## **PROCEEDINGS**

#### OF THE

## BIOLOGICAL SOCIETY OF WASHINGTON

# A NEW TRIMETOPON (OPHIDIA) FROM GUATEMALA

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During the course of investigating the herpetofauna of the southwestern highlands of Guatemala in 1947, the writer had the opportunity to spend some ten days at a coffee finca on the Pacific slopes. While raking in the mulch that accumulates in the coffee groves, I encountered, along with Rhadinaea lachrymans, Ninia s. sebae, Geophis nasalis, and Adelphicos q. sargii, a small snake which appears to be new to science, and may be assigned tentatively to the genus Trimetopon Cope.

As investigations into the nature and composition of the Middle American ophidian groups allied to the genus *Rhadinaea* Cope have progressed, the genus *Trimetopon* has become increasingly difficult of definition. Originally diagnosed as possessing a single prefrontal and a reduced number of dorsal scale rows (15), the genus has been redefined to include species with two prefrontals and 17 scale rows. Dunn¹ essayed a redescription of the group on the basis of the four species known to him at the time. Since then two Trimetopons have been named and in this paper I add another two. As the genus now stands, therefore, it cannot be differentiated from *Rhadinaea*, though it is possible that a reexamination of all material may reveal some hemipenial or tooth character by which the genus may be defined. In the opinion of the writer, however, the genus represents an unnatural group of species which appear to have had independent origins, in part at least, from several Rhadinaean ancestors, or, rather, Rhadinaean-like prototypes.

Not withstanding, the writer believes that, on the basis of our present knowledge, the genus is of value. In assembling under it a group of forms which in morphological characters and habits show some similarity and which would, for the present, confuse rather than clarify the nature of some other genus into which they might be forced, *Trimetopon* is worthy of recognition if its possible shortcomings are kept in mind. For my good friend and hospitable host, Señor don Walter Hannstein of Finca La Paz and Panajachel, I am, therefore, pleased to name

### Trimetopon hannsteini new species

Holotype.—University of Michigan, Museum of Zoology No. 98756. An adult male collected at Finca La Paz (18 kilometers [straight line]

Dunn, E. R., "New or Unnamed Snakes from Costa Rica." Copeia, 4, 1937: 214-15.

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due north of Coatepeque), Department of San Marcos, Guatemala, May 14, 1947. Elevation, 1,450 meters.

Paratypes.—University of Michigan, Museum of Zoology Nos. 98753-55, 98757. Collected with the holotype.

Diagnosis.—A small snake differing from all other species currently included in Trimetopon in possessing two prefrontals (eliminates gracile and simile), 17 dorsal scale rows (eliminates barbouri), eight supralabials (eliminates posadasi, slevini, and viquezi), and a single postocular (eliminates veraepacis, discussed below).

Description of holotype.—A full colubrine complement of normal head scutes. Rostral broader than high; visible from above. Two internasals; broader than long and only about one-half as long as the paired prefrontals. Frontal pentagonal; longer than its distance from the tip of the snout. Supraoculars long and narrow; equal in length to the prefrontals. Nostril between two nasals. Loreal slightly longer than high. One pre- and one postocular. Temporals 1 + 2. Eight supralabials, the fourth and fifth entering the eye. Eight infralabials, four in contact with the anterior chin shields which are longer than the posterior ones. Eleven slender teeth on the maxilla; increasing in size posteriorly. These followed by a diastema (?) behind which lie two stout, slightly enlarged teeth. Dorsal scales without apical pits, in 17 longitudinal rows throughout the body length. Abdominals 147; pre-anal divided; subcaudals 70. Supra-anal scales with low, but definite keels. Body length, 232 mm.; tail length, 92 mm.

The hemipenis of the species is short, extending only to the sixth subcaudal in the inverted position. In contrast to Cope's figure<sup>2</sup> of that of T. pliolepis (= gracile) which is colubrine in structure, the hemipenis of T. hannsteini is typically xenodontine with a divided sulcus spermaticus, slightly bifurcate distally, and capitate or at least moderately so. The sulcus lies on the medial side of the organ and originates occasionally as two groves which join as the calyculate portion of the hemipenis takes form, and bifurcates about halfway up the length of the organ. The medial side of the hemipenis, except for one or two large spines flanking the sulcus at its base, is entirely calyculate. The lateral side, except at the very tip, is spinous. On this latter side there are two large basal hooks concealing two smaller ones. Above these basal hooks are two patches of small spines separated by a naked area. Proximally these spines are scattered or arranged into three irregular rows which merge into a single row distally where the spines become shorter and more slender. Each spinous patch is comprised of about 25 individual spines.

Inasmuch as the color of the holotype is somewhat darker than that of the paratypes, its pattern is difficult to discern. The top and sides of the head are dark brown minutely flecked with lighter shades; each supralabial with an irregular white spot. The lower jaw is cream-color heavily dusted with brown on the infralabials. There is a trace of a white collar on the nape which is definitely apparent only ventro-laterally and is merely indicated dorsally by light spots. Ground color of the dorsum dark brown flecked with lighter shades. There are nine longitudinal stripes on the dorsum which are produced by a darkening of certain portions of the various scale rows, and which are disposed as follows:

<sup>&</sup>lt;sup>2</sup>Cope, E. D., "The Classification of the Ophidia," Trans. Amer. Philos. Soc., 18, 1895: Pl. 20, Fig. 1.

lateral edges of the abdominals and the ventral one-quarter of scale row one; dorsal one-half of scale row one and ventral one-half of scale row two; dorsal one-half of scale row three and ventral one-half of scale row four; dorsal one-half of scale row five, all of scale row six (except for light flecks on its center) and the ventral one-half of scale row seven; center one-half of the vertebral scale row. Undersurfaces of tail and body, except for the edges of the abdominals, immaculate cream-

Variation.—The paratypes are like the holotype in all essential features. Ventral scutellation varies as follows:

Number	Sex	Abdominals	Subcaudals
98755	8	144	broken
98753	8	141	72
98754	· P	150	63
98757	Q Juv.	153	66

Of the nature of the maxillary dentition of this species I cannot be certain. In Nos. 98754 and 98756 there appears to be a diastema, though this may be a space left by a shed tooth. In Nos. 98753 and 98755 there is no indication of a diastema. In all the specimens the last two or three teeth are stouter than the others. The total tooth count varies 10-13.

The only other variability in the type series worthy of note is the color. The holotype is by far the darkest of the lot. The pattern of the paratypes is, therefore, more apparent than in the holotype, especially the white collar.

Comments.—I have previously noted that a species described by Stuart and Bailey3 under the name of Rhadinaea veraepacis might better be allocated to the genus Trimetopon. I take this step at the moment because in its general features the species is very similar to others assigned to this same genus. It was noted in the original description that veraepacis was something of a waif in the Rhadinaea picture. It is, however, not very different from hannsteini and may well be related to it. Dunn4 has already suggested a barbouri-viquezi-slevini chain. Thus three very definite groups might be sorted out in the genus as now constituted. Based upon a very little material personally examined and upon the literature<sup>5</sup> relating to the genus, it may be summed up as follows:

A. A single prefrontal	В
B. Ventrals 151-154graci	le
BB. Ventrals 122simi	le
AA. Two prefrontals	C
C. Dorsal scales in 15 longitudinal rows barbou	ri
CC. Dorsal scales in 17 longitudinal rows	D

<sup>&</sup>lt;sup>3</sup>Stuart, L. C., and Joseph R. Bailey, "Three New Species of the Genus Rhadinaea from Guatemala." Occ. Papers Mus. Zool. Univ. Michigan, 442,

<sup>1941: 9.

&</sup>lt;sup>4</sup>Dunn, E. R., "New and Noteworthy Herpetological Material from Panama."
Proc. Acad. Nat. Sci. Phila., 92, 1940: 118.

<sup>5</sup>Dunn, E. R., "New Snakes from Costa Rica and Panama." Occ. Papers Boston Soc. Nat. Hist., 5. 1930: 330-32.

Dunn, op. cit., 1937 and 1940.

Slevin, Joseph R., "A New Central American Snake." Proc. Cal. Acad. Sci., 23 (4), 1936: 79-81.

Stuart and Bailey, op. cit.

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D. Seven supralabials	E
E. A single postocularposadasi	
EE. Two postoculars	F
F. Paired light spots on nape; no dark stripe on scale	
row 4slevini	
FF. No light nape spots; a dark stripe on scale row	
4viquezi	
DD. Eight supralabials	G
G. A single postocularhannsteini	
GG. Two postocularsveraepacis	

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Stuart, L C. 1949. "A new Trimetopon (Ophidia) from Guatemala." *Proceedings of the Biological Society of Washington* 62, 165–168.

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