



## NEW RECORD OF GENUS *CATOPTRUS* A. MILNE EDWARDS, 1870 FROM INDIAN COASTAL WATERS

S. Shrinivaasu, K. Venkataraman<sup>1</sup> & C. Venkatraman

Marine Biology Regional Centre, Zoological Survey of India, 130, Santhome high road, Chennai – 600028. Tamil Nadu, India

<sup>1</sup> Zoological Survey of India, M-Block, New Alipore, Kolkata-700053, West Bengal, India.

### ABSTRACT

A portunid crab *Catoptrus nitidus* A. Milne-Edwards, 1870, previously known from Srilanka (Alcock, 1900b) and Indo-west Pacific Ocean is reported for the first time in Indian coastal waters based on a specimen collected underneath dead coral rock in the intertidal zone of Manouli Island, Gulf of Mannar Biosphere Reserve. This is also the first record of the genus *Catoptrus* A. Milne Edwards, 1870 from India

**KEY WORDS:** Portunidae, *Catoptrus*, new record, dead coral, Gulf of Mannar.

### INTRODUCTION

Brachyuran crabs (Crustacea: Decapoda: Brachyura) are one of the highly diversified and dominant group among Crustaceans. There are around 6,793 valid species of Brachyura has been reported throughout the world (Peter, 2008). The genus *Catoptrus* was established by A. Milne-Edwards in 1870. There are six species of *Catoptrus* such as *C. nitidus* A. Milne-Edwards, 1870, *C. inaequalis* (Rathbun, 1906), *C. rathbunae* Serène, 1966, *C. quinquedentatus* Yang, Chen et Tang, 2006, and *C. undulatipes* Yang, Chen et Tang, 2006, *C. marigondonensis* Masatsune Takeda, 2010 described so far. A total of 991 species of brachyuran crabs have been recorded from the Indian waters (Pillai and Thirumilu, 2008). Of which 404 and 238 species have been reported in Tamil Nadu and Gulf of Mannar respectively (Kathirvel 2008, Gokul and Venkataraman, 2008). In Gulf of Mannar, the coral reef ecosystems of Manauli island itself harbours 32 species of brachyuran crabs (Jeyabaskaran and Ajmal Khan, 2007). Studies on Indian brachyuran has been carried out by several workers (Henderson 1893; Alcock 1895, 1896, 1898, 1899, 1900a, 1900b; Borradaile 1903; Gravelly 1927; Chopra 1930; Sankarankutty 1967; Premkumar and Daniel, 1971; Sethuramalingam and Ajmalkhan, 1991; Jayabaskaran *et al.*, 2000; Venkataraman *et al.*, 2004; Gokul, 2006).

### MATERIAL & METHODS

While conducting cryptofaunal surveys in Gulf of Mannar Marine Biosphere Reserve, Southern India, a bright orange coloured crab was seen under dead coral rock exposed in intertidal zone of Manouli Island (Lat 9°14'16.55"N; Long 79° 9'24.38"E), during 13<sup>th</sup> January 2013, 0930hrs. The specimen was carefully collected by hand picking and preserved it immediately in 4% formaldehyde. The taxonomic characters described by Alcock (1895) coincide with the collected specimen (male) and identified as *Catoptrus nitidus*. The identified specimen was deposited in National Zoological collections of Marine Biology Regional Centre, Zoological Survey of India, Chennai.

### RESULT

#### Systematic position

Phylum ARTHROPODA

Class MALACOSTRACA

Order DECAPODA Latreille, 1803

Suborder PLEOCYEMATA Burkenroad, 1963

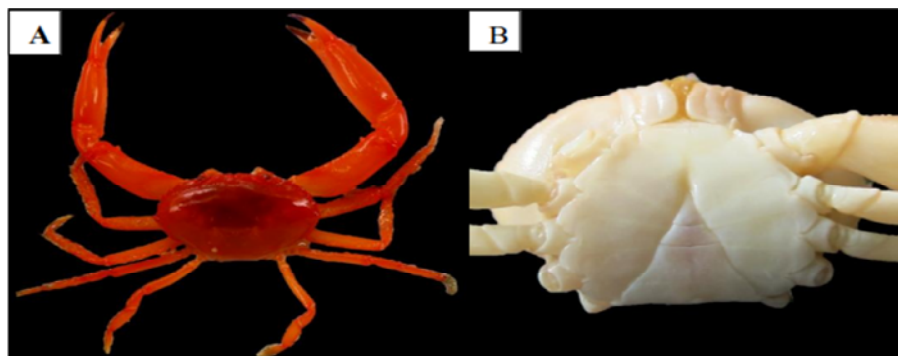
Infraorder BRACHYURA Linnaeus, 1758

Superfamily PORTUNOIDEA Rafinesque, 1815

Family PORTUNIDEA Rafinesque, 1815

Genus *Catoptrus* A. Milne-Edwards, 1870

*Catoptrus nitidus* A. Milne Edwards, 1870



*Catoptrus nitidus* A. Milne-Edwards, 1870. (ZSI/MBRC/Invertebrata/D-175, Cl: 15.6mm, Cb: 25.2mm) in Dorsal (A) and ventral (B) view.

### New record of genus *Catoptrus* A. Milne edwards

**Material examined:** 1 male, Carapace: Width: 25.2 mm; Length: 15.6 mm; Front orbital 5.4mm; Abdomen 8.8mm; Propodus length (larger arm) 24mm; Propodus width (larger arm): 7.4mm; Reg No. ZSI/ MBRC/ Invertebrata/ D-175.

**Observation:** Carapace is smooth (except granulations in anterolateral borders), convex and 1.6 times as broad as long. Front bilobed, faintly notched and grooved in the middle line. Anterolateral border of carapace with six unequal teeth, the sixth longest of all forming a procurved spine. Chelipeds slightly heterochelous, smooth, unarmed, much longer and more massive than legs. Smaller cheliped fingers are longer slightly hooked and finely toothed when compared too swollen cheliped. Dactylus of the ambulatory legs are compressed and slender. Fifth pair of legs not modified for swimming. Colour is orange.

**Locality:** Shenbaga Muruvai, Manouli Island, Gulf of Mannar, (Lat 9°14'15.84"N, Long 79° 9'23.30"E).

**Habitat:** Coral reef, sub littoral, low Intertidal, dead coral and underneath rock, to 140m depth. (Davie, 2002).

**Distribution range:** Sri Lanka (Alcock, 1900b), Indo-west Pacific Oceans (Madagascar to Japan and Hawaii)(Davie, 2002).

**Remarks:** New record to India.

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