

Catalogue of American Amphibians and Reptiles.

Villa, Jaime D., and Larry David Wilson. 1990. *Ungaliophis*, *U. continentalis*, *U. panamensis*.

***Ungaliophis* Müller**
Central American Dwarf Boas

Ungaliophis Müller, 1882:142. Type-species, *Ungaliophis continentalis* Müller, by monotypy.

Peropodum Bocourt, 1882:522. Type-species, *Peropodum guatemalensis* Bocourt. See Stuart (1954) for generic nomenclatural history.

• **Content.** Two species, *continentalis* and *panamensis*, are recognized.

• **Definition.** (Modified from Bogert, 1968a) Relatively small tropidopheids (760 mm TL) with the head distinct from neck, relatively slender and compressed body and a short, prehensile tail (8.5-12.4% of TL). Males have well-developed anal spurs; these may be present, although not as well developed, in some females. The eye is moderate in size (its diameter is greater than its distance to the lip) with a vertically elliptical pupil. The anterior dorsal cephalic scales are relatively large, especially the frontal and the single prefrontal. The parietals are practically indistinguishable from the dorsals. There are two nasals (with nostril in anterior nasal), one loreal and one preocular, and 2-3 postoculars. Supralabials number 8-10 (two or three reaching the eye), and infralabials 9-11, the first pair of the latter in broad contact behind the moderately large mental, followed posteriorly by 2-3 pairs of chin shields. Tubercles are present on all cephalic scales. The dorsal scales are smooth (except for minute tubercles), in 19-25 rows at midbody, reducing to 17 or 15 near the vent. Ventral scales range from 204 to 258. Subcaudals are single, numbering 39-46. The anal plate is also single, and the tail ends in a blunt spine. The premaxilla is toothless and has an ascending process. The maxillae have 12-15 teeth, the first 4-5 larger and separated from the posterior ones by a short diastema, all decreasing in size posteriorly. The palatine has 5-8, the pterygoid 11-15, and the dentary 13-15 teeth.

The hemipenes are relatively long and bilobed. The sulcus spermaticus appears to bifurcate near the base, and each branch of the sulcus extends to the terminus of the lobe. The basal portion is plicate and calyces on the lobes lack crenate edges.

• **Diagnosis.** These small, slender-bodied boas differ from all other Tropidopidae by having a relatively enormous, azygous prefrontal, and 19-25 rows of dorsal scales at midbody.

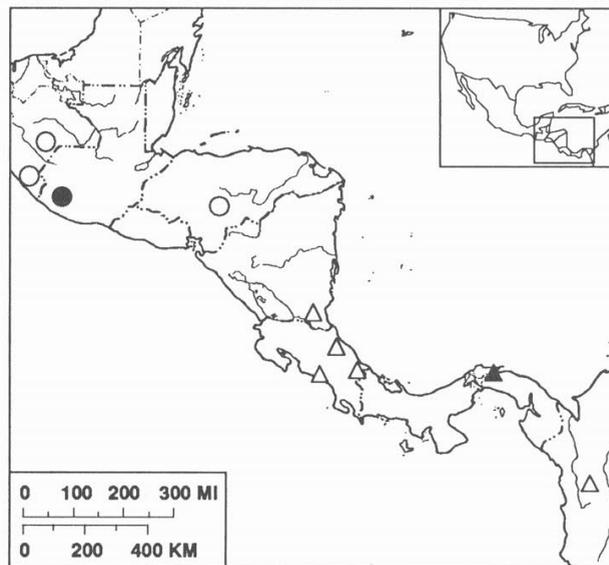
• **Descriptions.** The most comprehensive description of the genus is by Bogert (1968a). Most prior descriptions of, or references to specimens are inaccurate, confusing, or misleading.

• **Illustrations.** See species accounts.

• **Distribution.** Known from southeastern México through Central America to northwestern Colombia. Not yet found in the Yucatan Peninsula, Belize, or El Salvador.

• **Fossil Record.** None.

• **Pertinent Literature.** The confused history of the names *Ungaliophis* and *Peropodum* was elucidated by Stuart (1954), who determined that the former is the appropriate generic name. Cranial osteology was described by Frazetta (1959). Butner (1963) provided information on visceral anatomy. Bogert (1968a) discussed the variability and affinities of the genus, and Bogert (1968b) compared it with other dwarf boas. Peters and Orejas-Miranda (1970) provided a key to the species and a summary of their distribution. McDowell (1987) discussed the systematic position of the genus and Cadle



Map. Distribution of *Ungaliophis continentalis* (circles) and *U. panamensis* (triangles), modified from Bogert (1968a). Solid symbols indicate type-localities.

(1987) its distribution. Villa et al. (1988) summarized the pertinent literature on both species of *Ungaliophis*.

• **Etymology.** *Ungaliophis* is from *Ungalia*, a boid genus no longer recognized as valid, and *ophis*, snake. The gender is neuter.

• **Comment.** For many years the genus was included in a subdivision of the family Boidae (Underwood, 1967), but it is currently accepted that *Ungaliophis* is one of four genera (with *Exiliboa*, *Trachyboa*, and *Tropidophis*) that merit recognition as a separate family (Cadle, 1987; Dowling and Duellman, 1978; Dowling and Jenner, 1988; McDowell, 1987). The family name has been spelled either Tropidophiidae or Tropidopidae (the latter used by MacDowell, 1987). Smith and Preston (in press) pointed out that the latter is correct, inasmuch as the *ophe-* stem is used in classical Greek, to which the International Code of Zoological Nomenclature adheres, whereas *opbi-* is the stem in vernacular Greek.

• **Key to Species**

Rostral and prefrontal scales in broad contact, separating internasals; paravertebral blotches ovoid, with rounded edges; mid-dorsal scale rows 25, reducing to 15 near the vent *continentalis*
Rostral and prefrontals not in contact, separated by internasals; paravertebral blotches triangular, with straight edges; mid-dorsal scale rows 19-23 (rarely 25?), reducing to 17 near the vent .. *panamensis*

***Ungaliophis continentalis* Müller**
Isthmian Dwarf Boa

Ungaliophis continentalis Müller, 1882:142. Type locality "Retaluléu, costa grande v[on]. Guatémala" [ca. 35 km inland from the Pacific coast, at an elevation of 200 m, according to Bogert, 1968a]. Holotype, Naturhistorisches Museum Basel 426, apparently an adult female, collected by G. Bernoulli in 1877 (not examined by authors).

Peropodum guatemalensis Bocourt, 1882:523. Type locality, "Retaluléu, Guatemala."

• **Content.** No subspecies have been described.

• **Diagnosis.** A species of *Ungaliophis* with 25 rows of scales at midbody, reducing to 15 at the vent. Color is grayish brown with dark oval vertebral and paravertebral blotches. The venter is heavily

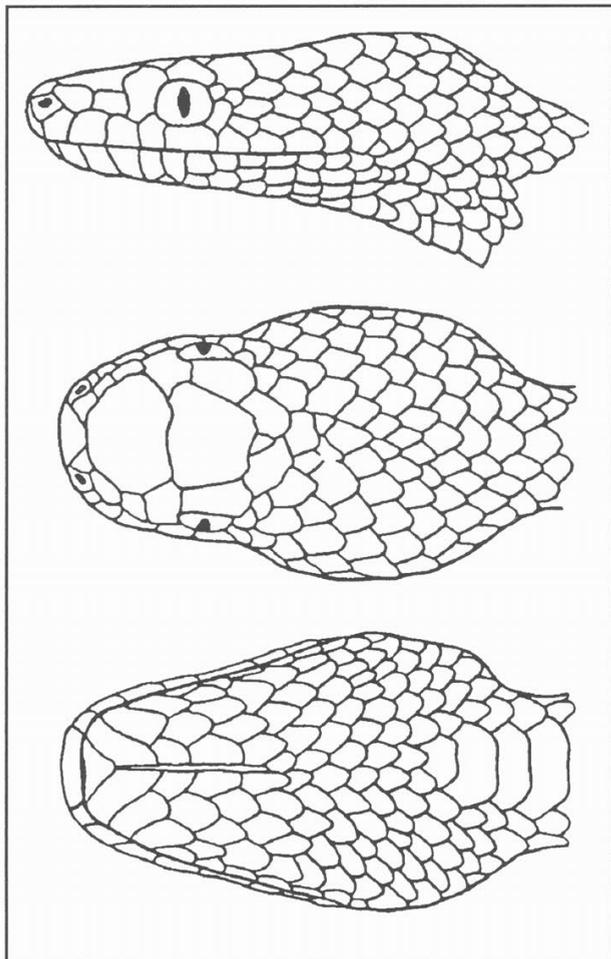


Figure 1. Lateral, dorsal, and ventral views of the head of *Ungaliophis continentalis*. From Bogert (1968a), reproduced with permission of the American Museum of Natural History.

stippled with black. The rostral is in broad contact with the prefrontal, separating the small internasals. The prefrontal and frontal are subequal in size, or the prefrontal somewhat larger. Supraoculars are small, less than half the area of the frontal. There are 9-10 supralabials, two entering the orbit; 2 postoculars; and 14 maxillary teeth.

• **Descriptions.** The most comprehensive description of the species was by Bogert (1968a). Conant (1966) described an adult female from Chiapas and a juvenile female from Honduras. Wilson and Meyer (1982, 1985) redescribed the Honduran specimen.

• **Illustrations.** Müller (1878) and Bocourt (1882) provided a pen-and-ink drawing of a Guatemalan specimen. Line drawings of the lateral, dorsal and ventral aspects of the head of the Honduran specimen and of the ventral aspect of the head are in Bogert (1968a). A living specimen was illustrated with a color photograph of the head and anterior part of the body by Mehrtens (1987). The photograph in Cendrero (1970) is actually a misidentified *U. panamensis*.

• **Distribution.** The range extends from low to intermediate elevations (to 2134m) on the Pacific versant from Chiapas, México, to Honduras; also on the Atlantic versant in Chiapas, México.

• **Fossil Record.** None.

• **Pertinent Literature.** Bogert (1968a) presented a complete account of systematics. References to earlier literature may be found therein. The taxon has been included in various checklists of Stuart (1963) for Guatemala, Villa et al. (1988) for Middle America, and Peters and Orejas-Miranda (1970) for the Neotropics. Wilson and Meyer (1982, 1985) discussed the same Honduran specimen earlier

treated by Conant (1966) and Bogert (1968a). The species was also discussed by Alvarez del Toro (1982) and Johnson (1984).

• **Etymology.** The name *continentalis* is derived from the Latin noun *continens* meaning "continent" and the Latin suffix *-alis* meaning "pertaining to," in reference to the continental (i.e., non-insular) distribution of this snake.

Ungaliophis panamensis Schmidt Panamanian Dwarf Boa

Ungaliophis panamensis Schmidt, 1933:12. Type locality: "Cerro Brujo [Colón Province], Panama, altitude 2,000 feet [ca. 870 m]." See Bogert (1968a) for more details. Holotype, National Museum of Natural History (USNM) 54059, an adult female collected by E. A. Goldman on June 6, 1911 (examined by senior author).

Ungaliophis danieli Prado, 1940:5. Type locality: "Andes, a sudoeste de Antioquia [Colombia]." Holotype, Museo del Colegio de San José [Medellín, Colombia] 189, a young male collected by Brother Daniel in October, 1938 (not seen by authors).

• **Content.** No subspecies have been described.

• **Diagnosis.** A species of *Ungaliophis* with 19-23 (rarely 25) rows of scales at midbody, reducing to 17 at the vent. Color is brown with dark diamond- or hourglass-shaped vertebral and triangular paravertebral blotches. The venter is heavily pigmented with prominent ovoid blotches running across the ventrals at least on the posterior half of the body. The rostral is separated from the prefrontal by the internasals. The prefrontal is considerably larger than the frontal. Supraoculars are relatively large, larger than half the area of the frontal. There are 7-9 supralabials, two or three entering the orbit, and 2-3 postoculars. There are 13-15 maxillary teeth.

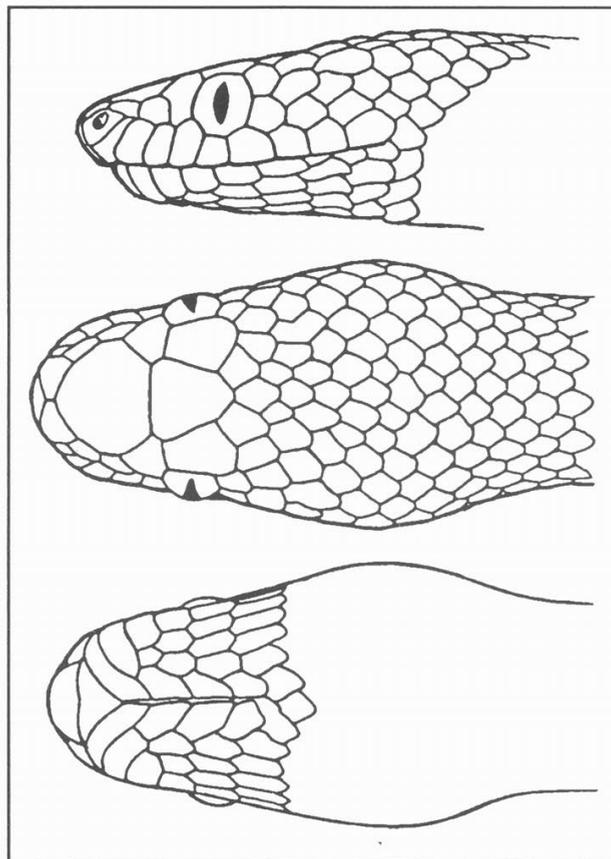


Figure 2. Lateral, dorsal, and ventral views of the head of *Ungaliophis panamensis*. From Bogert (1968a), reproduced with permission of the American Museum of Natural History.

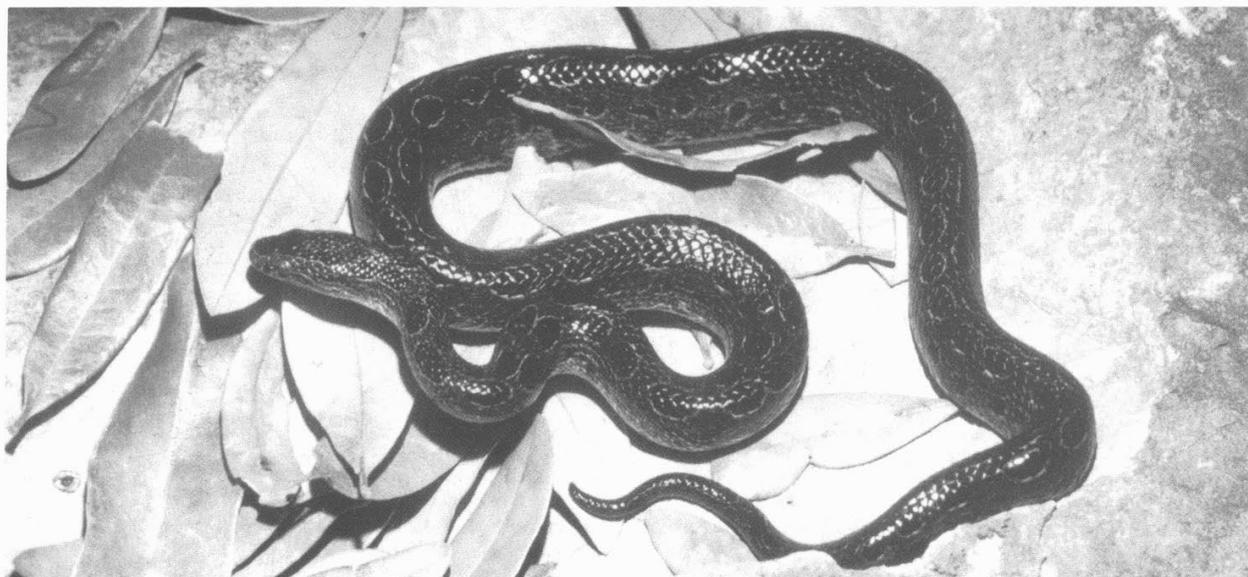


Figure 3. *Ungaliophis continentalis* from Chiapas, México. Photograph by Suzanne and Joseph T. Collins, University of Kansas, courtesy of the Dallas Zoo.

- **Descriptions.** The most complete descriptions are by Schmidt (1933) and Bogert (1968a). Corn (1975) provided additional information for Costa Rican specimens.

- **Illustrations.** Prado (1940) provided line drawings of the dorsal, ventral, and lateral aspects of the head of a Colombian specimen (as *U. danieli*), and a color drawing of the dorsal surface of the head. Oliver (1956) published a black-and-white photograph of a specimen of unknown origin which was reprinted by Bogert (1968a) and Cendrero (1970), the latter misidentified as *U. continentalis*. Bogert (1968a) also published modified versions of Prado's line drawings, as well as drawings of the anal region of a male, and a pen-and-ink drawing of the lateral and dorsal views of vertebrae from the posterior portion of the trunk of a juvenile female. A color photograph of a living specimen is in Mehrtens (1987).

- **Distribution.** The range extends from southern Nicaragua to northeastern Colombia, from near sea level to 2,100m in elevation. Specimens are rare, probably due to secretive and arboreal habits. See Corn (1975) for details of the ecology of the species. The record from the Canal Zone, Panamá (Nemuras, 1967) is based on a juvenile

Corallus hortulanus (fide Myers in Bogert, 1968a).

- **Fossil Record.** None.

- **Pertinent Literature.** The most complete account of the species was by Bogert (1968a). The species has been included in checklists from Nicaragua (Villa, 1971, 1983), Costa Rica (Savage and Villa, 1986), and Panamá (Smith, 1958). Mehrtens (1987) briefly described the species, its ecology, and care in captivity. Villa et al. (1988) summarized pertinent literature and Meratzakis (1988) added a new locality from Costa Rica.

- **Etymology.** The name *panamensis* refers to the Republic of Panamá, whence the species was first described.

Literature Cited

Alvarez del Toro, Miguel. 1982. Los Reptiles de Chiapas. 3rd Edition. Tuxtla Gutiérrez, Chiapas, Mexico. 248 p.
 Bocourt, Marie-Firmin. 1882. In A. Duméril, M.-F. Bocourt, and F. Mocquard, Etudes sur les Reptiles. In Recherches zoologiques pour servir à l'histoire de la faune de l'Amérique Centrale et du

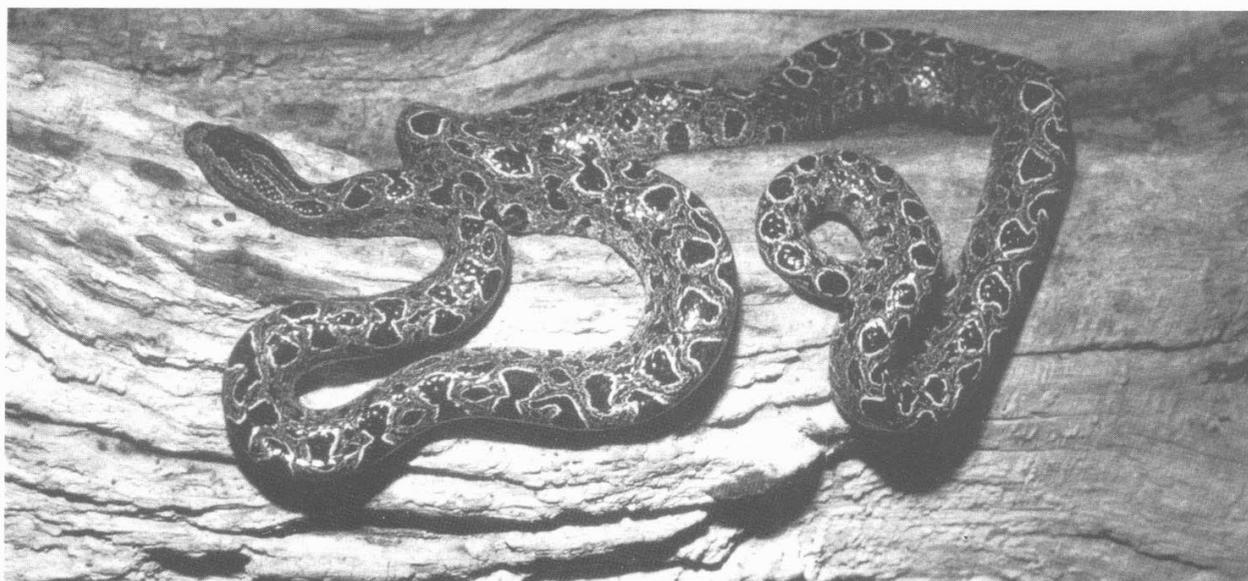


Figure 4. *Ungaliophis panamensis* from Costa Rica. Photograph by Suzanne and Joseph T. Collins, University of Kansas, courtesy of the Dallas Zoo.

- Mexique. Mission Scientifique au Mexique et dans l'Amerique Centrale, recherches zoologiques, Part 3, sect. 1. Paris. 1012 p. 77 pls.
- Bogert, Charles M. 1968a. The variations and affinities of the dwarf boas of the genus *Ungaliophis*. Amer. Mus. Novitates (2340):1-26.
- . 1968b. A new genus and species of dwarf boa from southern Mexico. Amer. Mus. Novitates (2354):1-38.
- Butner, Alfred. 1963. An addition to the boid snake subfamily Tropidophinae. Copeia 1963(1):160-161.
- Cadle, John E. 1987. Geographic distribution: Problems in phylogeny and zoogeography. Pp. 77-105 *In*: Seidel, Richard A., Joseph T. Collins, and Susan S. Novak. Snakes: Ecology and evolutionary biology. MacMillan Publ. Co., New York. xiv + 529 p.
- Cendrero, Luis. 1970. Zoología Hispanoamericana. Vertebrados. Editorial Porrúa, México. xviii + 1160 p.
- Conant, Roger. 1966. A second record for *Ungaliophis continentalis* from México. Herpetologica 22(2):157-160.
- Corn, Michael J. 1975 ("1974"). Report on the first certain collection of *Ungaliophis panamensis* from Costa Rica. Carib. J. Sci. 14(3-4):167-175.
- Dowling, Herndon G., and William E. Duellman. 1978. Systematic herpetology: A synopsis of the families and higher categories. HISS Publ., New York.
- , and Janann V. Jenner. 1988. Snakes of Burma, Checklist of reported species & bibliography. Smithsonian Herpetol. Info. Serv. (76):1-19.
- Frazetta, T. H. 1959. Studies on the morphology and function of the skull in the Boidae (Serpentes). Part 1. Cranial differences between *Python sebae* and *Epicrates cenchris*. Bull. Mus. Comp. Zool. 119:453-472.
- Johnson, Jerry D. 1984. A biogeographic analysis of the herpetofauna of northwestern nuclear Central America. Ph.D. thesis, Texas A&M University, College Station. 127 p.
- McDowell, Samuel B. 1987. Systematics. Pp. 3-50 *In*: Seidel, Richard A., Joseph T. Collins, and Susan S. Novak. Snakes: Ecology and evolutionary biology. MacMillan Publ. Co., New York. xiv + 529 p.
- Mehrtens, John M. 1987. Living snakes in Color. Sterling Publ Co., New York. 480 p.
- Merahzkis, George. 1988. *Ungaliophis panamensis*: Geographic distribution. Herpetol. Rev. 19(3):60.
- Müller, F. 1878. Katalog der in Museum und Universitätskabinet zu Basel aufgestellten Amphibien und Reptilien nebst Anmerkungen. Verh. Naturh. Gessell. Basel, 6(4):557-709, pls. 1-3.
- . 1882. Erster Nachtrag zum Katalog der herpetologischen Sammlung des Basler Museums. Verh. Naturh. Gessell. Basel, 6(4):557-709, pls. 1-3.
- Nemuras, Kenneth. 1967. Notes on the herpetology of Panama: part 4. Dry season in the tropics. Bull. Maryland Herpetol. Soc. 7(1): 120-165, 1 pl.
- Oliver, James A. 1956. A rare gift: the Guatemalan boa. Animal Kingdom 59:56-57.
- Peters, James A., and Braulio R. Orejas-Miranda. 1970. Catalogue of the Neotropical Squamata. Part 1, Snakes. U. S. Nat. Mus. Bull. (297):1-347.
- Prado, Alcides. 1940. Outras serpentes da Colombia, com a descrição de uma nova especie de boideo. Memorias Instituto Butantan 14:35-39.
- Savage, J. M., and Jaime Villa R. 1986. Introduction to the herpetofauna of Costa Rica. Soc. Stud. Amph. Rept., Contrib. Herpetol. (3):viii + 206 pp.
- Schmidt, Karl Patterson. 1933. Amphibians and reptiles collected by the Smithsonian Biological Survey of the Panama Canal Zone. Smithsonian Coll., 89:1-20.
- Smith, Hobart Muir and Michael J. Preston. 1989. The stem for formation of family-group names from the Greek word *opbis*. Bull. Md. Herpetol. Soc., in press.
- Smith, Hobart M. 1958. Handlist of the snakes of Panama. Herpetologica 14(4):222-224.
- Stuart, Lawrence C. 1954. Further notes on the status of the generic names *Peropodum* and *Ungaliophis*. Herpetologica 19(1):79-82.
- . 1963. A checklist of the herpetofauna of Guatemala. Misc. Publ. Mus. Zool., Univ. Michigan (122):1-150.
- Underwood, Garth. 1967. A contribution to the classification of snakes. Publ. British Mus. (Nat. Hist.) 653:x+179 p.
- Villa, Jaime. 1971. Lista tentativa de vertebrados inferiores de Nicaragua. Universidad Nacional Autónoma de Nicaragua, Managua. 36 p.
- . 1983. Nicaraguan fishes, amphibians and reptiles: A checklist and bibliography. Universidad Centroamericana, Managua. 53 p.
- , Larry D. Wilson and Jerry D. Johnson. 1988. Middle American herpetology. A bibliographic checklist. Univ. Missouri Press, Columbia. xxxvi + 132 p.
- Wilson, Larry D. and John R. Meyer. 1982. The snakes of Honduras. Milwaukee Public Mus. Publ. Biol. Geol. (6):1-159 pp.
- , and ———. 1985. The snakes of Honduras, 2nd. Edition. Milwaukee Public Mus., x + 150 pp.

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