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Short Communication

New record of brachyuran crabs from the Chennai coast

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Abstract

Three species of brachyuran crabs from two families, *Jonas indica* (Chopra, 1935) belonging to the family Corystidae, and *Demania baccalipes* (Alcock, 1898) and *D. indiana* Deb, 1986 belonging to the family Xanthidae, are reported for the first time from the Chennai coast. The crabs were obtained from a depth of 30-60 m in the trawl bycatch. The morphological features, colour and distribution of these crabs are given.

Keywords: Brachyuran crabs, Corystidae, Xanthidae, Chennai coast

Introduction

Crabs constitute an important crustacean resource in trawl catches and they also form an important ecological entity in their habitat. Although the commercial fishery is supported by species belonging to the family Portunidae, there are numerous brachyuran crab species from other families which are also caught accidentally in trawl nets and landed as low value bycatch. A total of 991 species of brachyuran crabs have been recorded from the Indian waters. Recently, Manokaran *et al*. (2008) described *Jonas choprai*, for the first time from Indian waters (Parangipettai coast) and thus adding one more species to the 404 species belonging to 26 families and 152 genera from the Tamil Nadu coast reported by Kathirvel (2008). Krishnamoorthy (2007) reported 54 species (excluding those belonging to family Portunidae) from the Chennai coast. Here we report three new records of crabs from the Chennai coast, *viz. Jonas indica* (Chopra, 1935) belonging to family Corystidae, *Demania baccalipes* (Alcock, 1898) and *D. indiana* Deb, 1986 belonging to the family Xanthidae, with their salient morphological features and colour pattern.

Material and methods

Two specimens of *Jonas indica*, four specimens of *D. baccalipes* and one specimen of *D. indiana* were collected from the mechanised trawl landings at Chennai Fisheries Harbour during regular weekly sampling. The trawling off Chennai was in the depth range of 30-60 m. The crabs were identified following the descriptions and keys by Alcock (1898), Chhapgar (1957), Sakai (1976), Deb (1986) and Ng and Yang (1989). The size of crabs mentioned in the text is pertains to carapace width (CW) in mm.

Results and Discussion

Jonas indica (Chopra, 1935)

Family: Corystidae Dana, 1852; genus: *Jonas* Jacquinot and Lucas, 1853; species: *indica* (Chopra, 1935) (Fig. 1); material: 1 male (35 mm CW); 1 female (43 mm CW); depth of occurrence: 30-50 m.

Fig. 1. Dorsal view of *Jonas indica* (Chopra, 1935)

The carapace of the species is longitudinally elliptical and its dorsal surface is set with clusters of granules. The rostrum is bidentate and the rostral spine is produced beyond the tip of the preorbital spines. The lateral border of the carapace is with ten sharp teeth. The flagellum of antenna is longer than half the length of the carapace. The dactylus of the last pair of the ambulatory legs is flattened and paddle shaped. The body is pinkish white in colour.

The species is reported from the mouth of the Hooghly River, which is the type locality (Chopra, 1935). The present observation from Chennai is the first record other than the type locality. The species is reported from the Persian Gulf (Mac Gilchrist, 1905) and Iranian Gulf (Stephensen, 1945).

Demania baccalipes (Alcock, 1898)

Family: Xanthidae Mac Leay, 1838; subfamily: Xanthinae Mac Leay, 1838; genus: *Demania* Laurie, 1906; species: *baccalipes* (Alcock, 1898) (Fig. 2); material: 1 male (40 mm CW); 3 females (38-43 mm CW); depth of occurrence: 30-50 m.

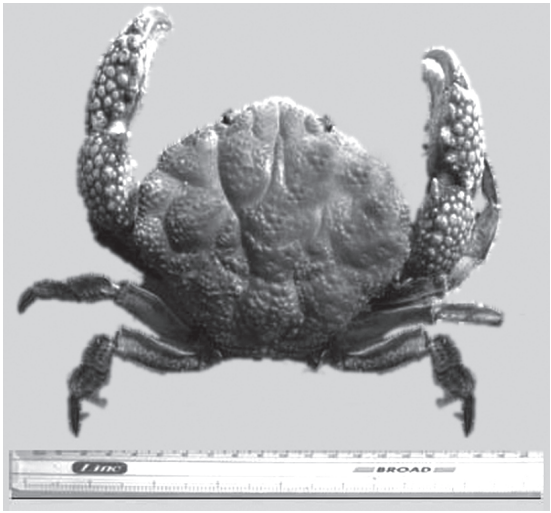

Fig. 2. Dorsal view of *Demania baccalipes* (Alcock, 1898)

The cardiac region of the carapace is slightly rugose and lacks any granules or distinct grooves. The inner angle of the wrist of the chelipeds is with blunt rounded tubercle. The dorsal margin of the merus of the ambulatory legs is lined with rounded granules. The body of the crab is reddish in colour with green patches.

The species is reported to occur off Mumbai (Chhapgar, 1957), Parangipettai (Sethuramalingam and Ajmalkhan, 1991) and Gulf of Mannar (Jeyabaskaran *et al*., 2000). The present record from Chennai coast indicates its distribution to the middle region of the Coromandel Coast of India. The species is reported from Sri Lanka (Alcock, 1898), Malacca Strait (Balss, 1938; Buitendijk, 1950; Garth and Ng, 1985), Singapore (Ng and Yang, 1989) and Japan (Sakai, 1976).

D. indiana Deb, 1986

Material: 1 male (CW 27 mm); depth of occurrence: 30-60 m.

The dorsal surface of the carapace is with numerous small granules. The inner angle of the wrist of the chelipeds is with a sharp acute tooth. The surface of the palm of chelipeds is covered with numerous evenly spaced large rounded granules. The dorsal margin of the merus of the ambulatory legs is crested. The crab is brick red in colour.

The crab is reported from Balasore Bay (Orissa coast) which is the type locality (Deb, 1986). The present observation from Chennai is the first record outside the type locality. The species has not been recorded from other regions in the Indo-Pacific.

This species was described as a new species in the name of *Demania indiana* by Deb (1986) (Fig.3). However, while listing the brachyuran crabs

Fig. 3. Dorsal view of *Demania indiana* Deb, 1986

of the world, Ng *et al*. (2008) have synonimised *D. indiana* with *Demania armadillus* (Herbst, 1790). *D. armadillus* has not been reported from the Indian waters.

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