

## Catalogue of American Amphibians and Reptiles.

Villa, Jaime D. 1988. *Typhlops costaricensis*.

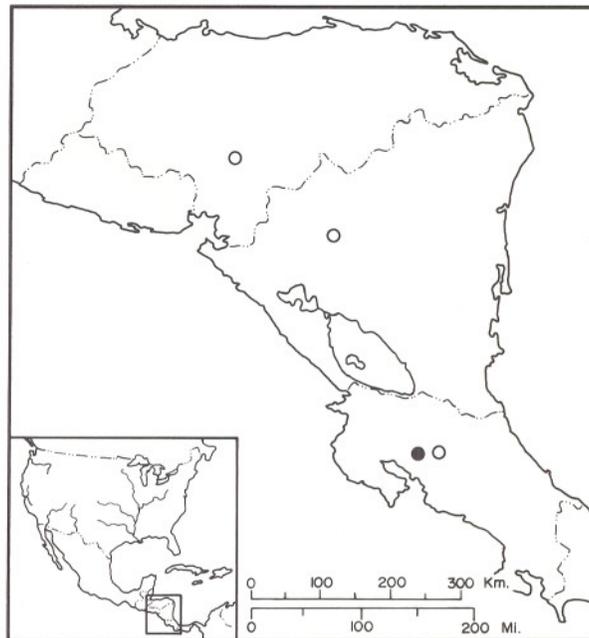
***Typhlops costaricensis* Jiménez and Savage  
Costa Rican Blind Snake**

*Typhlops costaricensis* Jiménez and Savage 1963: 199. Type locality, "Monteverde, Sierra de Tilarán, Provincia de Puntarenas, Costa Rica; elevation 1500 m.; collected by Walter James between March 6-13, 1960." Holotype listed in the original description as "Museo Nacional de Costa Rica Reptile No. 1960" but is now on permanent loan in the Los Angeles County Museum of Natural History, No. 26767 (examined by author).

• **Content.** No subspecies are recognized.

• **Definition.** *Typhlops costaricensis* is a moderately sized (360 mm total length) stout (body diameter contained 46-48 times in total length) worm snake, with 20 rows of uniformly-pigmented scales throughout the body, a completely divided nasal, 390-413 dorsals, and 7-9 subcaudals. The head is not widened but is somewhat flattened, its width in total length 1.50-1.93, (mean: 1.78%). The body is cylindrical, slightly depressed. The tail is very short (1.28-1.73, mean: 1.45% of total length), ending in a short pointed spine. The subocular is absent. The nasals are separated by the rostral. There are four supralabials, increasing in size posteriorly, the third and fourth in contact with the ocular. There are three infralabials, the third one largest, mostly overlapped by the supralabials. The eye is prominent, covered by the ocular and placed anterior and above the center of the scale. The interorbital distance is 72.5-76.4, (mean: 74.1%) of head width. The eye to nostril distance is 39.6-51.8, (mean: 47.4%) of head width. The nostrils are not visible from above. The supraoculars and the prefrontal are much broader than long. There is a well-developed tracheal lung; the branch of the pulmonary artery to the tracheal lung is conspicuously larger than the branch to the pulmonary lung. There are two carotids. The maxilla is of the typhlopoid type, with about 4 teeth. The stomach is elongated, poorly distinguished from the esophagus and intestine. There is a long, rather narrow intestinal caecum. The tongue lacks lateral papillae. The hyoid is opposite ribs 6-8 and it has an ossified basihyoid lacking a cultriform process and articulated cartilaginous first ceratobranchials (Type II of List, 1962). Females have a well-developed right oviduct and no left oviduct. Jiménez and Savage (1963), based on a preserved specimen, described the color as follows: "anterior portion of head dull yellow with some brown markings; other scales dull brown; throat yellow. Dorsal part of body dull brown with several irregular black spots; under magnification each dorsal scale appears to be heavily punctated with brown, except margins of scales which are yellowish. A dull black ring encircles body 6-8 scale rows anterior to anus, ring about five scale rows wide. Belly light with some brown punctations; underside of tail dull yellow; terminal spine yellow." Timmerman and Hayes (1981) described it as of a "uniform dark color." Dixon and Hendricks (1979) considered it "uniformly pigmented (all rows pigmented with brown.)" A freshly collected specimen from Nicaragua was lead gray above, paler below. The anterior third of the dorsal scales was dark gray, the rest with heavy brown punctations; on the ventrals this division was less obvious; the anterior end of head, face, gular anterior ventral areas (to dorsal scale 23) were creamy white (not lemon yellow). The terminal spine, subcaudal and anal area, and some posterior ventral scales were irregularly pigmented with creamy white; after preservation the creamy white areas became yellowish cream. There was no evidence of the preanal dull black ring found in the holotype, nor was it present in four Costa Rican specimens I examined. A diffuse dark midventral stripe is present in some specimens.

• **Descriptions.** There is an adequate description of the holotype and only known specimen at the time by Jiménez and Savage (1963); Dixon and Hendricks (1979) summarized the variation of all specimens known then.



**Map.** Solid symbol marks the type-locality. Hollow symbols mark other localities.

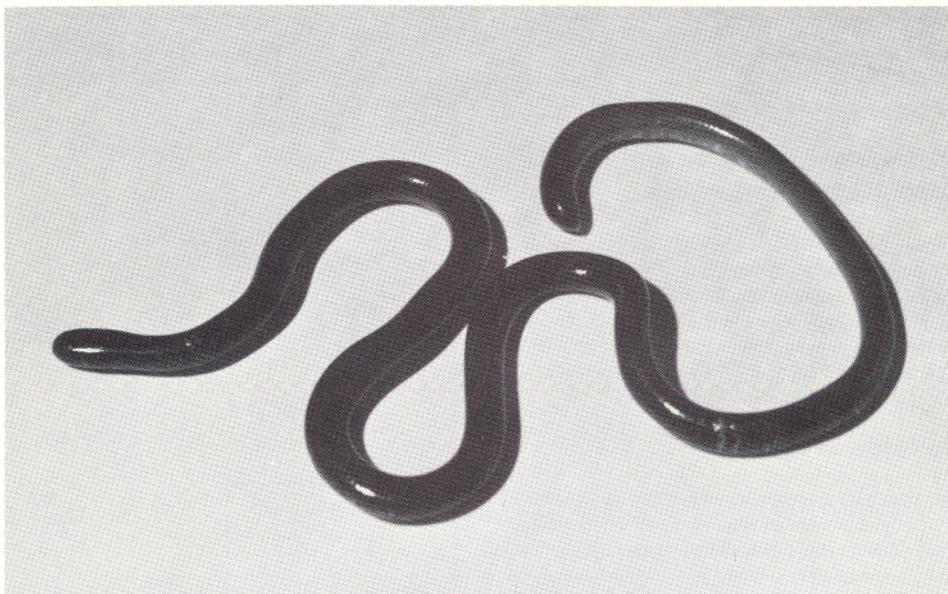
• **Illustrations.** The only known illustrations are in Dixon and Hendricks (1979), depicting the dorsal, ventral and lateral aspects of the head. A photograph of a living specimen from Nicaragua is pictured in Fig. 1.

• **Distribution.** The species is known only from four definite localities: near San Juancito, Francisco Morazán, Honduras (Wilson et al., in press); near San José de la Montaña, Departamento de Matagalpa, Nicaragua; near Poco Sol (15-20 km NW Villa Quesada 540m, Provincia de Alajuela, a Premontane Rain Forest-Tropical Moist Forest bioclimate ecotone in the scheme of Holdridge (1967); and from Monteverde, Provincia de Puntarenas (the latter two are in Costa Rica). A Nicaraguan specimen from "Matagalpa" could be from the city of Matagalpa or from anywhere within the department of the same name. The elevation of the type locality was given as 1500m in the original description and corrected to 1400m by Savage (1974); it is of a Premontane Wet Forest bioclimate. The Nicaraguan locality is 1100m in altitude, in a Tropical Moist Forest, and that of Honduras is in a pine forest at about 1100-1500m in a Subtropical Moist Forest bioclimate.

• **Pertinent Literature.** The literature on this species is meager. The type description was based on a single specimen from Costa Rica. Villa (1978) reported the species for the first time from Nicaragua and added five additional specimens from Costa Rica. Dixon and Hendricks (1979) included *T. costaricensis* in their review of the mainland Neotropical *Typhlops*. Wilson et al. (in press) reported on a Honduran specimen. Otherwise, the species has been mentioned in various checklists for Middle America (Villa et al. 1988), Nicaragua (Villa 1971, 1983) and for Costa Rica (Hahn 1980; Savage 1973, 1976, 1980; Scott, Savage and Robinson 1983; Timmerman and Hayes 1981; Savage and Villa 1986).

• **Etymology.** The species was named for Costa Rica, where it was initially found.

• **Comment.** The internal anatomical characteristics here included were provided by S. B. McDowell (in litt.) on the basis of his dissection of a Nicaraguan specimen (AMNH 113546); he believes that *T. costaricensis* is allied to *T. reticulatus*, a species found in northern cis-Andean South America (Dixon and Hendricks, 1979).



**Figure.** *Typhlops costaricensis*, living individual from Nicaragua (AMNH 113546). Photograph by author.

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