

Three additions to the marine fish fauna of southern Africa

by

M. J. Penrith

State Museum,
Windhoek, South West Africa

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ABSTRACT

Three species of fish belonging to the families Polynemidae and Scorpaenidae are recorded from the southern African faunal area for the first time.

1 INTRODUCTION

The limits of the southern African marine faunal area have been defined by a number of authors. For fish the recent limitation of the area to the seas off southern Africa from the Kunene River mouth on the west coast to Beira on the east coast (Smith 1975) provides a natural and logical scheme. Within the area, the eastern portion is well known, the western half less so, and the north-western portion, off the northern Namib coast, is almost unknown. There are two main reasons for the low level of knowledge of this region. Firstly, although there has been a large fishery along the coast for many years operating from Walvis Bay, it is only recently that bottom trawling, as opposed to purse-seining, has been started in the area. Secondly, only very limited shore collecting has been done along the coast. The area is difficult to reach, to stay in, and to work in.

Of the three new records from the northern Namib coast noted below, the two scorpaenids were taken by bottom trawl, and the polynemid by shore collecting. It was collected during a visit to the area when netting was possible on only one day in two weeks.

2 POLYNEMIDAE

Galeoides decadactylus (Bloch), 1795

Material: SMP 1561.

40 km south of Kunene River mouth at 17°37'S., 11°46'E., 19–20.X.1979. Gill-net in surf zone of sandy beach. Water temperature 16,4°C. M. J. Penrith and T. Schoeman.

Description

Standard length 183 mm, head 60 mm, eye about equal to snout, both 4 in head. Base of second dorsal subequal to anal base and slightly more than half head length. Dorsal VII + I, 13. Anal III, 13. Pectoral free rays 8 each side.

The single example is in rather poor condition after being beach-rolled when the gill-net was washed ashore, but the 8 short free pectoral rays clearly identify the species and prevent confusion with other members of the family in the eastern Atlantic or western Indian oceans.

Distribution

Galeoides decadactylus has a wide distribution in the eastern Atlantic. In the north the species reaches the western extremity of the Mediterranean (Monod 1973) and has been recorded southwards to Baía dos Tigres (Poll 1959; Penrith 1978). Although the present record extends the species range only about 100 km southwards, it is the first record of *G. decadactylus* in the southern African faunal area (as defined by Smith

1975). Although only one example was obtained, the species is probably not uncommon south of the Kunene River. It was the only teleost taken in the single gill-netting attempt made during a visit to the area in October 1978.

3 SCORPAENIDAE

3.1 *Neomerinthe folgori* (Postel & Roux) 1964

Material: SMP 1560.

40 nautical miles N.W. of Rocky Point ($\pm 18^{\circ}45'S.$, $11^{\circ}50'E.$), July 1978. Trawled ± 200 metres. Capt. F. van Urk.

Description

Standard length 272 mm. Body proportions as in table 1. Dorsal XII, 11. Anal III, 5. Pectoral 17 right, 18 left. Upper 2 rays simple, next 7 branched, rest simple. Tubed lateral line scales 29. Two well-developed simple preorbital spines over maxilla, sub-orbital ridge well-developed, with many small spines and spine clusters. Supplemental preopercular spine. Three preopercular spines, first the best developed. In general head spines are simple.

Colour pattern after preservation (Plate 1) much as shown by Postel & Roux (1964, Figure 1). Dark tip of caudal present. Fresh (frozen) colour red/orange with darker patches.

The present specimen agrees well with previous descriptions (Postel & Roux 1964; Eschmeyer 1969). Where differences occur, as in the reduced subdivision of head spines relative to Eschmeyer's detailed description, this is probably related to the size difference (272 mm as opposed to 340 mm).

TABLE 1: Body proportions as % of standard length for the known examples of *Neomerinthe folgori*.

Standard length (mm)	SMP 1560	Postel & Roux, 1964	Eschmeyer, 1969
	272	285	340
Head	47,0	49,0	49,0
Eye	9,0	9,5	9,0
Snout	15,0	16,8	16,0
Interorbital	6,2	7,0	5,1–5,5
Depth	38,5	36,5	38,0
Depth, caudal peduncle	9,5	9,5	—
Jaw	22,0	—	23,0
Predorsal	42,0	—	46,0

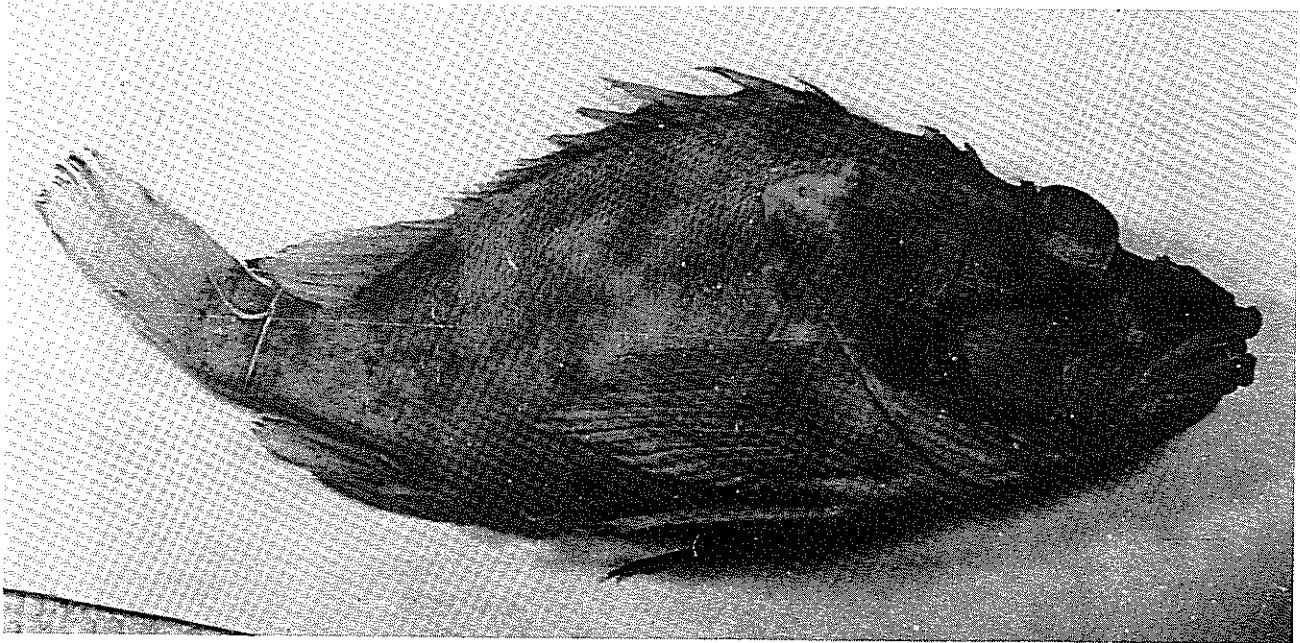


PLATE 1: *Neomerinthe folgori*, standard length 272 mm.

Distribution

Neomerinthe folgori has previously been recorded only from West African waters, Mauritania (Cervigon 1960) and Cape Verde Islands (Postel & Roux 1964) in 180–310 metres. The present record extends the range some 2 900 nautical miles southward. The species is probably much more widely distributed than the records suggest. Eschmeyer (1969) has suggested that it is possibly a rough bottom living species, a habitat type that has been little studied on the African west coast. Although trawled, the present example was taken over rough ground in a reinforced trawl-net.

Neomerinthe folgori is not listed in the keys to West African fishes of Blache *et al.* (1970).

3.2 *Pontinus leda* Eschmeyer, 1969

Material: SMP 1562.

Sole (*Austroglossus microlepis*) grounds N.W. of Rocky Point. August 1976. Trawled. Capt. F. van Urk.

Description

Standard length 198 mm. Body proportions as percentage of standard length: head 50,5 %, eye 12 %, snout 15 %, interorbital 5,5 %, depth 39 %, jaw 26 %, predorsal 44 %, 2nd dorsal spine 12,5 %. Dorsal XII. 9. Anal III, 4. Pectoral 18, all rays simple.

Tubed lateral line scales 23, vertical scale rows 41.

Preorbital with 2 spines overhanging maxilla, second larger and pointing posteriorly. Sub-orbital with 4 spines, first very small. Five preopercular spines plus supplemental spine. Third preopercular spine largest. Very small upper posttemporal spine on left side.

Eschmeyer (1969) noted two differences between *Pontinus accraensis* and the related *P. leda*: the presence in the former of elongated second and third dorsal spines and the presence of dark spots on the caudal, features lacking in the latter species. The present example has no elongated dorsal spines but has some scattered dark spots on the caudal.

Preserved colour pattern, especially the dark lateral line and patch on the membrane of the hind half of the spinous dorsal, as described and figured by Eschmeyer, but with some dark spots on the caudal as noted above. Colour before preservation but after freezing shown in Plate 2.

Distribution

Recorded from 2°S. to 4°S. (Eschmeyer 1969). Eschmeyer, however, has suggested that many of the more southerly of Poll's (1959) records of *Pontinus accraensis* (to 16°36'S.) may represent this species. The present record is the first within the southern African faunal area, and extends the range to approximately 18°50'S.

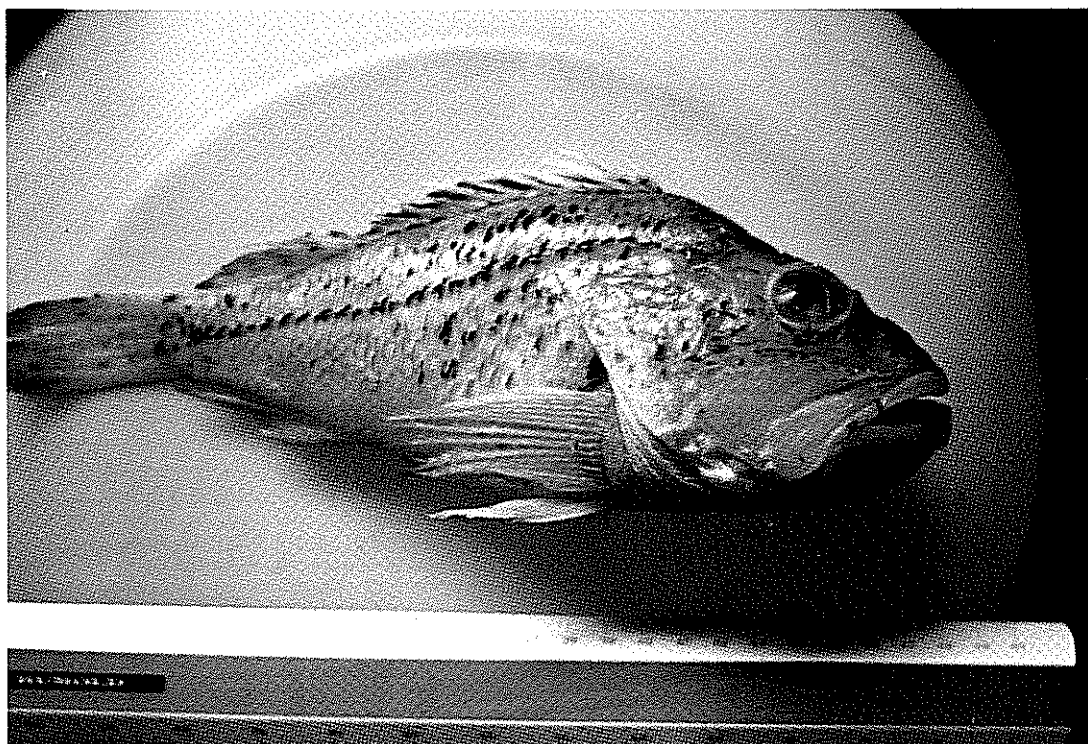


PLATE 2: *Pontinus leda*, standard length 198 mm. Post mortem coloration (quick frozen after capture).
(Photo: L. Jacobson)

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5 REFERENCES

BLACHE, J., CADENAT, J. and STAUCH, A.

1970: Clés de détermination des poissons de mer signalés dans l'Atlantique Oriental entre le 20^e parallèle N. et le 15^e parallèle S. *Faune tropicale* 18: 1 - 479.

CERVIGON, F.

1960: Peces recogidos en el curso de las campañas realizadas a bordo del "Costa Canaria" desde cabo Bojador a Guinea Portuguesa (Africa Occidental) y consideraciones sobre su distribución. *Investigación Pesq.* 17: 33 - 107 (not seen).

ESCHMEYER, W. N.

1969: A systematic review of the scorpionfishes of the Atlantic ocean (Pisces: Scorpaenidae). *Occ. Pap. Calif. Acad. Sci.* No. 79: 1 - 130.

MONOD, Th.

1973: Polynemidae. In Hureau, J. C. & Monod, Th. (Eds.). *Checklist of the fishes of the north eastern Atlantic and of the Mediterranean*. Paris: UNESCO.

PENRITH, M. J.

1978: An annotated checklist of the inshore fishes of southern Angola. *Cimbebasia* (A) 4: 179 - 190.

POLL, M.

1959: Poissons. V. Téléostéens, Acanthoptérygiens. *Rés. sci. Expéd. Océanogr. belg. eaux côt. afr. Atlant. Sud 1948-49* 4 (3B): 1 - 417.

POSTEL, E. and ROUX, C.

1964: *Scorpaena folgori*, poisson téléostéen nouveau des Iles du Cap Vert. *Bull. Mus. natn. Hist. nat. Paris* 36: 165 - 171.

SMITH, M. M.

1975: Common and scientific names of the fishes of southern Africa. *Spec. Publ. J.L.B. Smith Instit. Ichthyol.* No. 14: 1 - 178.