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John D. McEachran  
*Virginia Institute of Marine Science*

William N. Eschmeyer

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## RANGE EXTENSIONS FOR THE SCORPIONFISH *SCORPAENA ISTHMENSIS*

JOHN D. McEACHRAN AND WILLIAM N. ESCHMEYER

Virginia Institute of Marine Science, Gloucester Point, Virginia 23062  
[Now: Department of Wildlife and Fisheries Sciences,  
Texas A. & M. University, College Station, Texas 77843];  
California Academy of Sciences, San Francisco, California 94118

**ABSTRACT:** *New localities are cited off Honduras, Yucatán, Florida and North Carolina for this species which is best known from southern tropical Atlantic coastal waters.*

THE SCORPIONFISH *Scorpaena isthmensis* Meek and Hildebrand was previously reported from the Atlantic coast of Panama to Rio de Janeiro, Brazil, and considered a rarity from Panama to Columbia (Eschmeyer, 1965, 1969). On November 13, 1969, a specimen of *S. isthmensis* was captured off the coast of North Carolina (34°25.5' N, 76°19'W) in 15 fms (27.4 m). Examination of scorpaenids housed at the Tropical Atlantic Biological Laboratory (TABL) and the University of Miami Marine Laboratory (UMML) reveals that unreported specimens of *S. isthmensis* have been captured at four additional localities north of Panama (Fig. 1). It is likely that the species regularly occurs along certain portions of the east coasts of Central America and the southeastern United States.

Locality data for the new records are as follows: TABL 106085 (1, 130 mm SL) 15°45'N, 83°32'W, 18-20 fms, (off Honduras) UNDAUNTED STA. 6703, 60 ft trawl, 9 April 1967; TABL 107580 (4, 113-152 mm SL) 29°44'N, 80°26.5'W, 20 fms, (off Florida) SILVER BAY STA. 5587, otter trawl, 12 March 1964; TABL 107581 (1, 118 mm SL) 29°45.5'N, 80°28'W, 19 fms, (off Florida) SILVER BAY STA. 5495, 27 February 1964; UMML 27020 (1, 79 mm SL) 21°13'N, 86°25'W, 30-90 fms, (off Yucatán Peninsula, Mexico) PILLSBURY STA. 588, 10 ft trawl, 14 March 1967; VIMS (Virginia Institute of Marine Science) 990 (1, 116 mm SL) 34°25.5'N, 76°19'W, 15 fms, (off North Carolina) EASTWARD STA. 13307, tryp net, 13 November 1969.

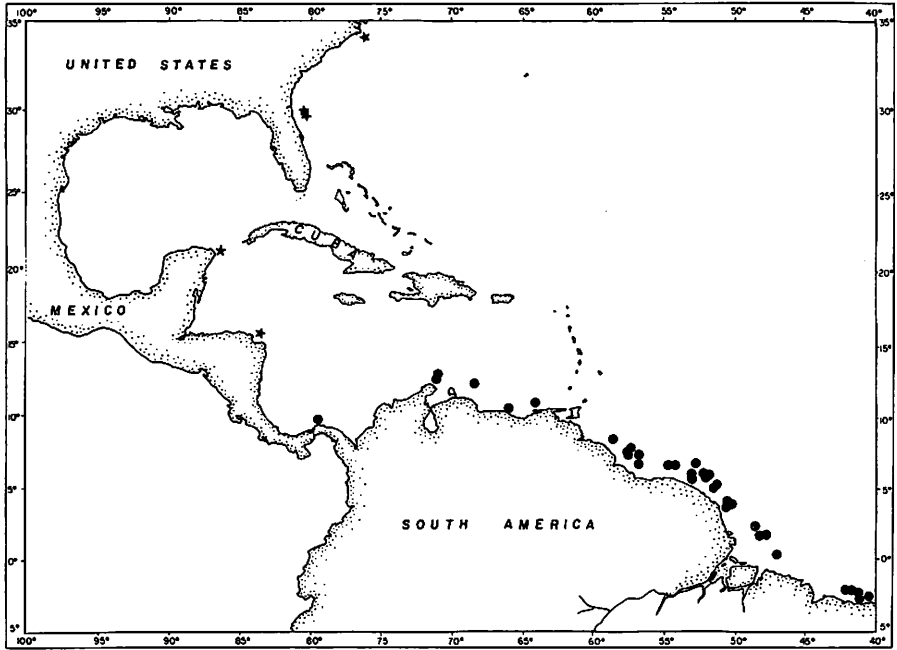


Fig. 1. Distribution (in part) of the Scorpionfish *Scorpaena isthmensis*. Solid circles from Eschmeyer (1969), specimens from Rio de Janeiro not shown. Stars represent new records.

*Scorpaena isthmensis* resembles *Scorpaena bergi* Evermann and Marsh, particularly in having a dark blotch on the spinous dorsal fin, but can be distinguished from the latter by the pectoral fin ray count, length of the second anal spine in relation to the third anal spine, coloration, and nature of the suborbital ridge (Eschmeyer, 1965). The northern specimens of *S. isthmensis* differ only slightly from the southern specimens reported by Eschmeyer (1965). Fin ray counts, scale counts and coloration are the same. All eight new specimens have a dorsal ray count of XII, 9-1/2; anal fin rays III, 5-1/2; and pectoral rays 18. The southern specimens have a gill raker formula of 4 - 5 + 9 - 10 (Eschmeyer, 1965), whereas the northern specimens have a formula of 4 - 5 + 9 - 11. Measurements are similar (Table 1). The slight differences in some of the ranges of body parts as a percentage of standard length (SL) are probably not populational differences but are caused by the larger size of the northern specimens. The 152 mm SL specimen reported here is the largest known.

*Scorpaena isthmensis* appears to be a "continental" species, as no specimens have been reported from the Bahamas or the eastern Caribbean Sea. It occurs with *S. calcarata* and other scorpionfishes in many areas but is unknown from the west coast of Florida or in the northern and western Gulf of Mexico. Depths of captures for *S. isthmensis* range from 8 to 55 fms, except one taken from 5 ft of water at Curacao (Eschmeyer, 1965). *S. calcarata* inhabits coastal waters from the southeastern United States, around Florida,

the northern Gulf of Mexico, the western and southern Caribbean Sea, and south to Brazil (Eschmeyer, 1965, 1969). *S. isthmensis* sometimes occurs with the more widely ranging species, *S. brasiliensis*, and occasionally has been captured with the offshore "continental" species, *S. agassizii*. Its habitat is similar to that of the less frequently collected *S. dispar*. *S. agassizii*, *S. dispar*, and *S. brasiliensis* have distributions similar to that of *S. calcarata*. *S. isthmensis* should be looked for at Tortugas shrimp grounds off Florida and in the northern and western Gulf of Mexico, but it may be excluded from these areas by subtle habitat differences or competition with other fishes.

Smooth cheek scorpionfish, in reference to the lack of spines on the sub-orbital ridge, is proposed as the vernacular name for *S. isthmensis* since this species will be an addition to the American Fisheries Society list of common names checklist.

The North Carolina specimen of *S. isthmensis* was collected by J. A. Musick of VIMS on the *R/V Eastward* through the cooperation of the Duke University Marine Laboratory and the Cooperative Program of Biological Oceanography, National Science Foundation Grant GB-8189. George C. Miller and Phillip C. Heemstra (TABL), C. Richard Robins (UMML), and Katherine Smith and Maurice Giles (California Academy of Sciences) assisted in the preparation of this note; Contribution No. 647, VIMS.

TABLE 1. Range and proportional measurements observed in northern and southern specimens of *Scorpaena isthmensis* expressed as percentage of standard length.

	Northern Specimens	Southern Specimens <sup>a</sup>
Number of specimens	8	0 <sup>b</sup>
Range in standard length	74-152 mm	2 <sup>b</sup>
Head Length	39-47	41-48
Jaw Length	21-25	20-24
Orbit Diameter	10-13	10-14
Snout Length	11-13	9-13
Length of Third Dorsal Spine	14-17	15-18
Pectoral Fin Length	28-36	30-36
Predorsal Fin Length	32-38	33-39
Interorbital Width	4-5	4-6
Body Depth	34-41	31-38
Caudal Fin Length	27-32	29-34
Orbit Diameter/Snout Length	0.8-1.1	0.9-1.5

<sup>a</sup>Eschmeyer, 1965.

<sup>b</sup>See Eschmeyer, 1965, pp. 104, 148-156.

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