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ATRACTUS SANCTAEMARTAE, A NEW SPECIES OF
SNAKE FROM THE SIERRA NEVADA
DE SANTA MARTA, COLOMBIA

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THANKS to the authorities of the Museum of Comparative Zoology (M.C.Z.), the Carnegie Museum (C.M.), and the Museum of Zoology of the University of Michigan (U.M.M.Z.), I have been able to study and compare sixteen specimens of *Atractus* from the Santa Marta region of Colombia. Ten of these are from the northwestern corner of the massif:

Río Frio, M.C.Z. No. 32766, a railroad station in the banana zone, exact altitude unknown, but well below 500 meters. Amaral (1928: 7-8) listed 693 snake specimens from Río Frio, but no *Atractus* is among them.

Minca, C. M. No. 201; 2000 feet.

Taqua, U.M.M.Z. No. 54946; 5300 feet.

El Libano, C.M. No. 213; 6000 feet.

Vista Nieve, U.M.M.Z. No. 63774; a plantation with grounds extending from 3000 to 8000 feet.

San Lorenzo, U.M.M.Z. Nos. 47739-41, 54945, 55675; 4000-6500 feet. This is the name of the northwestern mountain of the massif. Río Frio is at its base, and the other localities mentioned are on its slopes.

Six specimens are from the middle of the southern face of the massif:

San Sebastian, M.C.Z. Nos. 6525, 6531-33 and U.M.M.Z. Nos. 48298 and 85595. The town is at an altitude of 6500 feet. U.M.M.Z. No. 85595 is stated to be from 6000 feet.

The two Carnegie Museum specimens were collected by H. H. Smith in 1898 and were reported under the name of *Atractus badius* (Boie) by Griffin (1916: 172). Ruthven (1922: 66) reported as *Atractus iridescens* Peracca ten specimens then in the collections of Michigan and Harvard. I have seen most if not all of these, as I have examined eleven specimens in these collections taken before 1922 (M.C.Z. Nos. 6531-33, 6525, U.M.M.Z. No. 48298, taken by W. W. Brown in 1899; U.M.M.Z. Nos. 47739-41, 54945-46, 55675, taken by Ruthven and Carriker, 1913-21). These specimens seem to represent an undescribed species for which I propose the name

Atractus sanctaemartae, new species

TYPE.—U.M.M.Z. No. 48298, an adult female collected at San Sebastian on July 25, 1899.

DESCRIPTION.—All sixteen agree in having a single anal; first pair of lower labials in contact; a single pair of geneials; seven upper labials, the third and fourth in orbit; no preocular; a very elongate and narrow loreal; temporals 1-2; internasals much smaller than prefrontals; 17 dorsal scale rows. Ruthven said that one of the ten examined by him had fifteen dorsal scale rows. No such specimen is at present in the collections of Michigan or of Harvard. A tendency to reduction of the upper labial count is noticeable in U.M.M.Z. No. 47741, in which the left fifth is reduced in size and the fourth makes contact with the sixth above it. Variation is more considerable in the traits now to be detailed.

POSTOCULARS.—All the snakes examined have two postoculars with the exceptions of U.M.M.Z. No. 47740 which has three on the right side and U.M.M.Z. No. 54946 which has a single scale on the left side.

UPPER SECOND TEMPORAL.—This is a short scale followed by one or two similar scales bordering the parietal on ten of the thirty-two head sides; it is a long scale reaching to the tip of the parietal on twenty-two sides.

LOWER LABIALS.—Six lower labials are present on the left side of U.M.M.Z. No. 47741; seven are present on twenty-five sides; eight are present on one side only of M.C.Z. Nos. 6525, 6531, 6532, 6533, and on both sides of M.C.Z. No. 32766. I find among the early M.C.Z. and U.M.M.Z. specimens the same number of examples with 6-7 (one) and 7-8 (four) that Ruthven reported. I find six with 7-7 (he reported four); none with 8-8 (he reported one).

LOWER LABIALS IN CONTACT WITH GENEIALS.—Three or four of the lower labials may be in contact with the chin shields. When eight lower labials are present four are in such contact. Four make contact in three of the specimens with seven labials, and also in the one with six labials. The majority (twenty-two out of thirty-two sides) have seven labials, three in contact with the geneials.

VENTRALS AND CAUDALS.—Males from the northwest:

U.M.M.Z. 47741	159 vent.	36 caud.
U.M.M.Z. 55675	154 vent.	34 caud.
C.M. 201	152 vent.	30 + caud.
U.M.M.Z. 54946	156 vent.	33 caud.

Males from the south slope:

M.C.Z. 6533	158 vent.	34 caud.
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The average male ventral count is 155.8. The average for the four northwestern specimens is 155.2. The average caudal count is 34.25.

Females from the northwest:

C.M. 215	148 vent.	28 caud.
U.M.M.Z. 54945	154 vent.	23 caud.
U.M.M.Z. 63774	159 vent.	23 caud.
M.C.Z. 32766	163 vent.	27 caud.

Females from the south slope:

M.C.Z. 6532	163 vent.	25 caud.
U.M.M.Z. 48298	166 vent.	27 caud.
M.C.Z. 6531	168 vent.	26 caud.
M.C.Z. 6525	170 vent.	22 caud.
U.M.M.Z. 85595	171 vent.	26 caud.

The average female ventral count is 162.2. The average ventral count for the northwestern specimens is 156. The average ventral count for the southern specimens is 167.6. The average caudal count is 25.22.

In the genus *Atractus* and its relatives it is a general rule for the females to have more ventral scales than the males. C.M. No. 215, an almost mature female, is therefore an anomaly. Even without this specimen it is still apparent that the ventral count is higher on specimens from the south slope. As I take the first median scale behind the genials as the first ventral my counts are slightly higher than those given by Ruthven.

SIZE.—The largest female, U.M.M.Z. No. 48298, measures 600 mm.; tail, 59 mm. The largest male, U.M.M.Z. No. 54946, measures 410 mm.; tail, 55 mm.

COLORATION.—At one extreme the dorsum is light with vivid markings of narrow irregular black crossbars (M.C.Z. Nos. 32766, 6532, U.M.M.Z. Nos. 47741, 48298, 85595). In some (C.M. No. 215, M.C.Z. No. 6531, U.M.M.Z. Nos. 47740, 54945) the bars are more broken and irregular, whereas in M.C.Z. No. 6533, U.M.M.Z. Nos. 47739, 55675, and 63774, they are scarcely apparent at all, and the dark pigment is rather irregularly diffused.

At the other extreme are three specimens (C.M. No. 201, M.C.Z. No. 6525, U.M.M.Z. No. 54946) in which the whole dorsal appearance is the reverse of the above: a dark snake with a series of more or less vertically elongated light spots on each side. The spacing of these spots is approximately the same as the spacing of the black bars.

The light snakes with vivid dark markings look extraordinarily different from the dark snakes with light markings, but

as especially lighter scales are associated with the dark markings, and as some especially darker scales are associated with the light markings, it is probably a question of the lightness or darkness of the background rather than a fundamental change of pattern.

Ventrally, the majority have dark spotting on a light background, usually an arrangement of two spots to a ventral, making two rows of ventral spots. In one example with dark dorsum (U.M.M.Z. No. 54946) the belly is black with only a few white flecks.

There are no distinctive head markings, save that the upper labials are light and that some light spots mark the centers of the upper plates in specimens of the dark phase. In specimens of the light phase there is usually a middorsal dark nape stripe.

DISCUSSION.—I consider it probable that these specimens are samples of a single form of *Atractus*, although it would be more satisfactory to have proof that the two extremes of coloration either graded into one another or occurred in the same brood.

These specimens from Santa Marta indicate, I think, a population of *Atractus* different from any yet named. The nearest known populations are those of Ocaña, Norte de Santander (altitude 1200 m.), and of Mérida in Venezuela. I have seen no specimens of the Mérida form (*A. erythromelas* Boulenger). The coloration is, apparently, somewhat like that of the dark, light-spotted phase, but the male caudals are fewer (28–31), the male ventrals higher (159–168), and the female ventrals more numerous (171–186). I have seen five specimens from Ocaña (*A. indistinctus* Prado, 1939, and *A. vertebrolineatus* Prado, 1940). Caudals of both males (42) and females (35) are more numerous than in the Santa Marta form, and the color is drab with a dark vertebral line. The female type of *indistinctus* had the melanin diffused; the male type of *vertebrolineatus* had it concentrated.

The reference by Griffin to *A. badius* (Boie) has the recommendation that the scale counts of the type (154, 36) fit within the variation of Santa Marta males, but the broad dark cross-

bands of typical *badius* of the Guianas are not present in Santa Marta specimens. *A. badius* has not been reported from Venezuela, and the Colombian specimens referred to *badius*, most of which I have seen, do not agree with the original description. I think that a large majority of the populations of *Atractus* will eventually prove to be local races of one widespread species, and that *badius*, as the oldest name, will be the name of that species, but this idea cannot yet be substantiated.

The reference by Ruthven to *A. iridescens* Peracca has the following defects: the scale counts of the type (135, 40) are outside the variation of Santa Marta specimens; the coloration of the type is not matched by any Santa Marta specimen; the type of *iridescens* was from "South America," and I have seen no Colombian specimens which fit the description. I have caught and examined specimens of the Chocó form which Boulenger referred to *iridescens*. It has no resemblance to the Santa Marta specimens, nor does it agree in markings with the description of *iridescens*. Iridescence is a common characteristic of *Atractus* in general.

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