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Record of abnormal *Scylla olivacea* from the southeast coast of Cuddalore, Tamil Nadu

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Abstract

The Present study reveals the record of abnormality in *Scylla olivacea* from estuarine (Vellar estuary) of Parangipettai coast, southeast coast of India. The animal has additional teeth on a chelate leg. On chelate leg, additional teeth growth is quite interesting phenomena for further study. It has an abnormality in a chelate leg, right side extra tooth and abnormal size were observed. The specimens have Average length of 16 cm, while breadth 22 cm and Average weight of 400 gm.

Keywords: abnormality, additional teeth, *scylla olivacea*, parangipettai

1. Introduction

Scylla olivacea is commonly known as orange mud crab and is found along the east and southeast coasts of Peninsular India. *Scylla olivacea's* known geographical distribution includes coasts of Pakistan, Thailand, Singapore, Malaysia, Vietnam, southern China, Taiwan, Philippines and Western Australia. The Crustaceans are one of the most varied groups of aquatic animals, occupying a wide variety of habitats from the shore to the deep ocean and the tropics to Arctic waters, and extending into fresh water and in some cases on to land for part of their life history. *S. olivacea* as "Frontal lobe spines low (mean height approximately 0.03 times frontal width measured between medial orbital sutures), rounded with shallow interspaces. Antero — lateral carapace spines broad, with outer margin convex ^[1]. Fish and crustacean abundance in mangroves varied among sites, indicating that estuaries differ in their nursery-ground value ^[2]. Mud crabs of the genus *Scylla* (de Haan, 1833) ^[1] are one of the most common. Mangroves serve either as nurseries for juveniles or as feeding areas for transient fish and crustaceans ^[3]. In India, there are many brachyuran crab species caught accidentally in trawl nets and landed as catch ^[5]. Brachyuran crabs (Crustacea: Decapoda: Brachyura) are among the most species-rich animal groups which exhibit an outstanding diversity in the numbers of extant and extinct taxa ^[4]. The cause of this high richness is twofold. The basic cause lies in the tolerance of the biota to sand scour and inundation. Sand imposes an abiotic stress on the biota akin to temperature or desiccator stress ^[6]. The crustaceans also participate in the cycling of nutrients, controlling the remineralization of detritus in the forest ^[7]. Our main aim was to prepare a record for abnormal *Scylla olivacea* and observed its differential characteristic.

2. Material and Methodology

Visually Deformed *Scylla olivacea* were obtained from Parangipettai (Lat 11° 29' N; Long 79° 47' E) landing centre (Figure 1). During the study, we observed Three *Scylla Olivacea* species. Specimens were collected by hand picking method. The crabs were kept in the collection bag and preserved in 4% formalin.

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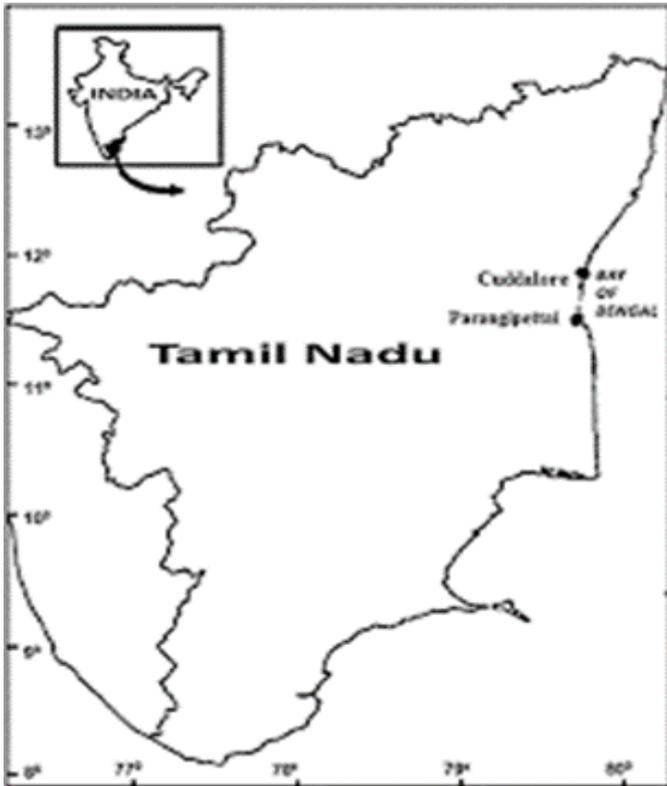


Fig 1: Study area



Fig 2(A): Length of crab



Fig 2(B): Additional Teeth

Taxonomy

Phylum : Arthropoda
 Subphylum : Crustacea
 Superclass : Multicrustacea
 Class : Malacostraca
 Subclass : Eumalacostraca
 Order : Decapoda
 Family : Portunidae
 Genus : *Scylla*
 Species : *olivacea*

Mud crabs of the genus *Scylla* are one of the common inhabitants of mangrove vegetated estuarine regions throughout the Indo-Pacific Region, These crabs are highly valued in the international market because of their large size and meat quality.

3. Results and Discussion

During Study, we observed three samples of *Scylla olivacea*. The *Scylla olivacea* species collected during the fishing catch. The procured specimens were having length of 10 cms and weight recorded was 400 gms. The chelate leg has additional teeth observed, it's a unique aspect. Here Fig 2(A) is show length of *Scylla olivacea* while 2(B) is show an additional teeth growth.

4. Conclusion

This abnormality may be caused due to pollutions of various sources in this coastal water or caused by the mutation. Additional teeth growth deformities among these type crab species would suggest environmental deterioration and hence signal the need for prompt remedial action.

5. References

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