

ORIGINAL RESEARCH ARTICLE

First Record of Brachyuran Crab from Pondicherry Coast, South East Coast of India

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ABSTRACT

Biodiversity habitually refers to the variety of life on earth. The ghost crabs the family Ocypodidae, to the ghost crabs of the genus *Ocypode*, species of *Ocypode macrocera* H. Milne-Edwards, 1852 have been recorded for the first time from Pondicherry coast. In this species data can be recovered analyzed to decide the number of dissimilar species in a community. Mostly, over fishing and other human activities, as well as natural and climate changes affect the marine crabs biodiversity, while the need for conservation strategies.

Key words: Family Ocypodidae, genus *Ocypode*, species *Ocypode macrocera*, reported.

INTRODUCTION

The sand crab, it is called ghost crab belongs in the family Ocypodidae, subfamily Ocypodinae Dana, 1851 and Genus *Ocypode* Weber, 1795, which also includes in fiddler crabs. It is supporting an estimated total of 26 worldwide documented species. ^[1] has been recorded from Indo-Pacific region, ^[2] has been reported *Ocypode quadrata* from Block Island. In Indian coast, *Ocypode ceratophthalma* Pallas, 1772, *Ocypode cordimanus* Latreille, 1818, *Ocypode mortoni* George, 1982, *Ocypode sinensis* Dai, Song & Yang, 1985, *Ocypode stimpsoni* Ortmann, 1897. Even though, the *Ocypoda macrocera* was not recorded from the state of Pondicherry coast. Hence in the present study were carried out the biodiversity of crabs from Pondicherry mangrove areas, there are monitoring regularly at the period the crabs were collected manually in the Pondicherry mangrove region (11° 52' 56 N"; 11° 59' 53" E) during low tide. After collection of the specimens to reach the laboratory and the identified, fixed in 10% formalin and preserved in 70% alcohol. A total of 27 specimens were collected during February, 2008. Its where including 13 males and 14 females, five of which was ovigerous. Although the identification of the existing resources, looking for new resources for these coastal environment.

RESULTS AND DISCUSSION

***Ocypode macrocera* H. Milne-Edwards, 1852**

Taxonomy hierarchy

Phylum : Arthropoda
Class : Crustacea
Sub class : Malacostraca
Series : Eumalacostraca
Super Order : Eucarida
Order : Decapoda
Infraorder : Brachyura
Family : Ocypodidae
Genus: *Ocypode*
Species: *O. macrocera*

Common Name: Ghost crab or Red Ghost Crab

Synonyms: *Ocypode macrocera* H. Milne-Edwards, 1834, *Ocypode portonovoensis* Kumar & Tiwari, 1964, *Ocypode mortoni* George, 1982.

Plate 1: Dorsal view of *Ocypode macrocera* H. Milne-Edwards, 1852



Plate 2: Ventral view of *Ocypode macrocera* H. Milne-Edwards, 1852



Description: Carapace slightly broader, square, surface evenly covered with bubble like granules, its eyestalk very long, horns attached to the end of the black eyes, which is see directly overhead, gastric and cardiac regions with a separated H-shaped grooves, front rounded and narrow chelipeds, markedly unequal, left cheliped bigger than right sides, its chelipeds each side well developed spines, the spines contains small hair, strongly asymmetrical in both sexes, finger of smaller chelipeds broad, tips and blunt, broadly compressed of immovable finger, male abdomen elongate and female in ovate, rounded abdominal flap, rounded telson, subquadrate, segment to be sinuated.

Colour: The exoskeleton whitish and orange in colour, chelipeds in reddish color, smaller chelipeds pale in colour, which is color to match the sand.

Size: Carapace length of the male 27.1 mm, breadth 29.3 mm; of the female, length 28.5 mm, breadth 31.7 mm.

Habitat: Coastal, estuarine, mid and high water mark, sandy substratum, mangrove regions. Food and feeding habits are both predators and scavengers, mostly filter-feeding, it is largely nocturnal in nature and it is rare to catch a glimpse of them during the day time and also they emerge mostly at night time. They consider of feed mostly live preys, snails, clams, turtle hatchlings, lizards and small crab insects and also the playing role in the energy transfer from organic detritus.

Remarks: It is commonly burrow a deep hole to keep them cool during the hottest part of the day and the remaining also in burrows during daytime and when winter months provide sufficient protection from the climatic conditions.

Distribution: West Bengal, Sundarbans, Tamil Nadu, Palk Bay, Mandapam, Orissa and Chilika Lake.

In the present study, the ocypodidae family crabs are found in shore regions^[3] and the maximum live in intertidal zones for feeding and digging burrows in the inshore muddy and sandy substratum. Their habitats are closely related to mangrove regions^[4, 5]. In this study indicate that the ocypode species were abundance and rarely available in mangrove regions, it's due to the study area of Thengaithittu, Veerampattinam, Murungapakkam and Ariyankuppam also. Since, the mangrove provides the shelter and nursering ground, plant litter is a major food source of many ocypodidae family crabs. The ocypode crabs are affected by human activities due to the reclamation and pollution. And also the trampling by careless visitors and due to collection by hobbyists also has an impact on local populations. In the present study consider about the survival of different species in these coastal regions, it's very much needed for conservation and managements.

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