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A NEW SPECIES OF LESSER ANTILLEAN TYPHLOPS (SERPENTES: TYPHLOPIDAE)

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Richmond (1965) based the name Typhlops trinitatus on a single specimen from Trinidad; an additional example, differing in no essential respects from the holotype, has since been collected on the adjacent island of Tobago. On the island of Grenada at the southern end of the Lesser Antillean chain Fred G. Thompson in 1968 collected a Typhlops most closely resembling T. trinitatus. Grenada is considered to be part of the West Indies faunistically (Bond, 1960; Darlington, 1957); only two of its 17 native species of amphibians and reptiles have their closest affinities with other Antillean forms rather than with South American species. Since Trinidad and Tobago are faunistically South American, the Grenada Typhlops adds yet another South American species to the herpetofauna of that island. Prior to the taking of the specimen by Dr. Thompson, no Typhlops were known from the Lesser Antilles south of the island of Dominica.

The Grenada individual differs from the known specimens of T. trinitatus at a level great enough to warrant recognition of the Grenada population as a separate species.

TYPHLOPS TASYMICRIS new species

Holotoype.—UF/FSM (University of Florida/Florida State Museum) 21547, an immature female, taken 1 mi. E Vincennes, St. David Parish, Grenada, on 9 May 1968 by Fred G. Thompson.

Diagnosis.—A species of Typhlops distinguished by the following features: preocular in contact with supralabials 2 and 3; high number of middorsal scales (429 in the holotype); 20 scale rows with no reduction; rostral oval in dorsal aspect and not flaring¹ along its contact with the labial border (Fig. 1A); anterior parietals narrow, greatly extended laterad and reaching below the level of the eye; preocular with rounded posteroventral corner; postocular cycloid and not greatly different from adjacent body scales; third supralabial higher than long, fourth supralabial about as high as long; brown pigment of dorsum extending onto rostral, postnasals, and dorsum of tail.

Distribution.—Known only from the island of Grenada, West Indies.

Description of holotype.—Total length 181 mm, tail 2.6 mm, midbody diameter 3.8 mm; 429 middorsal scales between rostral and caudal spine; 424 ventral scales posterior to mental; 20 scale rows with no posterior reduction. Postoculars 1/1; parietals 2/2, the anterior parietal on each side being narrow and greatly extended laterad, reaching to a point below level of eye. Rostral narrowest where it borders lip (41.3 percent maximum width), with a gradual broadening toward apex of snout and onto top of snout and with a broad-oval shape in dorsal aspect. Suture between nasals complete; lateral edges of anterior nasals not extending lateral to nares; preocular roughly triangular, its anterior edge straight, its posterior edge with an eye-level indentation and with a smooth posteroventrad curvature; preocular in contact with supralabials 2 and 3. Ocular more than twice as high as long; postocular cycloid, larger but similar in shape to adjacent body scales; third supralabial higher than long with narrow apex inserted between preocular and ocular; fourth upper labial about as high as long, extending along posterior edge of ocular to same height as apex of third labial. Scales in the 13 dorsalmost rows with dark centers, thus producing a pattern of dark brown longitudinal lines, the pigmentation in the more ventral of these rows becoming increasingly faint ventrally; a small brown spot on rostral and on dorsal tips of the postnasals; dorsum of tail pigmented as body.

Comparisons.—In having 20 scale rows, more than 400 middorsal scales, and a preocular in contact with supralabials 2 and 3, Typhlops tasymicris

¹ Labial flaring of the rostral refers to a lateral expansion of the ventralmost portion of the rostral occurring over a variable distance (in different species) anterior to the lip (Fig. 1C). In species having labial flaring of the rostral, the narrowest part of the rostral occurs just anterior to the flaring on the ventral surface of the snout.

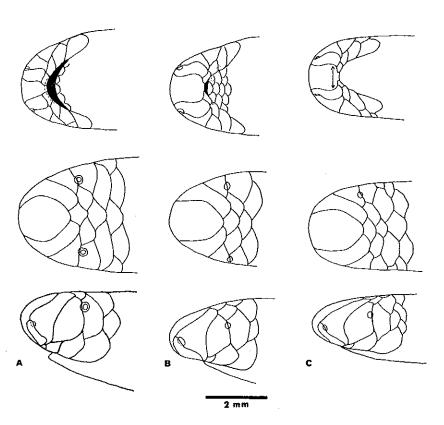


FIGURE 1. Lateral, dorsal, and ventral (bottom to top) views of the heads of A, Typhlops tasymicris (UF/FSM 21547, holotype); B, T. trinitatus (MCZ 55670); and C, T. lehneri (MCZ 48920). The double arrow in C indicates labial flaring of rostral.

differs from all New World Typhlops except T. caymanensis Sackett, T. costaricensis Jiménez and Savage, and T. trinitatus. In T. caymanensis the rostral is parallel-sided in dorsal aspect, the anterior edge of the preocular is distinctly curved, the parietal does not extend ventrad to the level of the eye, and the postocular is high and narrow. Also, caymanensis is uniformly dark brown above, and the total length is only 30 to 40 times greater than the tail length (70 times in tasymicris). In T. costaricensis the fourth supralabial is much higher than long, extending about halfway up the posterior edge of the ocular; the rostral is relatively narrow, about one-third as broad as the head at the level of the nares (3/4 as broad as the head in

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tasymicris); and the prefrontal is so broad that it separates the nasals from the supraoculars (Jiménez and Savage, 1962).

The most pertinent comparisons for T. tasymicris are with T. trinitatus and its mainland relative T. lehneri Roux. In both trinitatus and lehneri the rostral in dorsal aspect is parallel-sided instead of oval, and it flares laterally at its juxtaposition with the lip, the narrowest point being anterior to the lip on the underside of the snout. The rostral of tasymicris is narrowest at the edge of the lip, broadening anteriorly and dorsally onto the surface of the head. The anterior nasals of trinitatus and lehneri flare posteriorly so that the edges are situated lateral to the nares (Fig. 1); in tasymicris the edges of the anterior nasals do not surpass the lateral position of the nares. The preoculars are sharply angled on their posteroventral edges in trinitatus and lehneri, broadly curved in tasymicris. The posterior edge of the preocular lies just anterior to the eye in the specimen of tasymicris; in both specimens of trinitatus it lies over the eye. The posterior edge of the preocular is usually stated to be the preocular-ocular "suture," which is not a true suture, as it is the result of imbrication and not juxtaposition. For this reason the "suture" is subject to greater variation, both inherently and as a result of wear, than are true sutures. In the series of T. lehneri with which Richmond (1965) contrasted T. trinitatus, the position of the preocularocular "suture" shows this expected variation. Although usually anterior to the eye, as Richmond maintained, the edge of the preocular may overlie it (as in one of eight lekneri I examined); thus the distinction does not hold. In tasymicris the narrow anterior parietals extend more than halfway down the posterior edge of the ocular to well below the level of the eye; in trinitatus and lehneri the parietals are not markedly expanded and do not extend ventrad below the level of the eye. Of the three species, T. lehneri has the fewest middorsal scales (289-332; Shreve, 1947). The two known specimens of trinitatus have middorsal counts of 388; the middorsal count of 429 for the holotype of tasymicris is markedly higher.

All three species have lineate dorsal patterns; but in both trinitatus and lehneri the patterns end abruptly on the sides, whereas in tasymicris intensity of pigmentation undergoes gradual reduction on the lowermost patterned scale rows (this feature is variable in some Greater Antillean species). T. lehneri has a light spot on the snout but none on the tail; T. trinitatus is unpigmented at both extremities. T. tasymicris has small, deeply pigmented spots on the rostral and the dorsal tips of the posterior nasals, while the dorsum of the tail is pigmented in the same fashion as the body.

Etymology.—The name tasymicris is an anagram of Myristica, the genus of the nutmeg, a tree contributing significantly to the horticultural forests of Grenada.

Specimens examined.—Typhlops trinitatus: AMNH 89820 (holotype), Trinidad, Arima Road, 3 mi. above Simla; MCZ 55670, Tobago, Bacolet Road Burial Ground, Scarborough. Typhlops lehneri: MCZ 4819-26, AMNH 89819, Venezuela, Estado Falcon, Dist. Acosta, Pauji.

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