The J.L.B. SMITH INSTITUTE OF ICHTHYOLOGY

SPECIAL PUBLICATION

No. 28

A NEW SPECIES OF THE FISH GENUS PONTINUS (SCORPAENIFORMES: SCORPAENIDAE) FROM OFF NATAL, SOUTH AFRICA

by

William N. Eschmeyer

GRAHAMSTOWN, SOUTH AFRICA

May, 1983

ABSTRACT

Eschmeyer, W.N. 1983. A new species of the fish genus *Pontinus* (Scorpaeniformes: Scorpaenidae) from off Natal, South Africa. *The J.L.B. Smith Institute of Ichthyology, Special Publication* No. **28**, 4 pages, 1 figure. *Pontinus nigerimum* is described as a new species, the first of this genus from the Indian Ocean. This species is known only from one specimen collected off Natal in 146 m. It is characterized by having a black band encircling the base of the long supraocular tentacles

The publication of this paper has been assisted by a grant from the South African Department of National Education.

A NEW SPECIES OF THE FISH GENUS *PONTINUS* (SCORPAENIFORMES: SCORPAENIDAE) FROM OFF NATAL, SOUTH AFRICA

by

William N. Eschmeyer¹

The tropical and warm-temperate scorpionfish genus *Pontinus* is well represented in the Atlantic (Eschmeyer, 1969), where 9 species occur. About 10 species are found in the eastern Pacific, but half of them are undescribed. Until now, no species has been recorded from the Indian Ocean, and only 2 are recognised from the western Pacific (Eschmeyer, 1969; Eschmeyer & Randall, 1975): (1) *P. hexanema* (Günther, 1880) from the Arafura Sea, with *P. tentacularis* Fowler, 1938, a probable synonym known from Japan, the Philippines, and Taiwan (Chen, 1981); and (2) *P. macrocephalus* (Sauvage, 1882), with *P. spilistius* Gilbert, 1905, a synonym, known only from Hawaii.

Species of *Pontinus* are predators, growing to about 30–45 cm; they occur offshore in about 50–400 m and are common in some places. In the Indo-West Pacific, their habitat has not been adequately sampled. One specimen made available by the J.L.B. Smith Institute of Ichthyology was collected off Natal. It has distinctive, long supraocular tentacles that are black at their base. A thorough search of the fish collections of the J.L.B. Smith Institute and the South African Museum resulted in no additional specimens. The species is described here so that it may be included in the revision of *The Sea Fishes of Southern Africa* now in preparation.

In addition to the new species of *Pontinus* described here, there is an undescribed species off Mauritius (1 specimen provided by Jean de Boucherville Baissac) that has long pale tentacles, and probably two undescribed species discovered by P. Fourmanoir in the Society Islands: one with short tentacles and one with long, noticeably black-tipped tentacles. The latter species is known to me only from a photograph of specimens caught by a fisherman. It is likely that additional species will be found in the Indo-West Pacific, and additional material is needed.

Methods follow Eschmeyer (1969).

Genus Pontinus Poey, 1860

Pontinus Poey, 1860: 172 (type-species *Pontinus castor*, by inference from original text (see Eschmeyer, 1965:527) or by subsequent designation of Jordan and Gilbert, 1883:669).

DIAGNOSIS: Dorsal-fin rays XII,9—10; anal-fin rays normally III,5 (last ray double); pectoral-fin rays 15—20, all unbranched. Swimbladder present. Vertebrae 24. Body scales ctenoid; cheek, postorbital area and top of head scaly. No occipital pit. Vomerine and palatine teeth present. Preorbital bone with 2 spines over maxillary. Suborbital ridge usually with 3—4 spines, first on preorbital bone often absent. Supplemental preopercular spine present. First preopercular spine longest, second often absent, 3rd and 4th present, 5th present or absent.

Closely related to *Neomerinthe*, but species of that genus have branched pectoral rays.

¹ California Academy of Sciences, Golden Gate Park, San Francisco, California, 94118 USA

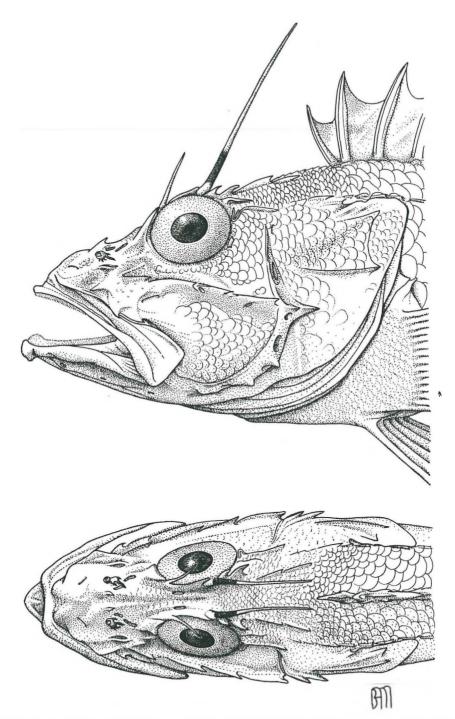


Figure 1. Pontinuss nigerimum, holotype, RUSI 11132, lateral and dorsal view of head.

Pontinus nigerimum sp. n.

HOLOTYPE: RUSI 11132, (156 mm SL, 183 mm TL), off Natal, 146 m; 11 June 1973; trawl. Donated by the Oceanographic Research Institute, Durban.

DIAGNOSIS: A species of *Pontinus* with long supraocular tentacles that are black at their base (Fig. 1). Pectoral rays 16; dorsal soft-rays 9 (last double).

DESCRIPTION: Body robust, somewhat compressed posteriorly.

Snout moderate, longer than orbit diameter. Dorsal fin with 12 spines, none especially elongate, and 9 soft-rays (last ray double). Pectoral rays 16. Gill rakers and rudiments on first arch 17; 7+1+9. Preorbital bone with 2 spines overlying maxillary; first points mostly down, second larger, points down and back. Suborbital ridge with 4 spinous points, first on lateral face of preorbital bone, second under eye, third below rear of eye, fourth just before preopercle. Second preopercular spine absent, 5th virtually absent; supplemental, first, third and fourth present. Other spines include: nasal, pre-, supra-, and postocular, parietal, nuchal, cleithral, opercular. Upper posttemporal spine absent. Vertical scale rows estimated at 46 (many scales rubbed off). Lateral-line scales 25+1 (some scales missing). Small knob at symphysis of lower jaw. Supraocular tentacle long and slender, about $2\frac{1}{2}$ orbit diameter.

Measurements in mm (% SL in parentheses): Head 70.7 (45), body depth 50.3 (32), snout 22.4 (14), orbit diameter 15.2 (10), interorbital width 6.4 (4), jaw length 31.7 (20), preorbital distance 59.7 (38), caudal fin 37.1 (24), pectoral fin 44.6 (29), pelvic fin 37.8 (24). First dorsal spine 14.0 (9), second 18.0 (12), third 20.5 (13), fourth (longest) 22.0 (14). First anal spine 11.6 (7), second 25.9 (17), third 22.4 (14). Preorbital tentacle about 10.5 (7), supraocular tentacle 36 (23).

Coloration in life unknown, probably mostly red. Coloration in alcohol: Body tan. Dusky pigment on occiput, above pectoral fin, along lateral line, at base of soft dorsal fin, on membranes between first three dorsal-fin spines, and at tip of anal fin and caudal fin.

REMARKS: Judging from intraspecific variation of related species, smaller specimens will have the snout length more nearly equal to the orbit diameter and larger specimens will have a proportionally longer snout in relation to the orbit diameter. Pectoral fin ray counts are nearly constant for species in this genus, but occasional specimens may have 15 or 17 rays.

COMPARISONS: This is the only species of *Pontinus* that has a black band at the base of the long supraocular tentacles. In counts and snout length, the species resembles *P. hexanema* from the western Pacific. An undescribed species from Mauritius has similar counts and shape, but its tentacles are pale. Sexual dichromatism is extremely rare in scorpionfishes, and it is expected that both sexes of the new species will have the dark band on the supraocular tentacles.

DISTRIBUTION: Known only from the holotype collected off Natal in 146 m.

NAME: The scientific name *nigerimum* comes from Latin, "niger" (black) plus "-imum" (lowest part, bottom) in reference to the black band on the lower 1/3 of the supraocular tentacle.

ACKNOWLEDGMENTS

I am endebted to Phil Heemstra for making the specimen available. The drawing was prepared by Beth Meinhard and Michael Hearne made the X-ray. A grant from the John S. Schlesinger Foundation Fund of the J.L.B. Smith Institute permitted me to visit South Africa. P.A. Hully and Sidney Kannemeyer assisted my work at the South African Museum. Billy Ranchod and Margaret M. Smith were especially helpful during my visit to the J.L.B. Smith Institute. John E. Randall loaned a specimen from the Society Islands and put me in touch with both Baissac and Fourmanoir. Lillian J. Dempster kindly reviewed the manuscript.

REFERENCES

- Chen, L. 1981. Scorpaenid fishes of Taiwan. Quarterly Journal of the Taiwan Mus. 34 (1,2): 1-60.
- Eschmeyer, W.N. 1965. Three new scorpionfishes of the genera Pontinus, Phenacoscorpius and Idiastion from the western Atlantic Ocean. Bulletin of Marine Science, 15(3):521-534.
- Eschmeyer, W.N. 1969. A systematic review of the scorpionfishes of the Atlantic Ocean (pisces: Scorpaenidae). Occasional Papers of the California Academy of Sciences, No. 79: 130 pp.
- Eschmeyer, W.N., and J.E. Randall. 1975. The scorpaenid fishes of the Hawaiian Islands, including new species and new records (Pisces: Scorpaenidae). *Proceedings* of the California Academy of Sciences, 40(11):265-334.
- Jordan, D.S., and C.H. Gilbert. 1883. Synopsis of the fishes of North America. Bulletin of the United States National Museum, 16:1vi+1018 pp.
- Poey, F. 1860. Poissons de Cuba. Memorias sobre la Historia natural de la isla de Cuba, 2: 115-356.

périod by **shifti**s commerces passas Re