

NOTES ON THREE SPECIES OF CRABS AND TWO SPECIES OF
PRAWNS RECORDED FOR THE FIRST TIME FROM
MAHARASHTRA COAST

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ABSTRACT

Three species of portunid crabs, *Portunus (Monomia) gladiator* Fabricius, *Charybdis (C) granulata* Herbst and *Portunus (Xiphonectes) hastatoides* (Fabricius), and two species of prawns, *Metapenaeus halarula* (de Man) and *Sicyonia lancifera* (Olivier), being first records of these species from the coast of Maharashtra, are briefly described. Except the crab *P. (X). hastatoides*, which was collected from the Dol catches landed at Versova, all the species were collected from trawl catches landed at Sassoon Docks, Bombay.

Crabs

1. *Portunus (Monomia) gladiator* Fabricius

(Fig. 1)

Material: Two females of carapace lengths 52 mm and 43 mm and carapace width 77 mm, 66 mm and one male with carapace length 45 mm and width 75 mm were collected from trawler landings at Sassoon Dock. One of these females was berried.

Remarks: The species was identified as *P(M) gladiator* Fabricius from the important features such as low granulated elevations of the carapace; front with four teeth, middle pair being small; upper orbital margin with two fissures; and chelipeds with crimson spots described as characteristic of the species by Barnard (1950). A single row of granules was found to be present on the postero-lateral border of the carapace in both sexes. Granules were also noticed to be

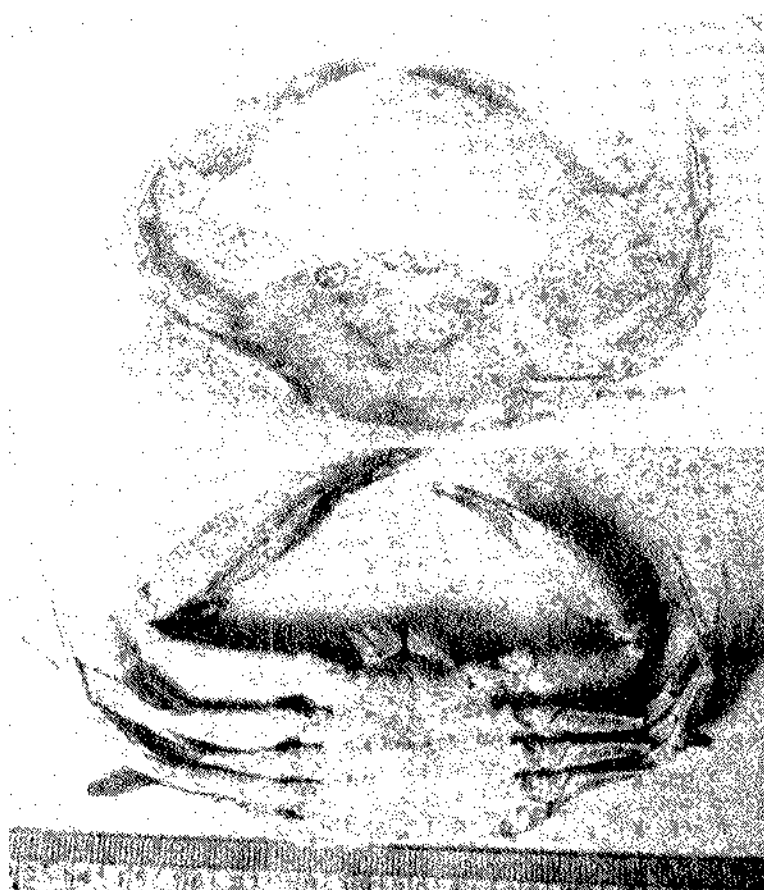


FIG. 1. *Portunus (Monomia) gladiator* collected from Sassoon Dock.

present at the bases of posterolateral spines and, in the case of last posterolateral spine, a definite single row was found to be extending to the base of the spine from the carapace. Three distinct anterolateral granulated patches on the carapace, squamiform patches on the undersurface of chelipeds reported as characteristic of the species by Stephenson and Campbell (1959), were present. The specific characteristics of first pleopod of the abdomen of male and third maxilliped in both the sexes agreed with earlier descriptions. This species has a very close resemblance with *P. (Monomia) argentatus* (white). But the following characters given by Sakai (1976) are helpful in identifying the species.

Portunus (Monomia) gladiator

1. Larger species
2. Chelipeds with crimson spots

Portunus (Monomia) argentatus

1. Smaller species
2. Not with crimson spots

- | | |
|---|--|
| 3. No spot on the dactylus of last ambulatory legs | 3. A spot on the dactylus of last ambulatory legs |
| 4. Penultimate segment of male abdomen not convex on the outer border | 4. Penultimate segment of male abdomen markedly convex on the outer border |

Distribution: Indopacific: recorded from China, Sumatra, New Guinea, Australia, Mergui Archipelago, India, Madagascar and Mauritius. This is its first record from Maharashtra region of the Indian coast.

2. *Charybdis (Charybdis) granulata* De Haan

(Fig. 2)

Material: One male with carapace length 40 mm and width 56 mm.

Remarks: The characters such as first anterolateral tooth being blunt and last being smaller than preceding tooth, hand of chelipeds with 5 spines on the upper margin, keeled nature of 2nd to 4th abdominal segments, and colour pattern of the thumb and finger of chelipeds resemble those of *C. (C.) natator* Fabricius as reported by Barnard (1950) from South African waters.

However, squamiform nature of the lower palm of cheliped, which is not longitudinally sulcate as shown in Fig. 2, b, and the rounded nature of the lateral borders of the penultimate segment of male abdomen are distinguishing features of *C. (C.) granulata* De Haan as reported by Sakai (1976), from Japanese waters. In the present case, only right cheliped was found to have squami-

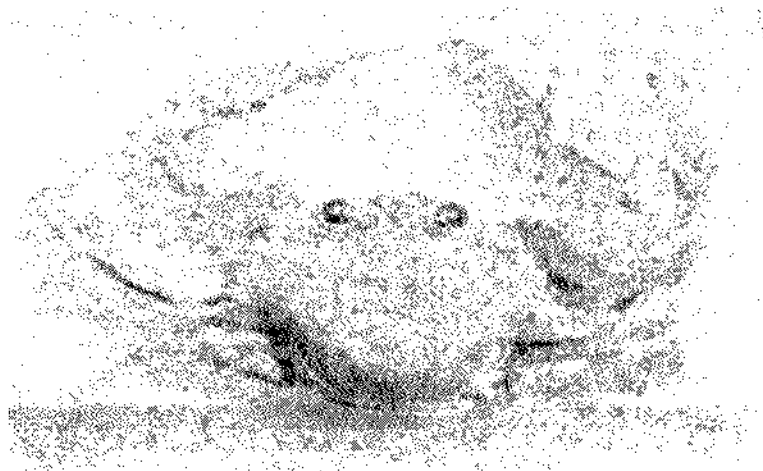


FIG. 2. *Charybdis (Charybdis) granulata*.

form ridges on the undersurface of the palm whereas the left cheliped was smaller in size with granules on the undersurface of the palm which may be an abnormality, quite common among portunid crabs.

Distribution: Indopacific-Japan-Hongkong to Durban in South Africa, as Sakai (1976) considers Barnard's *C (C) natator* to be probably *C (C) granulata*.

3. *Portunus (Xiphonectes) hastatoides* Fabricius

Material: 6 specimens collected from a Dol net catch sample from the inshore waters of Versova on 7.3.1984.

Remarks: The portunid crab *Portunus (Xiphonectes) hastatoides* Fabricius is a deep water species inhabiting a depth range of 30-100 m (Sakai, 1976). Though Alcock (1899) has recorded this species from Indian waters, Chhapgar (1959), studying the crabs of Bombay, did not come across the species in the Bombay coast.

The specimens were within a size range of 8-11 mm in carapace length and 18-25 mm in carapace width with an average weight of 29 g. Both males and females were present in the sample in almost equal proportion. The distinctive features of this species are as noted below:

1. Posterolateral border of the carapace curved and produced into a clawlike structure.
2. Granulated patches on the carapace with three rows in the posterior half.
3. The abdomen in male fused with 4th and 5th segments and narrowing very rapidly.
4. Anterolateral border of carapace with nine teeth.
5. Posterior border of propodus of natatory legs finely serrated and the last segment in juveniles with black patch in fresh condition.

The first two species are large-sized portunid crabs and were fished by private trawlers off Ratnagiri coast in depth ranging from 40 to 70 m. The landings of the species together amounted to only 50 kg/day, but these two species, because of their size, may develop in future a fishery potential in the areas off Maharashtra coast. *P. (X) hastatoides* may not have any commercial value because of its small size as well as its stray occurrence.

Prawns

1. *Metapenaeopsis hilarula* (De Man)

(Fig. 3)

Material: Three mature females were collected from Sassoon Dock, Bombay, on 2.10.1984. The specimens were found mixed among *M. stridulans* in the trawler catches from off Murud-Harnai coast of Maharashtra, in a depth range of 30-70 m. The specimens ranged 41 mm to 61 mm in size.

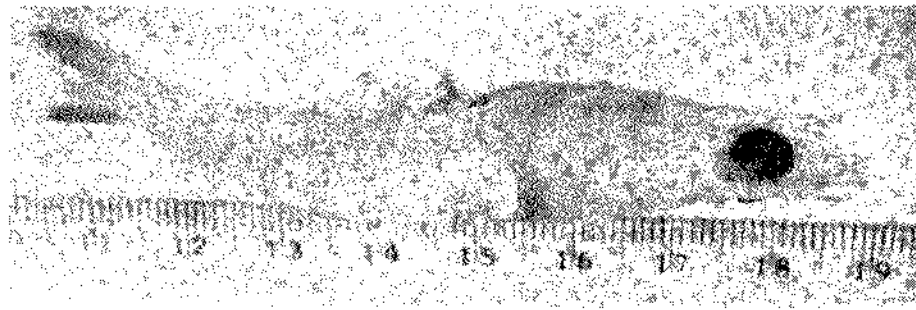


FIG. 3. *Metapenaeus hilarula*

Remarks: The salient characters of *M. hilarula* useful in the identification of the species are:

1. Stridulating organ absent in clear distinction to *M. stridulans*.
2. Telson falls short of tip of inner uropods.
3. Seminal vesicle of thelycum broad distally and not tubular.
4. Body less closely mottled than in other *Metapenaeopsis* sp.
5. Distal half of uropods distinctly marked with dark brownish red colour in fresh condition.

The species has been reported by Muthu (1971), Kathirvel et al (1976) and George (1979) from Indian waters.

This is the first record of the species from Bombay waters. Its occurrence in trawler catches has been noticed only in small numbers.

2. *Sicyonia lancifera* (Olivier)

(Fig. 4)

Material. One adult female measuring 58 mm in total length and 15 mm in carapace length was collected on 20.10.1984 from Sassoon Dock trawler catches, from among *Trachypenaeus curvirostris* and *Solenocera choprai*. The area of fishing was the same as reported for *M. hilarula* above.

Remarks: The distinctive characteristics of the species are:

1. Post rostral carina armed with 5 teeth.
2. Abdominal pleura of 1st and 2nd segments unispinose while 3rd, 4th and 5th with 3 spines.
3. Dull reddish brown in colour with darkish patches on the abdominal segments.

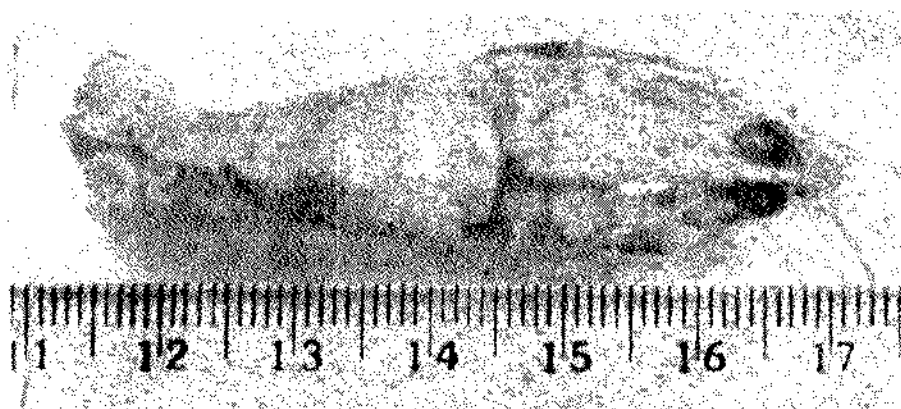


FIG. 4. *Sicyonia lancifera*.

4. A pair of bright rounded dark markings present on the first abdominal tergum adjoining the carapace. The cephalothoracic appendages banded with red and white patches alternatively in fresh condition.

Sicyonia lancifera (Olivier) has been reported earlier from Indian waters by Kurien (1953), George (1967) and Muthu (1971). This is the first record from the northwest coast of Maharashtra.

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