

OCCASIONAL PAPERS OF THE MUSEUM OF  
ZOOLOGY

UNIVERSITY OF MICHIGAN

ANN ARBOR, MICHIGAN

UNIVERSITY OF MICHIGAN PRESS

REMARKS ON SOME MEXICAN SNAKES OF  
THE GENUS *TANTILLA*

BY NORMAN HARTWEG

FOR some time the Museum of Zoology, University of Michigan, has had specimens of two undescribed Mexican species of the genus *Tantilla*. In the course of comparing these with other Mexican forms both in the Museum of Zoology and in the American Museum of Natural History, another novelty was disclosed. In addition to the descriptions of the new species, notes on *Tantilla rubra*, *T. bocourti*, *T. deviatrix*, and *T. calamarina* are presented.

*Tantilla bogerti*, new species

HOLOTYPE.—A.M.N.H.<sup>1</sup> 62259, a male from Acaponeta, Nayarit, on November 18–19, 1939. Collected by Charles Bogert.

PARATYPE.—A.M.N.H. No. 62260, a female with the same collection data given for the type.

DIAGNOSIS.—Color pattern of the head and neck regions generally similar to that of *T. yaquia*, but subcaudal scales fewer.

DESCRIPTION OF THE HOLOTYPE.—Upper labials, 7, third and fourth entering the eye;<sup>2</sup> prefrontal and second labial not in

<sup>1</sup> American Museum of Natural History; U.M.M.Z.=University of Michigan, Museum of Zoology.

<sup>2</sup> In the description of *yaquia* (Smith, 1942: 41) labials 4 and 5 (instead of 3 and 4) are given as entering the eye.

contact, separated by nasal and preocular; postoculars 2; naris much nearer upper than lower edge of the completely divided nasal; two elongate temporals, the first broader and in contact with the postoculars, the second pair longer than the first; lower labials 7, the first pair separating the mental from the chin shields; two pairs of chin shields, the anterior longer than the posterior; dorsal scales in 15 rows; abdominals, 140; caudals, 51; total length, 113 mm.; tail, 23.8 mm.

Ground color light brown above, clear light tan below; top of head brown, much lighter in the snout region, stippled with lighter in the central part, dark brown without stippling in the posterior parietal region; sides of head dark brown, except for the seventh, sixth, fifth, and posterior half of the fourth upper labials<sup>3</sup> and lower part of the first temporal, which are immaculate cream, and the first labial, which is cream with a faint wash of brown; solid dark brown on sides of head and of posterior parietal region continuous with an area of the same color covering the first four transverse scale rows behind the head, and descending ventrolaterally through two scale rows below angle of mouth,<sup>4</sup> not involving seventh labial; posterior border of dark brown area of neck region straight behind, edged with a cream transverse line one scale wide; a spot of black immediately behind cream line; rest of dorsal and lateral surface of body brown, finely and more or less evenly stippled with dirty cream, contrasting sharply with the dark solid brown of posterior head and neck region; ventral surface of body and tail clear light tan; underpart of head somewhat lighter, mental and first four lower labials lightly stippled with brown.

The female paratype is essentially the same color as the holotype; the scale data are the same except for the abdominals and caudals, which number 149 and 46, respectively. Total length, 93 mm.; tail, 16 mm. Although the description is at variance with that of *yaquia* in several respects, the difference

<sup>3</sup> Smith (1942: 41) was referring to the subocular labials (3 and 4), not to a subocular scute, in his description of the head coloration of *yaquia*.

<sup>4</sup> Smith (*in litt.*) has informed me that the characters of groups Nos. 13 and 14 (1942: 34) are reversed and that by exchanging these numbers the situation is corrected.

TABLE I  
COMPARATIVE CHARACTERISTICS OF *T. bogerti*, *T. yaquia*, *T. eiseni*, AND *T. planiceps*\*

	<i>bogerti</i>	<i>yaquia</i>	<i>eiseni</i> †	<i>planiceps</i>
Abdominals .....	♂ 140 ♀ 149	♂ ♀ ♀ 150	♂ 165-174 ♀ 174-190	♂ 134-140 ♀ ♀
Caudals .....	♂ 51 ♀ 46	♂ ♀ ♀ 66	♂ 58-69 ♀ 53-66	♂ 56-60 ♀ ♀
Postoculars .....	2	2	2	1 or 2
No. of transverse scale rows covered by postparietal dark collar .....	4	3	2	3‡
Relation of naris to upper and lower borders of nasal plate .....	Nearer upper	Nearer upper	Equidistant	Equidistant
Nasal .....	Divided above and below naris	Divided above and below naris	Divided above and below naris	Divided below naris only
Prefrontal and second labial	Separated	Separated	Separated	Separated or in contact
Light area involving lip behind eye and half of first temporal .....	Present	Present	Absent	Absent
Relation of mental and anterior chin shields .....	Separated	In contact	In contact	Separated or in contact

\* From data given in De Blainville (1835), Van Denburgh (1895), Mocquard (1899), Bocourt (1883; 1886), Blanchard (1938), Smith (1942), and from the present study.

† Since the Lower California forms, *planiceps* and *eiseni*, are treated in Blanchard's paper (1938), they are omitted from Smith's diagnostic list (1942).

‡ Five scale lengths according to Van Denburgh (1895).

in the number of caudals (female *yaquia* 66 and female *bogerti* 46) probably has the greatest significance.

The affinities of *bogerti*, *yaquia*, *planiceps*, and *eiseni* are close, but the few specimens known, the absence of intermediates, and the great geographic gaps between the few locality records do not invite a definition of their relationships (Table I).

*Tantilla coronadoi*, new species

HOLOTYPE.—U.M.M.Z. No. 85697, female, from the vicinity of Chilpancingo, Guerrero. Collected by W. W. Brown.

DIAGNOSIS.—A *Tantilla* with three dark longitudinal stripes on the body, differing from *calamarina* and *martindelcampoi* in possessing 7 upper labials and many more abdominal scales; from *deppei* in the number of longitudinal stripes and the absence of both a light and a dark nuchal collar; from *mexicana* in the absence of a posterior temporal scale and the presence of a completely divided nasal.

DESCRIPTION OF HOLOTYPE.—Upper labials, 7, third and fourth entering eye, seventh in contact with parietal; prefrontal and second labial not in contact, separated by nasal and preocular; postoculcers 2 on one side (the inferior small) and 1 on the other; naris nearer upper than lower edge of completely divided nasal; one elongate temporal, in contact with postocular(s) anteriorly and the seventh upper labial posteriorly; lower labials 7; mental and anterior chin shields in contact; 2 pairs of chin shields, the anterior very slightly longer than the posterior; dorsal scales in 15 rows; abdominals, 165; caudals, 40.

Top and sides of head brown, labials becoming lighter posteriorly; body light brown with three dark brown longitudinal stripes; stripes faint on posterior part of body, becoming denser anteriorly and fusing on prefrontal-supraocular region of head; median stripe occupies vertebral and adjacent halves of paravertebral scales in neck region, abruptly narrowing at seventh transverse row to occupy median one-third of vertebral from thence posteriorly; lateral stripe involves third and adjacent

half of fourth scale rows; undersurface light tan except for fine sprinkling of brown on outer edge of lower labials.

Although the resemblances of this form to *calamarina* and to *martindelcampoi* are noteworthy, they appear superficial; the relationships between *mexicana*, *deppei*, and *coronadoi* are very probably closer genetically. Some of the characters of the type of *coronadoi* are unusual and may be anomalous—such as the relation of the seventh labial to the parietals and the consequent absence of the posterior temporal (Table II). The species is named in honor of my Mexican friend, Señor Salvador Coronado of the Departamento Pesca y Maritima.

*Tantilla morgani*, new species

HOLOTYPE.—U.M.M.Z. No. 85968, male, from Necaxa, Puebla; April 18, 1939. Collected by J. W. Morgan.

DIAGNOSIS.—A form resembling *T. phrenitica* in its dark infralabials, dark dorsal surface, and contrasting light undersurface; it differs from *phrenitica* chiefly in possessing more caudal scales.

DESCRIPTION OF HOLOTYPE.—Upper labials, 7, third and fourth entering the eye; prefrontal and second labial in contact; naris about equidistant from upper and lower borders of nasal; 1 preocular; 2 postoculars; 2 temporals, the anterior deeper but somewhat shorter than the posterior; lower labials 7, the first pair separating the mental from the chin shields; 2 pairs of chin shields, the anterior the longer; dorsal scales in 15 rows; abdominals 149; caudals 56.

Top of head solid brownish black, except for anterior parts of prefrontals, junctural parts of internasals, and posterior part of rostral, which are flecked with tan; sides of head brownish black, except for tan spots on anterior parts of labials 1–5, posterior parts of lower postocular, and labials 4 and 7; outer edge of all infralabials and mental brownish black; a yellow collar occupies tips of parietals and about one and one-half transverse scale rows of neck, followed by a black collar about 2 scales wide, which gradually merges into brown of back; black collar extends ventrad to second dorsal scale

TABLE II

COMPARATIVE CHARACTERISTICS OF *T. coronadoi*, *T. mexicana*, *T. deppei*, *T. calamarina*, and *T. martindelcampoi*\*

	<i>coronadoi</i> (♀)	<i>deppei</i>	<i>mexicana</i> (♀)	<i>calamarina</i>	<i>martindelcampoi</i>
Abdominals .....	165	147-152	158	119-132	114
Caudals .....	40	55	52	27-40	39
Postoculars .....	1/2	2	2	1	1
Temporals .....	1	1 + 1	1 + 1	1	1 + 1
Upper labials .....	7	7	7	6	6
Nasal .....	Completely divided	Divided†	“Single”	Completely divided	Completely divided
Prefrontal and second labial .....	Separated	Separated	In contact	Separated or in contact	In contact
Mental and anterior chin shields .....	In contact	In contact	Separated	In contact	In contact
Scale rows involved by middorsal stripe .....	3 median in neck region, vertebral from thence posteriorly	Vertebral	Vertebral	3 median	3 median
Scale rows involved by lateral stripes .....	3 and 4	3 (♀) and 5	2 and 3	3 and 4	4 and 5
Nuchal light collar or spots .....	Absent	Present	Present	Absent	Absent
Nuchal dark collar .....	Absent	Absent	Present	Absent	Absent

\* Data from Smith (1942), Boulenger (1896), Bocourt (1883, 1886), Taylor (1937), Günther (1862), and the present study.

† Bocourt's illustration (1886: Pl. 36, Fig. 11c) shows the nasal undivided above the naris.

row; brownish black of head extends to angle of mouth; dorsal surface of body dark brown, minutely stippled with light tan; ventral surface light tan.

REMARKS.—In *T. phrenitica* (Smith, 1942; 39) the abdominals in the males range from 137 to 142 (149 in *morgani*), and the caudals range from 37 to 44 (56 in *morgani*). The mental is in contact with the chin shields in all of the twenty-six specimens of *phrenitica*; it is separated from the chin shields in *morgani*. The general color pattern is similar in the two species.

*Tantilla rubra* Cope

In three specimens of *Tantilla rubra* from Tehuantepec, Oaxaca—U.M.M.Z. No. 82728 (Hartweg and Oliver, 1940: 28) and A.M.N.H. Nos. 62644-45—the mental and the anterior chin shields are separated in two and are in contact in the other. The prefrontals and labials are separated in all three. In two, males, the posterior temporal is longer than the anterior; in the other, a female, the posterior temporal is transversely divided. The abdominal-caudal number of the two males is 153, 64 and 158, 66. The female has 150 abdominals; the tail is incomplete.

*Tantilla bocourti* (Günther)

Two specimens (females) of *Tantilla bocourti* are of interest in that each has a very high number of abdominal scales. One specimen, A.M.N.H. No. 19735 (Dunn, 1928: 2-3), from the Federal District of Mexico, has 195 and the other, U.M.M.Z. No. 85698, from the vicinity of Chilpancingo, Guerrero, has 190. The caudals number 56 and 52. The prefrontal and second upper labial are in contact in the former, separated in the latter; the posterior temporal is only half as long as the anterior in both specimens.

Of interest because of its resemblances to both *T. bocourti* and *T. deviatrice* is a specimen, U.M.M.Z. No. 56492, from the state of Puebla. The posterior temporal resembles that of *bocourti* in that it is about one-half as long as the first and is roughly square. The length of the anterior chin shields is

subequal to that of the posterior, a condition which presumably is characteristic of both forms. There are 160 abdominals (154-160, *deviatrix*; 164-195, *bocourti*). This specimen appears to be an intergrade and probably indicates subspecific ranking for *bocourti* and for *deviatrix*.

*Tantilla calamarina* Cope

Smith (1942: 35) listed the abdominal and caudal ranges in *T. calamarina* from various Mexican localities as 119-132 and 27-35, respectively. Six specimens in the American Museum of Natural History are all within this range for the abdominals, but two of them (males), No. 12775, from near the city of Colima, Colima, and No. 19750 from near Santa Fe, Federal District, have 40 and 39 caudals, respectively.

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