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A New Species of Boa (Genus *Tropidophis*) from Western Cuba

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Stull (1928), in her revision of the boas of the genus *Tropidophis,* recognized five forms on the island of Cuba: *Tropidophis maculatus maculatus* (Bibron), *T. pardalis pardalis* (Gundlach), *T. wrighti* Stull, *T. melanurus melanurus* (Schlegel), and *T. semicinctus* (Gundlach and Peters). Bailey (1937) later described two additional forms, *T. nigriventris* and *T. maculatus pilsbryi.* Thus, as presently understood, there are six species of the genus *Tropidophis* on Cuba, one of which is represented by two subspecies. All the Cuban forms are not equally common or well represented in collections; *wrighti,* for example, is known only from the type and two additional specimens, and may thus be considered either as rare or as occurring in little-collected areas on the island. Likewise, *nigriventris* is known from but two specimens and *T. m. pilsbryi* by only three individuals. On the other hand, *melanurus* is a widespread form and is well represented in American collections.

In the West Indies, the genus *Tropidophis* is best represented on the island of Cuba with seven forms. Jamaica and Hispaniola each have a single form, in both cases insular races of *T. maculatus.* The Isle of Pines is inhabited by three forms, currently regarded as identical with the three species occurring on Cuba, *T. m. maculatus, T. p. pardalis,* and *T. m. melanurus.* Various Bahama islands are inhabited by races of *T. pardalis,* and five subspecies are recorded from these islands.

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Among the Cuban species, *T. semicinctus* appears to be moderately rare; Barbour and Ramsden (1919, p. 192) stated that this snake is "excessively rare, one of the rarest in Cuba." They reported on a single individual from Cienfuegos, Soledad, the only specimen in the Museum of Comparative Zoölogy at that time, and remarked that there were specimens in the Ramsden collection from Manzanillo and Cuabitas near Santiago, as well as two specimens in the United States National Museum. The specimens from Manzanillo and Cuabitas are from the eastern province of Oriente, and the Soledad specimen is from Las Villas Province. Stull (1928, pp. 48–49) reported on 11 specimens from the provinces of Matanzas and Las Villas. She made no mention of the occurrence of this snake in Oriente, and described from that province the superficially similar, but in reality quite distinct, form *T. wrighti.* Thus, in the ensuing nine years between Barbour and Ramsden's work and that of Stull, only a very few specimens of *T. semicinctus* had been deposited in American collections. At the time of Bailey's (1937) review of recently collected *Tropidophis* material, 20 additional specimens of *T. semicinctus,* all from Soledad, Las Villas, were available for his study. Schwartz and Ogren (1956, p. 105) mentioned one specimen from Soledad. Collation of the locality records whence this snake has been taken shows that it is at present known definitely from the provinces of Matanzas and Las Villas. Its occurrence in Oriente is open to question, for it is possible that older records from Oriente actually represent *T. wrighti,* and no recent authors have reported specimens from the eastern portion of the island. It is also remarkable that no specimens have been taken on the western portion of the island in Pinar del Río Province.

During the Christmas holiday season of 1956, eight days were spent collecting in the vicinity of San Vicente, Pinar del Río Province, in the company of John R. Feick and William H. Gehrmann, Jr. During this period, two specimens of *Tropidophis* were collected which at the time were considered as being representatives of *T. semicinctus,* although certain differences in coloration and pattern were at once obvious. Both individuals were taken at night. One was secured by Gehrmann as it was crawling into a hole in the limestone cliffs near the mouth of the Cueva del Rio; and the other, 15 feet within the entrance of the Cueva de los Indios by Feick. In so far as known, clivicolous tendencies have not been reported for *T. semicinctus;* it is usually considered as being terrestrial. For example, one specimen taken by Schwartz and Ogren (*loc. cit.*) was taken under a pile of bricks, and Stull (1928, p. 47) mentioned the taking of two *T. semicinctus* under a single stone.

I have been able to compare the two freshly taken specimens with materials in the following collections, and I wish to thank the respective curators for their loan of materials for study: Dr. James Boehlke, Academy of Natural Sciences of Philadelphia (A.N.S.P.); Mr. Charles M. Bogert and Dr. Richard G. Zweifel, the American Museum of Natural History (A.M.N.H.); Mr. Arthur Loveridge, Museum of Comparative Zoölogy (M.C.Z.); and Dr. Doris M. Cochran, United States National Museum (U.S.N.M.). In addition, I have had available my own notes on the specimen collected at Soledad and reported by Schwartz and Ogren (*loc. cit.*); this specimen is now in the Charleston Museum (Ch. M.). The text figure is the work of Mr. Gehrmann; I wish to thank him for allowing me to use the photographs of these snakes taken in the field. Study of these specimens indicates that the two individuals from Pinar del Río, as well as a third in the Museum of Comparative Zoölogy, represent a very distinct and unnamed population of *Tropidophis,* probably allied to *T. semicinctus,* which I take great pleasure in naming after John R. Feick, in acknowledgment of his cooperation, companionship, and assistance in the field.

Tropidophis feicki, new species

Figure 1

TYPE: A.M.N.H. No. 76224, taken December 20, 1956, at Cueva de los Indios, San Vicente, Pinar del Río Province, Cuba, by John R. Feick. Original number 1267.

PARATYPES: A.M.N.H. No. 76223, taken December 22, 1956, at cliffs at Cueva de los Indios, San Vicente, Pinar del Río Province, Cuba, by William H. Gehrmann, Jr. Original number 1195. M.C.Z. No. 54725, taken July 10, 1956, from a small tree about 20 feet from the base of a *mogote* at San Vicente, Pinar del Río Province, Cuba, by Charles and Patricia Vaurie.

DISTRIBUTION: Known only from the type locality.

DIAGNOSIS: A *Tropidophis* with smooth dorsal scales in 25 rows at midbody; ventral count high, 220-225; subcaudals 38-40; ground color of dorsum pinkish gray, with relatively few (18–19), widely spaced, dark brown saddles, resulting from more or less complete fusion of two lateral rows of blotches; venter immaculate.

DESCRIPTION OF HOLOTYPE: An adult female; total length 474 mm., tail 44 mm. Body relatively stout, cylindrical, not compressed, head distinct from neck; scales smooth, middorsal row greatly enlarged from blotch 15 to above vent; dorsal scales 23-25-17; ventral scutes 220; subcaudal scutes 39 plus terminal conical scale; anal single; nasal di-

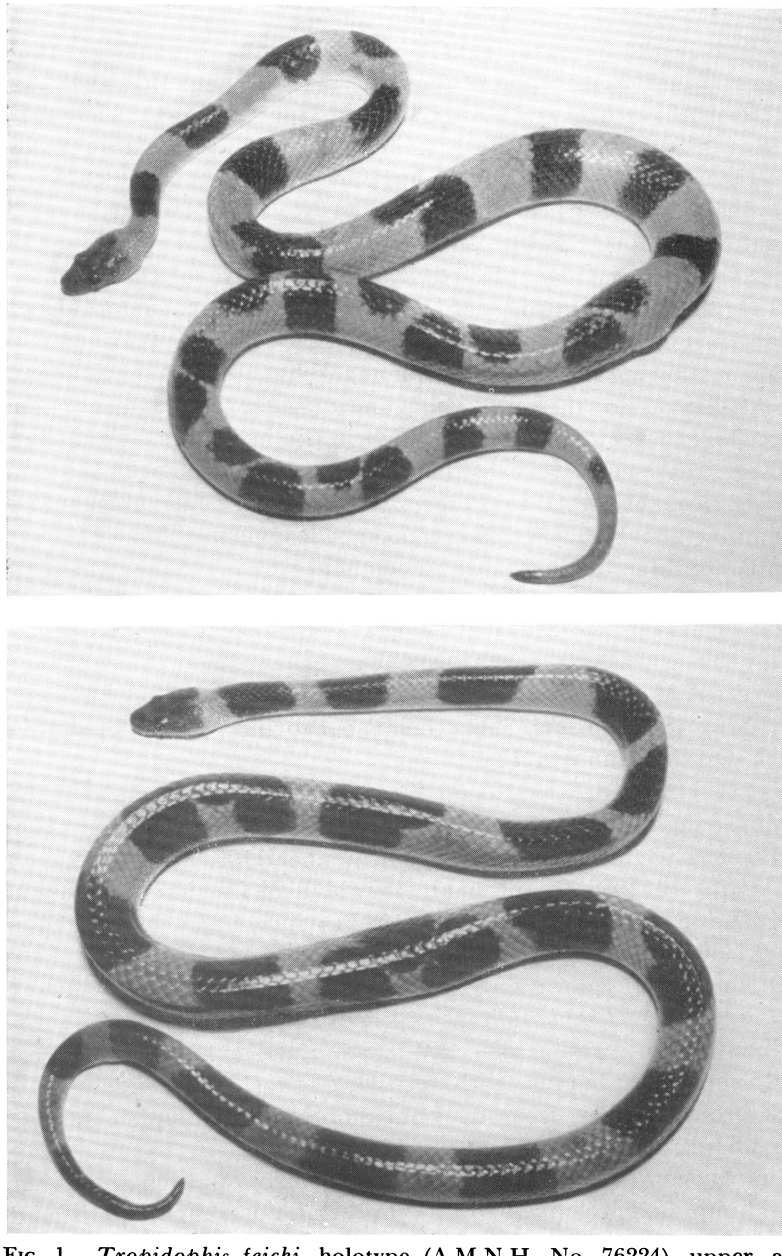

FIG. 1. *Tropidophis feicki,* holotype (A.M.N.H. No. 76224), upper, and paratype (A.M.N.H. No. 76223), lower. Photographs from Kodachrome transparencies taken in the field by William H. Gehrmann, Jr.

vided, nostril in anterior half; internasal suture decidedly shorter than suture between anterior pair of prefrontals, that between the posterior pair about one-half of the latter length; frontal long, its length about equal to the distance from the snout, and its width about equal to that of the supraocular; two large parietals, in contact with frontal and supraocular, two-thirds of the size of frontal, and separated by two small interparietals, the most anterior of which in contact with the posterior point of the frontal and very tiny; loreals absent; preoculars 1/1; postoculars 3/3; temporals 3+2 on left, 3+3 on right; supralabials 10/10, 4 and 5 entering eye; lowermost postocular almost strap-like; infralabials, 11/11. Dorsum iridescent; ground color (in alcohol, but not perceptibly different from color in life), dull grayish pink (pl. 54, A2; all color designations from Maerz and Paul, 1950); venter paler (pl. 44, A1). Dorsal saddles 18, dark brown, widely separated; saddles 11 through 17 incomplete dorsally, the right and left halves obviously representing incompletely fused right and left blotches. Ground color of tail not different from that of dorsum of body, with two complete saddles and a black tip. Head and three to five scale rows posterior to parietal scutes dull yellowish brown, lighter than brown of saddles. Saddles 7 to 18 encroaching to an increasing degree on the ventrals, and almost joining ventrally in front of vent in blotch 18. Maxillary teeth about 12.

DESCRIPTION OF PARATYPES: A.M.N.H. 76223: Adult female, total length 468 mm., tail 49 mm.; scale rows 25-25-17; supralabials 9/9; infralabials 11/11; preoculars 1/1, postoculars 2/3; temporals 2+3 on right, 3+1 on left; ventral scutes 225; subcaudal scutes 40 plus terminal conical scale. Body blotches 18, tail blotches six, plus black tip. Ground color of dorsum grayish pink, slightly darker (pl. 54, A3) than that of type; venter pale. This paratype resembles the type in most major details, except that all saddles are complete, although saddles 7, 8, 11, and 12 clearly show that they have resulted from the fusion of blotches. Saddles 10 through 18 encroach on the ventrals, and saddle 18 almost forms a complete ring just anterior to the vent. The middorsal row of enlarged scales begins at saddle 16 and continues to above the vent. A single tiny interparietal scale lies between the asymmetrical parietals at the posterior tip of the frontal; the right parietal extends across the dorsal midline behind the interparietal.

M.C.Z. 54725: Adult female, total length 395 mm., tail 45 mm.; scale rows 23-25-17; supralabials 10/9; infralabials 11/11; preoculars 1/1, postoculars 3/3; temporals 3+2 on right, 3+3 on left; ventral scutes 223; subcaudal scutes 38, plus terminal conical scale. Body

blotches 19 on right, 18 on left, tail blotches three, plus black tip. Ground color of dorsum grayish pink, about the same as that of type; venter pale. The pattern of this paratype resembles that of the remaining two specimens; incomplete fusion of lateral blotches occurs at the eighth, thirteenth, and fourteenth. Saddles 14 through 19 reach the ventrals, but the pigment does not form a complete ring just anterior to the vent. The middorsal row of enlarged scales begins at saddle 15 and ends at saddle 17. Head scalation like that of type except that a single small interparietal lies between the enlarged parietals, midway in the suture between them.

COMPARISONS: With the description of *T. feicki,* three Cuban forms of *Tropidophis* have been recorded that are characterized by dark blotches or saddles on a lighter ground color. As presently understood, *T. wrighti* occurs only on the eastern end of the island, *T. semicinctus* in the central region, and *T. feicki* on the western portion in Pinar del Río. *Tropidophis wrighti* is distinguished from *semicinctus* and *feicki* by the presence of four rows of blotches (rather than two rows or saddles). The ventral scutes of the three known specimens of *wrighti* vary

TABLE 1

COMPARISON OF THREE SPECIES OF *Tropidophis* FROM CUBA

	T. feicki (3 ♀)	*T. semicinctus* (12 ♂, 13♀, 1?)	*T. wrighti* (3♂)
Ventrals	223 (220–225)	208 (202–214)	200 (195–208)
Subcaudals	39 (38–40)	36 (33–39)	41 (36–45)
Scale rows (midbody)	25	21, 23, 25	21, 23
Body blotches	18, 19	25 (22–29)	22–28
Tail blotches	4 (2–6)	6 (4–8)	3–4
Pattern	Saddles	2 rows of blotches	4 rows of blotches
Ground color	Grayish pink	Yellow to orange	?

between 195 and 208 (see table 1); the ground color of this species in life is unknown. *Tropidophis semicinctus* is characterized by its yellow to orange ground color, variation of body blotches between 22 and 29, in two discrete series, the blotches closely approximated, and ventrals averaging 208 (range 202–214). The relationships of *T. wrighti* with *T. semicinctus* are unknown. If the eastern species is regarded as a portion of a widespread blotch-patterned Cuban *Tropidophis,* it may be observed that there is apparently a clinal tendency from east to west

as regards blotching and ventral scutes, from the eastern *T. wrighti* (four rows of blotches, low ventral count) through *T. semicinctus* (two rows of blotches, moderate ventral count) to *T. feicki* (dorsal saddles showing evidence of originating from fusion of two rows of blotches, high ventral count).

No intergrades between these three named populations are known at present. In fact, other than "eastern Cuba," the provenance of the three extant specimens of *T. wrighti* is unknown. It might be argued, and appropriately, that *T. feicki* actually represents a subspecies of *T. semicinctus,* indigenous to the limestone mountains of western Cuba. Against this contention may be presented the higher number of ventrals, the lower number of body saddles (which are almost certainly derivatives of a blotch pattern as occurs in *semicinctus*), and the trenchantly different coloration of the dorsa of these two forms. Although it is probable that *semicinctus* and *feicki* have originated from a common stock and may well be subspecifically related, the evidence for a specific relationship between these two forms outweighs that for a subspecific allocation of *T. feicki.* Intergrades may demonstrate that these two species, along with *T. wrighti,* are conspecific.

Comparison of *T. feicki* with the other Cuban members of the genus *Tropidophis* is almost unnecessary. The newly described form exceeds four of the remaining forms (*T. m. maculatus* and *pilsbryi, T. p. pardalis, T. nigriventris)* in number of ventrals, as well as differs radically in color and pattern. From *T. m. melanurus,* in which the ventral counts vary between 198 and 224 (within which range the ventral counts of *T. feicki* fall), the latter snake differs widely in coloration and pattern, as well as having 25 rather than 27 or 29 scale rows at midbody.

Specimens Examined

Tropidophis wrighti: Eastern Cuba, three (U.S.N.M. No. 12420, holotype; A.N.S.P. Nos. 9886, 9887).

Tropidophis semicinctus: Las Villas Province, Cienfuegos, two (U.S. N.M. Nos. 56346, 56347); Soledad, 22 (M.C.Z. Nos. 22685–22697, 27312, 32646–32650; U.S.N.M. No. 134357; Ch.M. No. 55.1.3); Baños de Ciego Montero, Santa Clara (A.M.N.H. No. 7386); Matanzas Province, Matanzas, one (U.S.N.M. No. 26361).

Tropidophis feicki: Pinar del Río Province, Cueva de los Indios, San Vicente, two (A.M.N.H. No. 76224, holotype; A.M.N.H. No. 76223, paratype); San Vicente, one (M.C.Z. No. 54725, paratype).

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