PALINUSTUS MOSSAMBICUS BARNARD (PALINURIDAE : DECAPODA), A RARE SPINY LOBSTER FROM INDIAN WATERS

The present material was collected in the first week of November 1965, during an exploratory fishing cruise off the Southwest coast of India, on board the Research Vessel *KALAVA* of the Indo-Norwegian Fisheries Project, Cochin.

Many numbers of *Epinephelus* spp. were caught on hand lines from the rocky patches over the continental shelf 80-100 m. deep lying between Lat. 10° 36′-11° 03′N and some of these fishes were found to regurgitate the undigested portions of their stomach contents while brought on to the deck. One such specimen of *Epinephelus diacanthus* (Val.), 375 mm. total length, caught off Calicut was found to regurgitate a small lobster along with remains of other crustaceans. Except for the slightly crushed carapace and missing extremities of the antennae and pereopods the specimen was fairly intact enabling its identification clearly as female of *Palinustus mossambicus* Barnard (1926).

This species is very rare, known only from 1 male originally described by Barnard (1926) and 4 males and 1 female dealt with by Holthuis (1947). This appears to be the 7th specimen and the 2nd female of this species on record so far and for the first time from the Indian waters.

Palinustus mossambicus Barnard

Palinustus mossambicus Barnard 1926, p. 126.

Palinustus mossambicus Holthuis 1947, pp. 117-121.

Palinustus mossambicus Barnard 1950, p. 545.

Material : 1 female, 90 mm. total length and 32 mm. carapace length ; 3rd November 1965.

Locality : S.W. coast of India, off Calicut, Lat. 11° 03′ N and Long. 75° 09′E, 84 m. depth.

Description : The specimen on hand agrees well with the descriptions of Barnard and Holthuis (*op. cit.*) except for the slight differences in minor details which only are mentioned here.

The inner margin of the two supra orbital processes with 4 small teeth (Fig.) ; the strong forwardly directed spine on the dorsal surface of each supra orbital process near the outer margin extends slightly beyond the anterior margin of the truncated part of the process ; the anterior margin of carapace between the supra orbital processes slightly convex and provided with 6 spinules of equal size.

Antennular segment posteriorly with 5 erected spines in the median part, one on the extreme left being comparatively small. Basal segment of antennular peduncle reaches tip of last segment of antennal peduncle.

The 6th abdominal segment bears in its centre 2 median posteriorly directed tubercles with only a pair each on either side ; posterior margin of the same with 6 strong short spines ; the ventral margin of the 1st abdominal segment provided with only 4 or 5 spinules ; ventral margin of the 6th somite with 9 small blunt spines.

Since the tips of the pereiopods are missing their comparative length could not be studied. Calcified portion of exopod of the uropod with 6 spines on the marginal carina and that of the endopod with 4.

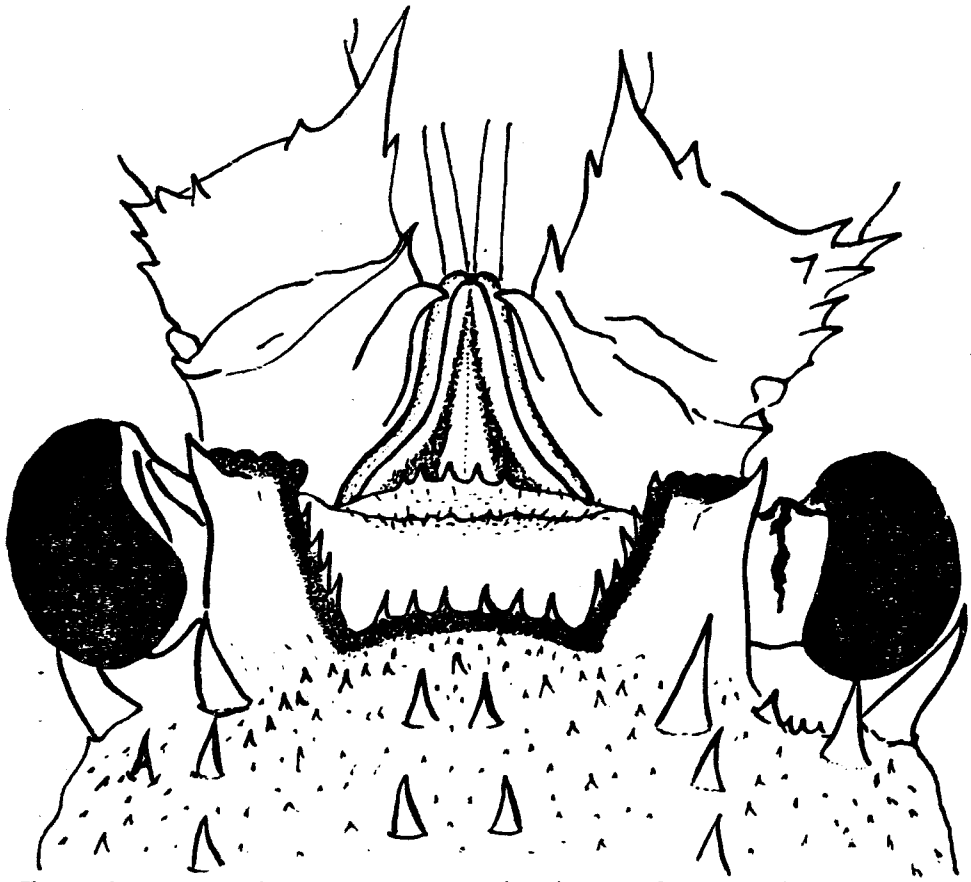

FIG. *Palinustus mossambicus* Barnard, female. Anterior part of carapace with antennular and ophthalmic segments in dorsal view.

Colour : The colouration of the specimen had not faded much even though it was collected from the regurgitated stomach contents. Reddish brown ground colour ; anterior margin of the carapace between the supra orbital processes banded red ; the posterior margin of carapace, the anterolaterl margin of abdominal segments and lateral margin of telson and uropods also reddish. Abdomen dorsally with white spots on hind margins of segments and an oblique white line laterally on each side from 2nd to 5th segments. First antennae and legs banded with white.

Distribution : Portuguese East Africa, 406 m. (Barnard) ; Sulu Sea near the south western point of Mindanao, 72-80 m. (Holthuis). The present record of the species from the Indian waters indicates a wider distribution of the species in the Indo-Pacific.

Remarks : While Barnard's specimen showed 2 strong submedian spines at the anterior margin of the carapace, the specimens of the Snellius Expedition

had 4-6 spines of different size. Present specimen shows 6 spines of almost equal size.

In the number of spinules at the posterior margins of the sterna of abdominal somites 1 and 2 the present specimen is more in agreement with Barnard's material, while in the absence of pre-anal spines it agrees with Holthuis' specimens.

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REFERENCES

BARNARD, K. H. 1926. *Trans. Roy. Soc. S. Afr.*, **30** : 119-129.

BARNARD, K. H. 1950. *Ann. S. Afr. Mus.*, **38** : 1-864.

HOLTHUIS, L. B. 1947. *Temminckia.*, **7** : 1-178.