Catalogue of American Amphibians and Reptiles.

HARDY, LAURENCE M. 1980. Ficimia publia.

Ficimia publia Cope Blotched hooknose snake

Ficimia publia Cope, 1866:126. Type-locality, "Yucatán, Mexico." Lectotype, U.S. Nat. Mus. 16428, male, collected by Schott, 28 July 1865 (examined by author).

Ficimia ornata Bocourt, 1883:571. Type-locality, "Mexico." Location of holotype unknown.

Gyalopium publium: Cope, 1885:177.

Ficimia olivacea: Boulenger, 1894:271.

Ficimia publia taylori Smith, 1947:411. Type-locality, "Rio Chiquito at San Lorenzo, Veracruz." Holotype, U.S. Nat. Mus. 123491, adult male, collected by Matthew W. Stirling during the period February to April, 1946 (examined by author). Ficimia publia wolffsohni Neill, 1965:103. Type-locality, "Gallon

Ficimia publia wolffsohni Neill, 1965:103. Type-locality, "Gallon Jug, Orange Walk District, British Honduras" [Belize]. Holotype, Mus. Comp. Zool. Harvard University 71668, collected by a local resident on 23 July 1962 (examined by author).

Ficimia publia ornata: Hardy, 1970:2.

- CONTENT. The species is monotypic.
- DEFINITION AND DIAGNOSIS. Ficimia publia has the following characteristics: smooth dorsal scales in 19-19-17-17-17 rows with single apical pits and no anal ridges; 4-10 dorsal scales contacting parietals; internasals usually present; nasal divided or entire above naris, always divided below naris; loreal absent; one preocular; two postoculars; 1 + 2 temporals; rostral contacting frontal, turned up in front and sharp edged; 7 supralabials, 3-4 contacting orbit; labials 2-3 contacting preocular; 7 infralabials, 1-3 contacting anterior genials; mental separated from anterior genials by mutual median contact of first infralabials; nasal separated from preocular and fused to first supralabial; 12-33 gulars; 137-157 (females), 127-152 (males) ventrals; 32-41 (females), 26-44 (males) subcaudals; anal plate divided; 22-38 (females), 17-38 (males) dorsal body blotches; 7-12 (females), 6-13 (males) dorsal caudal blotches; 13-15 maxillary teeth (diastema and fangs absent); 7-10 palatine teeth; 14-17 dentary teeth; snout-vent length is 115-340 (females), 111-415 mm (males); tail length is 25-63 (females), 20-79 (males); tail length/total length is 0.136-0.170 (females), 0.141-0.178 (males).

Ficimia publia differs from F. olivacea by having dorsal blotches; from F. streckeri by having dorsal blotches longer than one scale in length and two postoculars (usually); from F. ramirezi by having the interspaces between dorsal blotches less than twice the length of the blotches; from both F. variegata and F. ruspator by having fewer than 42 dorsal body blotches.

• DESCRIPTIONS. Smith and Taylor (1941) described and discussed 18 specimens in their generic revision. Smith (1947) described geographic variation in Veracruz specimens and proposed that they be recognized as a distinct subspecies (F. p. taylori). Smith and Langebartel (1949) compared two specimens of F. publia from Oaxaca to the new species F. ramirezi. Peters (1953) gave characteristics of two specimens from Quintana Roo.

The first actual specimen from Belize was described by Neill and Allen (1961). Color notes and scale counts for a hybrid $(F, p, publia \times F, p, taylori)$ are in Hensley and Smith (1962). Duellman (1965a) described two specimens (Campeche and Yucatán) that do not support the recognition of subspecies.

Neill (1965) described a new subspecies (F. p. wolffsohni), giving scale counts, color notes, comments on the juvenile pattern

and a description of the habitat.

Greer (1966) described eggs from a Belize specimen. Comments on morphology, secretive behavior, and photographs are in Alvarez del Toro (1973). Marx and Rabb (1972) gave several characteristics of the osteology and dentition. Saiff (1975) pointed out the absence of preglottal structures in *F. publia*. Descriptions of several specimens are in Hardy (1975a).

• ILLUSTRATIONS. This species was first illustrated by Bocourt (1883). Photographs are in Neill (1965), Alvarez del Toro (1973), and Hardy (1975a).

- DISTRIBUTION. Ficimia publia occurs from northern Veracruz, southern Puebla, and Guerrero southward and eastward in the coastal lowlands, throughout the Isthmus of Tehuantepec (at elevations below 1500 m), Yucatán Peninsula, Chiapas, Guatemala (except the central highlands), Belize, and northern Honduras. Comments regarding habitat and geographic distribution are in Smith and Taylor (1941), Smith (1943), Stuart (1958), Neill (1960), Neill and Allen (1961), Stuart (1963), Duellman (1965b), Greer (1966), and Henderson and Hoevers (1975).
 - FOSSIL RECORD. None.
- PERTINENT LITERATURE. Cope (1866) suggested that F. publia is evolutionarily between F. olivacea—F. variegata and G. canum. Ficimia ornata Bocourt was synonomized with F. publia by Cope (1885). In 1886 (p. 18) Boulenger placed F. publia in the genus Gyalopium [= Gyalopion] as follows: "Gyalopium, g.n. for Ficimia publia, Cope [= F. ornata, Bocourt]..." Cope (1887, 1891) also placed publia in Gyalopium. However, Günther (1893) used Gyalopium.

The next significant papers started with Taylor's (1931) conclusion that F. publia was closely related to F. streckeri and his doubt (1931, 1936) that Boulenger (1894) was justified in synon-synonymizing F. publia with F. olivacea. In the first generic revision, Smith and Taylor (1941) recognized geographic variation (Honduras population has uniformly dark blotches on a pale background), but did not propose subspecies. Two specimens from Guerrero (Smith, 1943) seemed to verify the specific distinctness of F. publia and F. ruspator. Smith and Taylor (1945) did not recognize subspecies of F. publia.

The first subspecies (Ficimia publia taylori Smith, 1947) was

The first subspecies (Ficimia publia taylori Smith, 1947) was diagnosed as lacking internasals and having one postocular on each side (rather than two), and was distributed in most of Veracruz. Smith (1947) also summarized some data on 22 specimens

of F. publia.

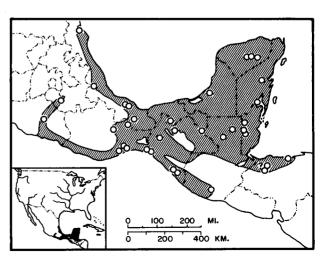
Smith and Taylor (1950) restricted the type locality of F. publia to Chichen Itzá, Yucatán; the restriction was not recognized by Hardy (1975a). The types of F. publia and F. publia taylori are recorded in Cochran (1961).

Hensley and Smith (1962) described an intermediate specimen between *F. publia publia* and *F. p. taylori* in Tabasco. Duellman (1965a) did not use a trinomial for two specimens from Campeche and Yucatán because they did not conform to the subspecies arrangement proposed by Smith (1947).

The second subspecies (F. p. wolffsohni) was described by Neill (1965) and was differentiated mainly by color pattern.

Hardy (1970) listed three subspecies: F. p. publia, F. p. wolffsohni, and F. p. ornata. Hardy (1969, 1975a) correctly listed the subspecies as: F. p. publia, F. p. wolffsohni, and F. p. taylori (see COMMENT).

Marx and Rabb (1972) analyzed many characteristics of F. publia in comparison with many other colubrids.



MAP. The symbols represent the known localities. The precise type-locality is unknown.

In the most recent revision of the genus, Hardy (1975a) presented a distribution map, characteristics of scutellation, dentition, osteology, hemipenes, and coloration on 69 specimens, and analyzed geographic variation. No subspecies were recognized and F. publia was considered to be distinct from F. variegata (Hardy, 1975a). Comparisons of F. publia to other species of Ficimia, Gyalopion, and Pseudoficimia are in Hardy (1975b).

• ETYMOLOGY. The specific epithet (publia) is Latin (publ, public, state, people; -ia, of or belonging to) and apparently means common, ordinary, vulgar, or general.

COMMENT

Bocourt (1883) described the new species, Ficimia ornata based on one specimen that was illustrated by line drawings (plate 35, fig. 10). Even though the exact locality is unknown, the characteristics given and illustrated by Bocourt suggest that the holotype did not originate from either Veracruz and vicinity, or Belize and vicinity. There is no doubt that Ficinia ornata Bocourt is a subjective synonym of F. publia Cope.

The distribution of Ficimia publia, as indicated by the shading on the map, is based on the distributions of vegetation, soils, and elevation. The distribution of F. publia roughly corresponds to the semideciduous broadleaf trees (coastal lowlands and interior of Yucatán), broadleaf deciduous forest and deciduous scrub (coastal Yucatán), and tropical rain forest (Belize, Guatemala, and Honduras), the elevation below 1500 m, and the distributions of latosolic soils of the wet-dry tropics (coastal lowlands, Yucatán, Belize, and Guatemala) and the latosolic soils of the continuously humid tropics (Honduras) (Espenshade, 1970).

LITERATURE CITED

Alvarez del Toro, Miguel. 1973. Los reptiles de Chiapas. Segunda edicion. Gobierno del Estado, Tuxtla Gutierrez, Chia-

pas. 178 p.

Bocourt, Marie-Firmin. 1883. In A. Duméril, M.-F. Bocourt, and F. Mocquard, Études sur les reptiles. In Recherches zoologiques pour servir a l'histoire de la fauna de l'Amerique Centrale et du Mexique. Mission scientifique au Mexique et dans l'Amerique Centrale, recherches zool., part 3, sect. 1. Imprimerie Nat., Paris. xiv + 1012 p. (1870–1909). Boulenger, George Albert. 1886. Reptilia and Batrachia. Zool.

Rec. 22:1-26, 1885.

1894. Catalogue of the snakes in the British Museum (Natural History). Vol. 2. London. xi + 382 p.

Cochran, Doris M. 1961. Type specimens of reptiles and amphibians in the U.S. National Museum. U.S. Nat. Mus. Bull.

- (220):xv + 291. Cope, E. D. 1866. Fourth contribution to the herpetology of tropical America. Proc. Acad. Natur. Sci. Philadelphia 18:123-132.
- 1885. Twelfth contribution to the herpetology of tropical America. Proc. Amer. Philos. Soc. 22:167-194.
- 1887. Catalogue of batrachians and reptiles of Central America and Mexico. U.S. Nat. Mus. Bull. (32):1-98.
- 1891. A critical review of the characters and variations of the snakes of North America. Proc. U.S. Nat. Mus. 14:589-
- Duellman, William E. 1965a. Amphibians and reptiles from the Yucatán Peninsula, México. Univ. Kansas Publ. Mus. Natur. Hist. 15(12):577-614.
- 1965b. A biogeographic account of the herpetofauna of Michoacán, México. Ibid. 15(14):627-709.
- Epenshade, Edward B., Jr. (ed.). 1970. Goode's World Atlas, 13th ed. Rand McNally and Co., Chicago, xii + 314 p.
- Greer, A. E. 1966. Viviparity and oviparity in the snake genera Conopsis, Toluca, Gyalopion, and Ficimia, with comments on Tomodon and Helicops. Copeia 1966(2):371-373.
- Günther, Albert C. L. G. 1885-1902 (1893). Reptilia and Ba-

- trachia, p. xx + 326. In F. D. Godman and O. Salvin (eds.), Biologia Centrali-Americana. Dulau and Co., London.
- Hardy, Laurence M. 1969. Systematic revisions of the genera Pseudoficimia, Gyalopion, and Ficimia (Serpentes: Colubridae). Ph.D. Dissertation, Univ. Mexico, x + 207 p., Albuquerque, April.

1970. Systematic revisions of the genera Pseudoficimia, Gyalopion, and Ficimia (Serpentes: Colubridae). Diss. Abs. Internat. 30(12).

1975a. A systematic revision of the colubrid snake genus Ficimia. J. Herpetol. 9(2):133-168.

1975b. Comparative morphology and evolutionary relationships of the colubrid snake genera Pseudoficimia, Ficimia, and Gyalopion. Ibid. 9(4):323-336. Henderson, Robert W., and Leo G. Hoevers. 1975. A checklist

and key to the amphibians and reptiles of Belize, Central America, Milwaukee Public Mus. Contrib. Biol. Geol. (5):1-

Hensley, M. Max, and Philip W. Smith. 1962. Noteworthy herpetological records from the Mexican states of Hidalgo and Tabasco. Herpetologica 18(1):70-71.

Marx, Hymen, and George Rabb. 1972. Phyletic analysis of fifty characters of advanced snakes. Fieldiana Zool. 63:viii + 321.

Neill, Wilfred T. 1960. Nature and man in British Honduras. Maryland Natur. 30:2-14.

1965. New and noteworthy amphibians and reptiles from British Honduras. Bull. Florida State Mus. Biol. Sci. 9(3):77-130

-, and R. Allen. 1961. Further studies on the herpetology of British Honduras. Herpetologica 17(1):37-52.

Peters, James A. 1953. Snakes and lizards from Quintana Roo, México. Lloydia 16:227-232.

Saiff, Edward. 1975. Preglottal structures in the snake family Colubridae. Copeia 1975(3):589-592.

Smith, Hobart M. 1943. Summary of the collections of snakes and crocodilians made in Mexico under the Walter Rathbone Bacon Traveling Scholarship. Proc. U.S. Nat. Mus. 93(3169): 393-504.

1947. Notes on Mexican amphibians and reptiles. J. Washington Acad. Sci. 37(11):408-412.

-, and D. A. Langebartel. 1949. Notes on a collection of reptiles and amphibians from the Isthmus of Tehuantepec, Oaxaca. J. Washington Acad. Sci. 39:409-416.

and E. H. Taylor. 1941. A review of the snakes of the genus Ficimia. J. Washington Acad. Sci. 31:356-368.

—, and — 1945. An annotated checklist and key to the snakes of Mexico. U.S. Nat. Mus. Bull. (187):iv + 239.

and - 1950. Type localities of Mexican reptiles and amphibians. Kansas Univ. Sci. Bull. 33(8):313-380.

Stuart, L. C. 1958. A study of the herpetofauna of the Uaxactun-Tikal area of northern El Peten, Guatemala. Contrib. Lab. Vertebr. Biol. Univ. Michigan (75):1-30.

1963. A checklist of the herpetofauna of Guatemala. Misc. Publ. Mus. Zool. Univ. Michigan (122):1-150.

Taylor, Edward H. 1931. Notes on two specimens of the rare snake Ficimia cana and the description of a new species of Ficimia from Texas. Copeia 1931(1):4-7.

1936. Description of a new Sonoran snake of the genus Ficimia, with notes on other Mexican species. Proc. Biol. Soc. Washington 49:51-54.

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