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DESCRIPTIONS OF TWO NEW SCELOPORI

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One of the specimens upon which these new species are based was found while examining the United States National Museum collection of the Genus *Sceloporus*. My attention was called to the other type by Dr. Karl P. Schmidt, who included it among specimens loaned for study by the Field Museum. The species which this specimen represents will undoubtedly prove interesting, for, as Dr. Schmidt's field notes state, the habitat conditions are rather unusual for a *Sceloporus*.

*Sceloporus cozumelae*, new species

*Diagnosis*: Head shields feebly keeled or striated; lateral scales directed obliquely upward and backward, abruptly differentiated from the dorsals, but not granular; series of femoral pores widely separated on preanal region; none of transversely enlarged supraoculars in contact with mesial head shields; adpressed hind limb reaches slightly beyond ear; tibia shorter than shielded portion of head; distance from base of 5th to end of 4th hind toe exceeding distance from end of snout to ear; free portion of long hind toe equaling distance

from end of snout to posterior angle of orbit; two canthal scales.

*Type Specimen*: Cat. No. 13904, United States National Museum; Cozumel Island, Yucatan; United States Fish Commission, collector.

*Description of Type Specimen*: Female.\* Head shields feebly keeled or striated; frontal transversely divided, anterior portion longitudinally bisected, posterior portion in contact with anterior pair of parietals but separated from interparietal by a small azygous shield; three parietals on each side, posterior largest; interparietal heart-shaped, widest portion equaling length; 5 transversely enlarged supraoculars on right side, 4 on left side, bordered inwardly by a complete row of small granular scales and separated from the superciliaries by one complete and an incomplete row of small scales; two canthal scales on each side; anterior border of ear very feebly denticulated; 5 supralabials, junction of 4th and 5th under center of eye; 5 infralabials; dorsal scales much larger than ventrals, as long as broad, strongly keeled, mucronate, in about 15 longitudinal rows across middle of back, keels nearly parallel but converging posteriorly toward median line, 15 equaling the length of shielded portion of head; about 53 scales from posterior border of interparietal to posterior border of thighs; lateral scales smaller than dorsals, abruptly differentiated from dorsals, strongly keeled, mucronate and directed obliquely upward and backward; ventral scales small, smooth, entire, bi- or tricuspid; about 60 scales around middle of body; 6 to 8 femoral pores; adpressed hind limb reaches beyond ear; tibia shorter than shielded portion of head; distance from base of 5th to end of 4th hind toe exceeding distance end of snout to ear; free portion of long hind toe equaling distance from end of snout to posterior angle of orbit.

	mm.
Length from snout to vent.....	43
Length of shielded portion of head.....	11
Length of hind limb from midventral line.....	32
Length of tibia.....	10
Distance from base of 5th to end 4th hind toe.....	14
Length of free portion of long hind toe.....	9

Ground color (in alcohol) above olive brown, with a lighter mid-dorsal stripe about two scales wide; on each side of the stripe is a series of 10 dark brown, chevron-shaped markings, apex pointing forward; these markings are about one and one half scales wide and are separated longitudinally by about 3 scales; on each side there is a dorsolateral light stripe running through the apex of the chevron-shaped markings; in front of the shoulder there is a yellowish white mark, extending obliquely upward and forward from the insertion of the arm and disappearing under one of the folds of the gular pouch; the limbs are faintly barred to the tips with dark brown; the posterior surface of the thigh exhibits two dark brown longitudinal stripes separated by one of light brown or dark yellow; the under surfaces are of a uniform yellowish color.

*Remarks:* This lizard (U. S. N. M., No. 13904) was originally identified by Cope (Proc. Amer. Philos. Soc., Oct., 1885, Part IV, Vol. XXII, No. 120, p. 388) as *Sceloporus scalaris*. However, he could not have examined it very closely, for the lateral scales are distinctly directed obliquely backward and upward instead of being parallel as they are in *S. scalaris*. Further, the femoral pores are widely separated on the preanal region, and number 6-8, whereas the series of pores in *S. scalaris* approximate very closely and frequently are continuous across the preanal region. The characteristic number of femoral pores in the latter species is from 13 to 20. Other differences between the two forms are that the new species has about 53 scales from the posterior border of the interparietal to the posterior border of the thighs, while the greatest number of scales found in examining over 100 specimens of *scalaris* was 45. *S. cozumelae* has about 60 scales around the middle of the body while *scalaris* has approximately 45.

The United States National Museum possesses three other specimens (Nos. 17827-8-9) which are listed from Cozumel Island, Mexico, but the locality is questioned. However, after a careful examination of these specimens, I am convinced that they belong to the same species, and are probably from a locality not remote from Cozumel Island.

Except for slight variation in numbers of scales, femoral pores, length of limbs, and color, these three specimens are identical with the type. Among the three individuals the dorsal scale numbers vary from 50 to 54. The number of scales around the middle of the body is about 60 in all three specimens. The femoral pore counts are 7-8, 7-8 and 5-7. The single male specimen has enlarged post anal plates and exhibits no color differences. The ventral coloration of all three is uniform white.

*Affinities:* The relationships of *Sceloporus cozumelae* are certainly with the *variabilis* group of *Sceloporus* and more definitely with *S. chrysostictus*, which inhabits the mainland of Yucatan. From the latter species it may be distinguished by the greater number of scales, smaller number of femoral pores, shorter hind limbs (particularly the tibia) and by the very different coloration.

#### **Sceloporus schmidti**, new species

*Diagnosis:* Head shields smooth; lateral scales directed obliquely upward and backward, not granular and not abruptly differentiated from dorsals; series of femoral pores widely separated on preanal region; none of the enlarged supraoculars in contact with the mesial head shields; adpressed hind limb reaches beyond ear; tibia longer than shielded portion of head; distance from base of 5th to end of 4th hind toe about equaling distance from end of snout to gular pouch; free portion of long hind toe slightly longer than shielded portion of head; one canthal scale on each side.

*Type Specimen:* Cat. No. 5214, Field Museum of Natural History; Mountain Camp—west of San Pedro, 4,500 feet altitude, Honduras; May 5, 1923; Karl P. Schmidt, collector.

*Description of Type Specimen:* Female. Head shields smooth; frontal transversely divided, posterior portion in contact with anterior parietal but separated from the interparietal by a small azygous shield; interparietal broader than long; 2 parietals on each side, posteriors triangular in shape, wider than anteriors but much shorter; anteriors roughly rectangu-

lar, long and narrow; 4 transversely enlarged supraoculars on the left side with a smaller scale on the outside between the first and second; on the right 4 transversely enlarged supraoculars form an inner row and between the first and third, marginal to the first row, are two smaller scales; supraoculars bounded inwardly by one complete row of small granular scales and separated from the superciliaries by one complete and an incomplete row of small scales; one canthal scale on each side but when viewed from above a supercanthal gives the appearance of 2; 5 supralabials, center of eye directly above junction of 4 and 5; 5 or 6 infralabials; 3 or 4 slightly enlarged acuminate scales form a denticulation on the anterior border of the ear; dorsal scales larger than ventrals, as long as broad, strongly keeled, mucronate and somewhat denticulate, keels forming parallel series which converge slightly toward median line; about 12 rows across middle of back; 42 scales from posterior margin of interparietal to posterior border of thighs; 8 scales taken in middle of back correspond to length of shielded part of head; lateral scales smaller than dorsals, strongly keeled, mucronate, directed obliquely upward and backward, merging above with dorsals and below with ventrals; about 45 scales around middle of body; ventral scales small, smooth, entire or bicuspid; posterior surface of thigh covered with small keeled acuminate scales smaller than those preceding vent; 12 femoral pores on each side; adpressed hind limb reaches beyond ear to angle of jaws; tibia longer than shielded part of head; distance from base of 5th to end of 4th hind toe (less claw) equals distance from end of snout to gular pouch; free portion of long hind toe slightly longer than shielded part of head and equaling distance from end of snout to angle of jaws.

	mm.
Total length.....	162
Length from end of snout to vent.....	78
Length of shielded part of head.....	15.5
Length from end of snout to posterior border of ear.....	20
Length of hind limb (from midventral line).....	60
Distance from base of 5th to end of 4th hind toe.....	22.5
Length of tibia.....	17
Length of free portion of long hind toe.....	16

Ground color above dark olive, with two series of indistinct, dorsal, sooty brown blotches which anteriorly form longitudinal bands converging from the ear across the scapular region; between these on the neck are three indistinct sooty brown longitudinal bands which begin at the head, converge toward the median line, and disappear between the shoulders; the appendages are transversely banded to the tip with sooty brown; on the sides are obsolete rows of dark blotches; an indistinct dark triangular blotch appears on the shoulder; the head has numerous light brown blotches, one in the center of the interparietal surrounding the pineal eye, another on the frontal, and others appear on the prefrontal and shields of the internasal regions; spots of the same color appear either as distinct spots or fused with others along the marginal edges of the enlarged transverse supraoculars; the under surfaces are slaty gray, washed with a tinge of light blue or greenish, the center of the individual scales are faintly greenish, and the margins are light brown; the anterior portion of the under surface of the tail has a distinct greenish cast with the color more intense than on the belly and throat; the posterior surface of the thigh has a sooty brown band above followed by one of slaty gray, which still lower is replaced by another sooty brown band, in turn giving away to the previously described ventral color.

*Habitat:* Regarding the locality and habitat Dr. Schmidt has written me as follows: "This locality is in a well defined 'cloud forest,' which begins at about 4,000 feet and extends to the tops of the ridges, 5,000 to 6,000 feet above sea level. The vegetation forms a mixed hardwood forest with trees 80 to 100 feet high, and heavy undergrowth of tree ferns and dwarf palms. The trees and even the lianas carry numerous bromeliads, which are supplied with moisture by daily rains and fogs.

"During a week's stay in March-April, 1923, Mr. Walters and I were encamped in the palm-thatched shelter of a 'Sarsaero' (Sarsaparilla hunter), at 4,500 feet, on a shoulder of the mountains overlooking the valley of the Rio Santa Anna.

We saw no *Sceloporus*. On May 5th I returned alone with heavy ax and the camera to collect from the bromeliads, as these had already yielded two species of salamanders. On my arrival at the shelter, I was greeted by the *Sceloporus* on one side of the uprights.

"The habitat conditions seem unusual for a *Sceloporus*, and I suspect that this specimen represents a stray from the much drier pine-oak zone below 4,000 feet. The month of April had been an unusually dry one, and the low ground was everywhere suffering from continued drouth. A spring at 3,500 feet had dried up during April, while the one below our camp showed no diminution of flow."

Dr. Schmidt will undoubtedly publish a complete account of the geography of this region in the near future. It is enough to note here that the general region is undoubtedly a continuation of the Central American mountain mass which extends from Chiapas to Nicaragua.

*Affinities:* *Sceloporus schmidti* belongs with the *formosus* group of *Scelopori*. It is probable that specimens from localities intermediate between the range of *S. formosus* and the type locality of this new species will reveal intergrading characters such that *schmidti* will be recognized as a subspecies of *formosus*.

From the latter species it differs in the character of the dorsal scales, length of limbs, and coloration.

