and third supralabials below; frontal longer than frontonasal; frontoparietals in broad contact; interparietal longer than parietals; two large occipitals; infraorbital series separating lower palpebrals from labials; six supralabials; temporal region below middle of ear opening and posterior corner of eye covered by small scales; above, by larger ones; four infra-



labials; one unpaired and three paired chin shields; two pairs of chin shields in contact on midline.

Gulars rectangular, smooth, in eight to nine rows, including collar; eight or 10 scales in collar. Dorsal nuchal scales weakly keeled, rectangular, wider than long, not rugose; four large smooth scales bordering occipitals posteriorly, about four times area of scales in following row; dorsal body scales about twice as long as wide, keeled; lateral scales forming a wide band of small scales (about 10) between dorsals and ventrals (Fig. 1A), about two rows of laterals for each row of dorsals in midbody region; scales of tail like dorsals above, like ventrals below.

Scales of upper arm smooth, polygonal, subimbricate on upper surface; granular below. Lower arm with smooth, polygonal, subimbricate scales on dorsal, posterior, and ventral surfaces; narrow granular zone along anterior surface, but granules not in contact with largest of scales on ventral surface; a single platelike scale at outer proximal corner of palm.

Scales of thigh large, smooth, polygonal, and subimbricate on anterior and ventral surfaces; scales of dorsal surface smaller, weakly keeled; posterior surface granular. Shank with large, smooth, polygonal, subimbricate scales on ventral surface; smaller, weakly keeled scales on anterior and dorsal surface; posterior surface granular.

Color in alcohol: dorsal surface gray-brown, with irregularly scattered black-brown spots; no light dorsolateral line; side with two irregular rows of light-centered black spots, those of upper row more numerous, continuing onto neck; two well developed black-bordered light lines extending across upper and lower lips from middle and posterior corner of eye, each centered on labial suture; other labial sutures crossed by shorter light lines; scales of throat and chin pigmented in center, with light borders, or with small scattered pigment spots; underside of body and tail lightly and uniformly pigmented with gray.

Snout-vent length, 75–76 mm.; total length 204–181 mm.

The UMMZ specimens differ from Peters' description of *Proctoporus luctuosus* particularly in having keeled dorsal scales, fewer dorsal scale rows, a partial second row of ocelli, more femoral pores, and a slightly longer hind limb (Table I). In the light of the many similarities, it seems preferable to assume that the differences are due to individual variation—at least until additional material becomes available.

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MAP 1. Northwestern South America showing locality records for lizards of the *Proctoporus luctuosus* group.

*Proctoporus laevis* (Boulenger)

Possibly the closest relative of *Proctoporus luctuosus* is a Colombian species, *P. laevis* (Boulenger, 1908). The holotype is a male from San Antonio in Valle de Cauca, about 10 km. WNW of Cali, nearly 2200 m. above sea level, on the eastern side of the west range of the Andes (Chapman, 1917). Another specimen was recorded by Burt (1932) from Jericó, Colombia. If this is the Jericó from which a specimen of *Anadia ocellata* is recorded in the same paper, it is in Antioquia, on the eastern slope of the west range of the Andes, at about 1967 m. (Dunn, 1944), and to the north of San Antonio (Map 1). The individual reported as *P.*

TABLE I

VARIATION IN CERTAIN CHARACTERS OF *Proctoporus luctuosus* AND *P. laevis*  
Data in parentheses under *P. laevis* are from Burt (1932).

Character	<i>P. luctuosus</i> (Syntypes)	<i>P. luctuosus</i> (UMMZ 117404-05)	<i>P. laevis</i>
Arrangement of ocelli (each side) .....	Single Row	One Complete, One Partial Row	Four Rows (Absent)
Dorsal scales .....	Striate	Keeled	Smooth (Smooth)
Dorsal-scale rows .....	43	38, 40	37 (36)
Ventral-scale rows			
longitudinal .....	10	10	8 (8)
transverse .....	20	21	19 (18)
Scale rows around midbody ..	?	46, 48	34 (33)
Total femoral pores .....	20, 24	27, 29	19 (15)
Light lip lines .....	Present	Present	Absent (Absent)
Hind-leg length .....	.402	.467, .474	.347
Snout-vent length .....			
Lamellae			
4th finger .....	?	13, 14	13
4th toe .....	?	18, 20	19, 20

*laevis* by Burt is generally similar to the holotype but has fewer femoral pores and lacks ocelli; these differences suggest that it is a female.

*Proctoporus laevis* shares the following characters with the syntypes and Rancho Grande specimens of *P. luctuosus*: lateral scales in the mid-body region in more numerous transverse rows than dorsals; large size (72 mm. snout-vent length, 160 mm. total length); and no light dorso-lateral lines. It differs, however, in several ways from either the Rancho Grande specimens of *P. luctuosus* or the syntypes or both (See Table I).

*Proctoporus oculatus* (O'Shaughnessy)

This species has not been retaken since its description by O'Shaughnessy (1879). The holotype is a male from Intac, Imbabura, Ecuador (Map 1).

Three specimens which do not belong to the *luctuosus* group were referred to *Proctoporus oculatus* by Burt and Burt (1931). One (AMNH 18310), from El Chiral, El Oro, Ecuador, consists only of the head and fore part of the body. Many important characters, therefore, cannot be determined, but it clearly differs from *P. oculatus* in having no loreal, the preangular scales in two transverse rows, striate instead of keeled dorsal scales, second supraocular in contact with upper palpebrals, and an enlarged scale on the anterior surface of the upper arm. The arrangement of the preangular scales, the striate dorsals, and the four supraoculars, together with minute ridges on the scales of the under side of the forearm, suggest relationship with *P. striatus*. It is, however, unlike that form in that the second supraocular is in contact with the palpebrals, the forearm has an enlarged scale on the upper surface, and the pattern lacks a dark median stripe between the dark-bordered light dorsolateral stripes. Determination of the status of this mutilated specimen must await the acquisition of additional material; it is probably closely related to *P. striatus*. The other two specimens (AMNH 38821-22), both from Abitagua, Napo-Pastaza, Ecuador, appear to represent a single form. They differ from species of the *luctuosus* group in having a narrow band of granules separating the dorsals and ventrals, and from *P. oculatus*, in particular, in having a median occipital, the second supraocular in contact with upper palpebrals, and short limbs, not touching when adpressed. They are unlike AMNH 18310 in having a loreal, a median occipital, small forelimbs, and keeled dorsal scales, and also in numerous other details. Although they most closely resemble *P. columbianus*, they show certain differences from that form.

*Proctoporus lividus* Thominot

Thominot (1889) described this species from two specimens without locality data. It was placed in the synonymy of *Proctoporus unicolor* (Gray) by Boulenger (1889), but Burt and Burt (1931) considered it a synonym of *P. oculatus*. *Proctoporus lividus* differs from members of the *luctuosus* group in that it has a narrow zone of granules separating the dorsal and ventral scales. It differs from *P. oculatus* in several additional ways: by having three supraoculars, a median occipital, weakly developed limbs, second supraocular in contact with palpebrals, and preanal

pores. The syntypes of *P. lividus* were compared with a specimen of *P. unicolor* by Jean Guibé. Since they agree with *P. unicolor* in all the characters listed above, but with no other species of *Proctoporus*, the name *P. lividus* must be returned to the synonymy of *P. unicolor*.

*Proctoporus shrevei* Parker

Since the description of this form (Parker, 1935) from the Aripo Northern Range of Trinidad, several additional specimens have been collected. I have seen the single paratype and 10 other individuals, nine from Mt. Aripo and one from Mt. Tucuche (Map 1).

Certain points in which *Proctoporus shrevei* differs from others in the *luctuosus* group deserve emphasis. The loreal is not distinct, but fused with the nasal. The hexagonal dorsal scales are more acute posteriorly and overlap to a greater extent than in any other species of the genus. In the midbody region, the lateral scales tend to form two rows for each row of dorsal scales. The venter of adult males is immaculate cream, resembling that of adult females and young; it is not heavily blotched with black. The pattern shows clearly in Parker's (1939) Figure 1.

In males of *Proctoporus shrevei* the femoral-pore series curves forward on the proximal part of the thigh (just as in other species of the *luctuosus* group) and the terminal pores in the curves are just lateral to the posterolateral corners of the two anterior preanal scales. A single pore is situated in the posterolateral corner of each anterior preanal scale. This pore does not continue the curve of the femoral-pore series, but lies, with the terminal pore in the adjacent curve, in a line normal to the curve. This is the only species of the genus which has such an arrangement of femoral pores. In the females, the femoral pores are small, poorly developed, and difficult to count. Individual totals for five females ranged from 2 to 17; this probably encompasses the variation. I do not believe, however, that a mean based on these counts would be valid.

Largest male: snout-vent length, 47 mm.; total length, 120 mm.  
Largest female: snout-vent length, 44 mm.; total length, 113 mm.

In all specimens examined, the longitudinal rows of ventral scales numbered 8. Variation in other characters is given in Table II.

Specimens examined: BM(NH) 1940.3.11.71-74, 1940.3.11.92-97; MCZ 34273, 38659.

*Proctoporus achlyens*, new species

(Fig. 1B)

HOLOTYPE.—UMMZ 117333, an adult male from 20.5 km. NNW of Maracay on Maracay-Rancho Grande road, 1150 m. above sea level, near



TABLE II

VARIATION IN *Proctoporus shrevei* AND IN THE TYPE SERIES OF *Proctoporus achlyens*  
 Figures represent ranges and (in parentheses) means.

Species, Sex, and Sample Size	Transverse Rows of Ventrals	Dorsal Scale Rows	Scale Rows around Midbody	Femoral Pores	Lamellae, 4th Finger	Lamellae, 4th Toe
<i>P. shrevei</i>						
Males (6) .....	19-21 (19.8)	33-37 (35.5)	29-33 (31.5)	29-31 (30.0)	11-12 (11.2)	15-18 (16.1)
Females (5) .....	19-21 (20.0)	36-41 (38.2)	32-34 (32.6)	2?-17?*	9-12 (10.2)	16-18 (16.4)
<i>P. achlyens</i>						
Males (9) .....	17-19 (17.9)	34-38 (36.1)	31-37 (34.0)	25-29 (26.7)	8-12 (9.9)	14-17 (15.8)
Females (9) .....	17-18 (17.7)	35-40 (37.1)	31-39 (34.3)	12-16 (15.1)	9-11 (10.4)	14-18 (15.7)

\* Femoral pores in females of *Proctoporus shrevei* are difficult to count (see text).

Rancho Grande, Aragua, Venezuela; collected July 24–25, 1956, by Owen J. Sexton; original field number CD 2229.

PARATYPES.—UMMZ 117317–32, 117403; all from near Rancho Grande, Aragua, Venezuela; 940–1215 m. elevation; collected by O. J. Sexton, H. F. Heatwole, F. H. Test, and A. R. Test.

REFERRED MATERIAL.—UMMZ 117312–16, 117334; MBUCV 3000–10; MCZ 53128.

RANGE.—All known specimens are from the higher parts of the Parque Nacional de Aragua, Aragua, Venezuela (Map 1).

DIAGNOSIS.—A species of the *luctuosus* group of *Proctoporus* characterized by having a distinct loreal, a light dorsolateral line, black blotches on venter of adult males, and ventral scales in six to eight longitudinal rows. *Proctoporus achlyens* may be distinguished from other members of the *luctuosus* group as follows: From both *P. luctuosus* and *P. laevis*, in having a light dorsolateral stripe on the anterior part of the body; from *P. luctuosus*, in having fewer scales around the middle of the body, fewer longitudinal rows of ventrals, the venter of adult males heavily blotched with black on a light background rather than uniformly gray, and dorsals obtusely hexagonal and imbricate; from *P. laevis*, in having keeled dorsals, more femoral pores, and light lines crossing both lips from eye; from *P. shrevei*, in having no pores on anterior preanal scales of males, black-blotched venter in adult males, and a distinct loreal; and from *P. oculatus*, in having more femoral pores, fewer longitudinal rows of ventral scales, and fewer rows (for each dorsal row) of lateral scales.

DESCRIPTION OF HOLOTYPE.—Frontonasal longer than broad, narrowed anteriorly, loreal broadly in contact above with frontonasal, narrowly in contact below with first and broadly with second supralabial; frontal as long as frontonasal; frontoparietals in broad contact; interparietal longer than parietals and frontoparietals; two occipitals, as large as parietals; complete series of suboculars separating lower palpebrals from labials; seven supralabials; temporal region covered by small scales, those above middle of ear opening and posterior corner of eye slightly larger; scales of head covered with shallow depressions; five infralabials; one unpaired and three paired chin shields; anterior two pairs of chin shields in contact on midline.

Gulars rectangular, smooth, in eight transverse rows including collar; ventrals in eight longitudinal and 16 transverse rows, excluding two rows of preanals; dorsal nuchal scales weakly keeled, minutely rugose, squarish or slightly wider than long; four larger, smooth scales bordering occipitals posteriorly, about four times area of other dorsal nuchals;

dorsal body scales about twice as long as broad, keeled and rugose, obtusely hexagonal and imbricate, in 36 transverse rows between occipitals and base of tail; dorsal scale rows in the midbody region continuing to ventrals, but with two to three short rows of scales wedged between the lower ends of the dorsal scale rows, so that just above the ventrals eleven scales occur in the space occupied by eight dorsal scale rows near the middorsal line (Fig. 1B); lateral scales minutely rugose; 37 scales around midbody; scales of tail like those of body.

Scales on upper forelimb rugose, polygonal and subimbricate above and posteriorly, granular below; on lower forelimb smooth, polygonal, and subimbricate on dorsal, posterior, and ventral surfaces, granular anteriorly, granules being in direct contact with largest scales on ventral surface; a single platelike scale at posteroproximal corner of palm; 11 lamellae under fourth digit.

Scales on thigh rugose on dorsal and posterior surface, smooth below; anterior and ventral surfaces with polygonal, subimbricate scales; smaller, weakly keeled scales above; granules posteriorly. Dorsal shank scales keeled and minutely rugose; ventral shank scales smooth, polygonal, subimbricate; scales on posterior half of dorsal surface of foot minutely rugose; 15–17 lamellae under fourth digit.

VARIATION.—Color in alcohol. Adult females and young: dorsal and lateral surfaces brown, dorsal surface with scattered spots of black, those in shoulder region being linearly arranged and forming irregular or regular margins for light dorsolateral stripes of yellow-brown; light stripes broken into patches posteriorly, or extending to base of tail; light stripes continuing on head to posterior corner of eye, but less distinct than on body; light areas may be present along sides; ventral surface of body cream-yellow; undersurface of tail brownish, with lighter area sometimes present on midline at base of tail; two light stripes across upper and lower lips, first from middle of lower eyelid, second from posterior corner of eye; chin mottled with brown. Adult males: similar, but generally darker; line of ocelli along sides from behind ear opening to near insertion of hind limbs with minute, apparently pigmentless, light dots centered in black spots two to three scale lengths across; below these frequently other ocelli, sometimes tending to form a second line; ventral surface blotched with black; light areas underneath often confined to posterior margins of ventrals and to scattered spots on scales of chin and throat.

All of the paratypes have eight longitudinal rows of ventral scales; of the 17 other specimens examined, one, MBUCV 3001, differs in having

six longitudinal rows of ventrals. Other data on variation are summarized in Table II.

Largest male: snout-vent length, 53 mm., total length, 143 mm. Largest female: snout-vent length, 52 mm., total length, 120 mm.

*Proctoporus achlyens* occurs with *P. luctuosus* at Rancho Grande. The name *achlyens* is from the Greek, ἀχλινόω, "to grow dark."

#### *Proctoporus hypostictus* Boulenger

In the material examined no specimens were found which fit the description of *Proctoporus hypostictus* Boulenger (1902). As far as I am aware this species is still known only from the holotype, a specimen from Paramba, Imbabura, Ecuador. My knowledge of it is based on the original description and on information furnished by J. C. Battersby. I have been unable to place *P. hypostictus* in any group of *Proctoporus*. It has many features similar to *P. achlyens*, including ventral coloration, number of dorsal scale rows, number of scales around midbody, number of transverse ventral scale rows, strong limbs, arrangement of prelegals, lack of a median occipital, and presence of a loreal and four supraoculars. The holotype is reportedly an adult male. According to Battersby, however, the sex was not determined by dissection. If it is a male, it differs from all members of the *luctuosus* group in lacking ocelli, and from *P. achlyens* in particular, in having 12 instead of 25 to 29 femoral pores and in lacking light dorsolateral stripes. Regardless of sex, it differs from all species of the *luctuosus* group in having 12 instead of 10 or fewer longitudinal rows of ventrals.

I have examined the specimen (AMNH 18312) reported by Burt and Burt (1931) as *Proctoporus hypostictus* from El Chiral, El Oro, Ecuador. In all details of scutellation, except lack of prefrontals, it appears to be a *Prionodactylus*, and I consider it an anomalous individual of that genus. It seems closest to *Prionodactylus vertebralis* (O'Shaughnessy), an Ecuadorian form.

#### RELATIONSHIPS

The five species allocated to the *Proctoporus luctuosus* group were compared for characters which seem to indicate relationships. The results are given in Table III. I cannot determine the exact relationship of the three species which I have seen to the two which I have not (*P. laevis* and *P. oculatus*). Of the three studied, I would place *P. shrevei* and *P. achlyens* together, and leave *P. luctuosus* by itself. Both *P. shrevei* and *P. achlyens* have hexagonal dorsal scales, and both have light dorso-

TABLE III  
COMPARISON OF THE FIVE SPECIES OF THE *Proctoporus luctuosus* GROUP

Species	Dorsolateral Light Stripe	Dorsal Scales	Rows of Lateral Scales per Dorsal Row	$\frac{\text{Hind-leg length}}{\text{Snout-vent length}}$	Lamellae, 4th Finger	Lamellae, 4th Toe
<i>P. luctuosus</i> .....	Absent	Rectangular; Striate or Keeled	About Two	0.402-0.474	13-14	18-20
<i>P. laevis</i> .....	Absent	Rectangular; Smooth	Two or Three	0.347	14	18-20
<i>P. ocellatus</i> .....	Present	Rectangular; Keeled	About Two	0.333	14	20
<i>P. achlyens</i> .....	Present	Obtusely Hexagonal; Keeled	One or Two	0.333-0.389	8-12	14-18
<i>P. shrevei</i> .....	Present	Acutely Hexagonal; Keeled	About Two	0.404	9-12	15-18

lateral lines. In adult males of *P. achlyens* the ventral pattern of heavy black blotches represents an ontogenetic change from the immaculate cream-colored venter of the young, while in adult males of *P. shrevei* the immaculate venter of the young is retained.

The species of the *luctuosus* group may be separated by means of the following key:

- 1a. Light dorsolateral line present, at least on shoulder ..... 2
- 1b. Light dorsolateral line absent ..... 4
- 2a. Loreal absent; venter of adult males immaculate cream; a pore on each anterior preanal scale of males ..... *Proctoporus shrevei*
- 2b. Loreal present; venter of adult males blotched with black; no pores on anterior preanal scales of males ..... 3
- 3a. Eight or fewer longitudinal rows of ventrals; total femoral pores 12 or more in females, 25 or more in males ..... *Proctoporus achlyens*
- 3b. Ten longitudinal rows of ventrals; total femoral pores in males 11 (holotype only known) ..... *Proctoporus oculus*
- 4a. Dorsal scales smooth; no light lines across lips; scales around middle of body about 34 ..... *Proctoporus laevis*
- 4b. Dorsal scales striate or keeled; light lines crossing lips from eye; scales around middle of body about 46 ..... *Proctoporus luctuosus*

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## LITERATURE CITED

- ANDERSSON, LARS GABRIEL  
 1914 A New Telmatobius and New Teiidoid Lizards from South America. *Arkiv för Zoologi*, 9(3): 1-12.
- BOULENGER, GEORGE ALBERT  
 1885 Catalogue of the Lizards in the British Museum (Natural History), 2: 1-497, Pls. I-XXIV.  
 1889 *Zoological Record*, 26, Division 4 (Reptilia and Batrachia): 1-23.  
 1902 Descriptions of New Batrachians and Reptiles from North-western Ecuador. *Ann. Mag. Nat. Hist.*, Ser. 7, 9: 51-57.  
 1908 Descriptions of New Batrachians and Reptiles Discovered by Mr. M. G. Palmer in South-western Colombia. *Ibid.*, Ser. 8, 2: 515-22.
- BURT, CHARLES E.  
 1932 Comments on Some Lizards from Colombia. *Trans. Amer. Micro. Soc.*, 51: 209-16.
- BURT, CHARLES E., and MAY DANHEIM BURT  
 1931 South American Lizards in the Collection of the American Museum of Natural History. *Bull. Amer. Mus. Nat. Hist.*, 61: 227-395.
- CHAPMAN, FRANK M.  
 1917 The Distribution of Bird-life in Colombia; a Contribution to a Biological Survey of South America. *Bull. Amer. Mus. Nat. Hist.*, 36: 1-729.
- DUNN, EMMETT REID  
 1944 The Lizard Genera *Anadia* and *Ptychoglossus* in Colombia. *Caldasia*, 3: 63-68.
- O'SHAUGHNESSY, A. W. E.  
 1879 Descriptions of New Species of Lizards in the Collection of the British Museum. *Ann. Mag. Nat. Hist.*, Ser. 5, 4: 295-303.
- PARKER, H. W.  
 1935 The New Teiid Lizard in Trinidad. *Tropical Agriculture*, 12: 283.  
 1939 Luminous Organs in Lizards. *Jour. Linn. Soc. London, Zoology*, 40: 658-60, Pl. 22.
- PETERS, WILHELM  
 1862 Über *Cercosaura* und die mit dieser Gattung verwandten Eidechsen aus Südamerika. *Abhandl. Akad. Wiss. Berlin*, 1862, 165-225, Pls. I-III.
- RUIBAL, RODOLFO  
 1952 Revisionary Studies of Some South American Teiidae. *Bull. Mus. Comp. Zool. Harvard Coll.*, 106: 477-529.
- THOMINOT, ALEXANDRE  
 1889 Observations sur quelques reptiles et batraciens de la collection du Muséum d'Histoire Naturelle de Paris. *Bull. Soc. Philomatique*, Ser. 8, 1: 21-30.

