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First record of *Eurypanopeus orientalis* crab from Indian Coast

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Resumo

Primeiro registro do caranguejo *Eurypanopeus orientalis* em Parangipettai, costa de Índia. O presente estudo relata a primeira ocorrência de um macho do caranguejo *Eurypanopeus orientalis* coletado em 07/03/2009 na costa de Parangipettai (Baía de Bengala), região da costa leste do sul da Índia. *Eurypanopeus orientalis* foi relatado pela primeira vez em 1939 por Sakai na baía de Sagami na costa do Japão. Este é o primeiro registro para a costa da Índia que expande a sua distribuição conhecida.

Unitermos: biodiversidade de caranguejo, biogeografia, caranguejos ornamentais, Baia de Sagami

Abstract

The present study reports the first occurrence of a male crab *Eurypanopeus orientalis* caught on 7th of March 2009 at Parangipettai coast (Bay of Bengal) which is an East coastal region of Southern India. *Eurypanopeus orientalis* was first reported in 1939 by Sakai in the Sagami bay coast of Japan. This is the first record in Indian Coast which expands in its known range.

Key words: biogeography, crab biodiversity, ornamental crabs, Sagami bay

Introduction

A new record often ensures the distribution of a species in a known range and helps us to understand the history of its population dispersal. It is necessary to know the distribution of a species when we want to preserve it.

In 1939 Sakai first reported the crab *Eurypanopeus orientalis* at Sagami bay of Japan at the depth of 85-120m deep. This is an ornamental crab and this crab diversity is also found along the south west coast of Jogashima, Sagami bay, To-Sa bay of Japan which indicates that this crab is a unique Indo-pacific species. (Sakai, 1939)

Type locality: Misaki, Sagami Bay, Japan.

Range: Japan - Misaki (Sakai, 1939), Sagami Bay (Sakai, 1965), Sagami Bay, Kii Minabe, and Tosa Bay (Sakai, 1976); Taiwan; Philippines - Legaspi Light, east coast of Luzon, and Jolo (Garth and Kim, 1983).

Classification

Kingdom: Animalia

Phylum: Arthropoda

Class: Crustacea

Order: Decapoda

Suborder: Pleocyemata

Infraorder: Heterotremata

Superfamily: Xanthoidea

Family: Xanthidae

Subfamily: Xanthinae

Genus: *Eurypanopeus*

Species: *Eurypanopeus orientalis*

Eurypanopeus orientalis crab belongs to the family Xanthidae (Alcock.1898).The family is divided into two main sections (i) Hyperolissa (ii) Hyperomerista.

Eurypanopeus orientalis belongs to Hyperolissa which constitutes 21 genera namely (i) *Halimede de Haan*, (ii) *Carpilius leach*, (iii) *Liagore de Haan*, (iv) *Atergatis de Haan,* (v) *Paraterigatus Sakai*, (vi) *Eurypanopeus. A. Milne – Edwards*, (vii) *Cycloxanthopus rathbun*, (viii) *Hypocolpus rathbun*, (ix) *Carpoporus stimpson*, (x) *Medaeus dana,* (xi) *Xantho leach*, (xii) Leptodius A. Milne-Edwards, (xiii) *Xanthias rathbun*, (xiv) Para *Xanthias odhner*, (xv) *Liomera dana*, (xvi) *Neoliomera odhner*, (xvii) Actaea de Haan (xviii) *Calvactaea ward*, (xix) Etisus H.Milne-Edwards, (xx) Pilodius A.Milne – Edward, (xii) *Chlorodiella rathbun*.

The order Hyperomerista constitutes of 14 genera.

Study area

The present study area of our collection is Parangipettai coast (Lat.11°29'N: Long.76°46'E) in Tamil Nadu a South east coast of India (Figure1). There

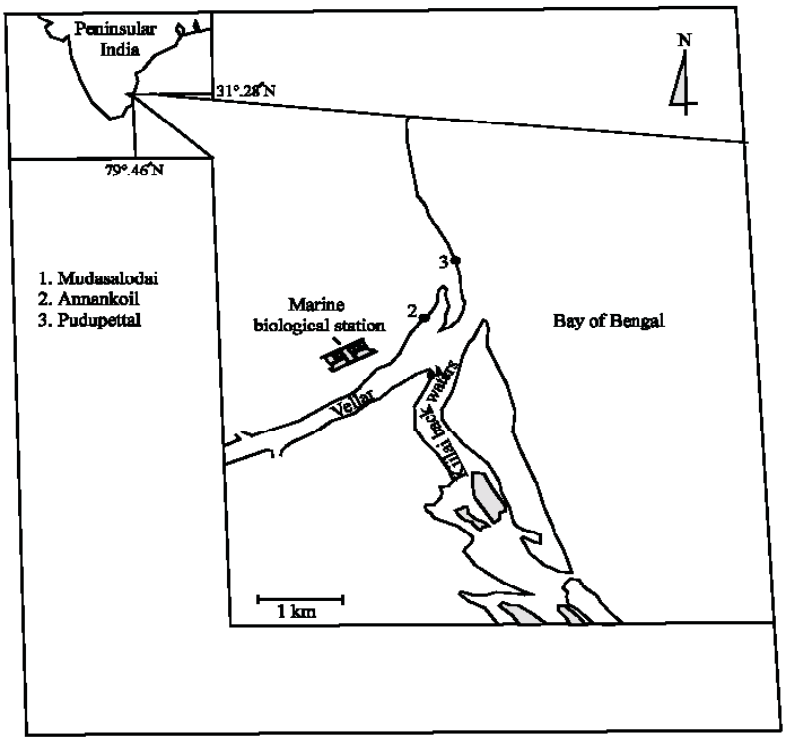

FIGURE 1: Map showing the study area.

are nearly five villages involved in fishing activities and bringing the catches to this landing centre every day. As this landing centre consists of 135 trawlers, every day around 30 trawlers are engaged in their fishing activities mainly during night and bringing their catches to the landing centre in the next day morning. The Net used here is the Trawl net. The *E. orientalis* was caught at the season of March-2009 and they are caught at the depth of 90 - 100m deep.

The reason for why this crab to be caught in our coastal area may be due to the changes in the drifting of ocean currents where by the eggs and larvae of the crabs may be drifted from the native land (Japan) to our coastal area. Nearly seven crabs have been caught during the entire March month and its occurrence was not in other months

Morphology

The crab caught was identified to be a male crab using the ventral abdominal elevated cone shaped sutures. Antero-lateral lobes well defined, more-or-less prominent, and all clearly and broadly separated; front markedly produced beyond the general carapace outline, a distinct median incision separating two lobes with their margins lateral sloping; 2M anteriorly divided (Davie, 1997).

The crab is reddish orange in colour and the male crab which is caught measures about 7cm and 4.6cm in width and length (Figure 2 and 3).

FIGURE 2: Dorsal view of *Eurypanopeus orien*talis crab.

FIGURE 3: Ventral view of *Eurypanopeus orientalis* crab.

Future prospective

The sample was ice preserved in our institute Centre of Advanced Study in Marine Biology for further studies. Our future prospective is to analyse why the crab abundance is only during the march in our coast and not in other months and also analyzing the biochemical parameters of this crab tissue.

Acknowledgment

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