

Article

Redescription and new distributional records of *Matuta planipes* (Fabricius, 1798) (Crustacea; Decapoda; Matutidae) from Chennai Coast, Tamil Nadu

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Abstract

Matuta planipes is reported for the first occurrence from Chennai coast, Tamil Nadu. Four female and two male specimens was caught in trawl net near Kasimedu fish landing center, on September 2013. The morphological characters of *Matuta planipes*, is having on surface regions of male chela a single spine, frontal lobes and carapace covered with reticulated loops as compared with bispinose chela, rounded lobes and minutely spotted carapace of the latter, these characters mostly differs from *Matuta victor*. The specimen has been compared with the earlier reports and other similar species.

Keywords *Matuta planipes*; trawl net; Kasimedu; Chennai coast.

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1 Introduction

Crabs constitute an important crustacean resource in trawl catches and they also from an important ecological entity in their habitat. Although the commercial fishery 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 by catch. Brachyuran crabs comprise about 700 genera and 5000 to 10,000 species worldwide (Ng, 1998; Ng et al., 2008). Crabs of the family Calappidae and Matutidae known as box crabs, shamefaced or moon crabs are one of the most fascinating crabs in the tropical and subtropical seas of the world ocean (Galil and Clark, 1995). The moon crabs belonging to family Calappidae, it was containing 16 genera, of which 7 in fossils. The Callapidae crabs have been studied from Indian waters was represented by (Dana, 1852). In India 705 brachyuran crab species, 28 families, 270 genera have been reported (Venkataraman and Wafar, 2005). A total of 991 species of brachyuran crabs have been recorded from the Indian waters (Lakshmi Pillai and Thirumullu, 2008). Tamil Nadu coast one of the states in India has 404

species of crabs belonging to 26 families and 152 genera were recorded by Kathirvel (2008). Though relatively more taxonomic works on the brachyuran crabs have been done on the fauna of Indian regions, our information on the fauna of Indian sub-continent is very scanty. Among the species reported from India many need detailed taxonomic revision and redescription. One such species is *Matuta planipes* first described by Fabricius 1798. In the present study, this species is redescribed and newly recorded from the Kasimedu, Chennai coast, Tamil Nadu.

2 Materials and Methods

During the survey of brachyuran fauna of *Matuta planipes* (Fabricius, 1798) has four adult female and two male species were collected in Chennai coast using trawl net. Trawl net hauled from depth of 40 m to 60 m. The specimen was preserved in 10% formalin and its taxonomy was confirmed to species level using various literatures (Sethuramalingam and Ajmalkhan, 1991; Jayabaskaran et al., 2000). The specimen was deposited in the Department of Zoology, Sir Theagaraya College, Chennai, Tamil Nadu, India.

3 Results

This species is available in various parts of the world. In earlier periods Alcock, 1896 was recorded in Indian water, after a long period recorded in this species at Kasimedu, Bay of Bengal, Chennai Coast. So, this species consider as the redescription and new distributional records of Chennai coast (Fig .1 a & b). The systematic position and diagnostic features, coloration and distribution are as follows:

Systematic Position

Phylum -	Arthropoda
Class	- Crustacea
Order	- Decapoda
Sub order	- Pleocymata
Infra order	- heterotremata
Super family	- Leucosioidea
Family	- Matutidae
Genus	- <i>Matuta</i>
Species -	<i>planipes</i>



(a). *Matuta planipes* – dorsal view



(b). *Matuta planipes*- ventral view

Fig. 1 a & b *Matuta planipes*.

Diagnostic features

Surface of carapace minutely granulate, small tubercles clustering around six dorsal tubercles, largest cluster surrounding mesogastric tubercle, front with straight horizontal lobes laterally and slightly emarginated rostrum medially. Ischium of third maxilliped tuberculate. Anterolateral margins nearly uniformly crenulate, tubercles somewhat larger posteriorly. Lateral spine 0.2 carapace width. Postero lateral margin oblique, with granulate carina extending to base of lateral spine. Carpus of cheliped with two obtuse tubercles on outer surface, its upper margin carinate, granulate, internal anterior angle produced. Upper margin of palm cut in to three teeth, proximal tooth tuberculate. Upper external surface with two rows of granulate low tubercles, proximal most in lower row largest. Mid palm, in male, rounded ridges extending to tip of lower finger, proximally with granulate tubercle followed by a prominent, acuminate spine. Mid palm, in female, five tubercles, second tubercle spine like. At lower proximal angle of palm a small granulate tubercle. Lower margins with row of tubercles terminating at base of dactylus. In female, an additional row of obtuse granules parallel to lower margin. Distinctly milled ridge on outer surface of dactylus in male, absent in female. Plastron finely granular.

Colouration

Carapace with reticulating brown lines forming small rings anteriorly and larger, elongate loops posteriorly.

Type Locality

Bay of Bengal (Chennai Coast).

Distribution

Indian Ocean (Fabricius, 1798, Galil and Clark, 1995); Persian Gulf (Stephensen, 1945); Strait of Hormuz

(Stephensen, 1945); Pakistan- Karachi (Alocock, 1896, Tirmizi and Kazmi, 1991); India – Sundarbans and Gangetic Delta, Mahanadhi Delta, Madras and Bombay (Alocock, 1896); Srilanka (Galil and Clark, 1995); Burma (Alocock, 1896); and near Tavoy (Chopra and Das, 1937); Distribution map for *Matuta planipes* was given in Fig. 2.

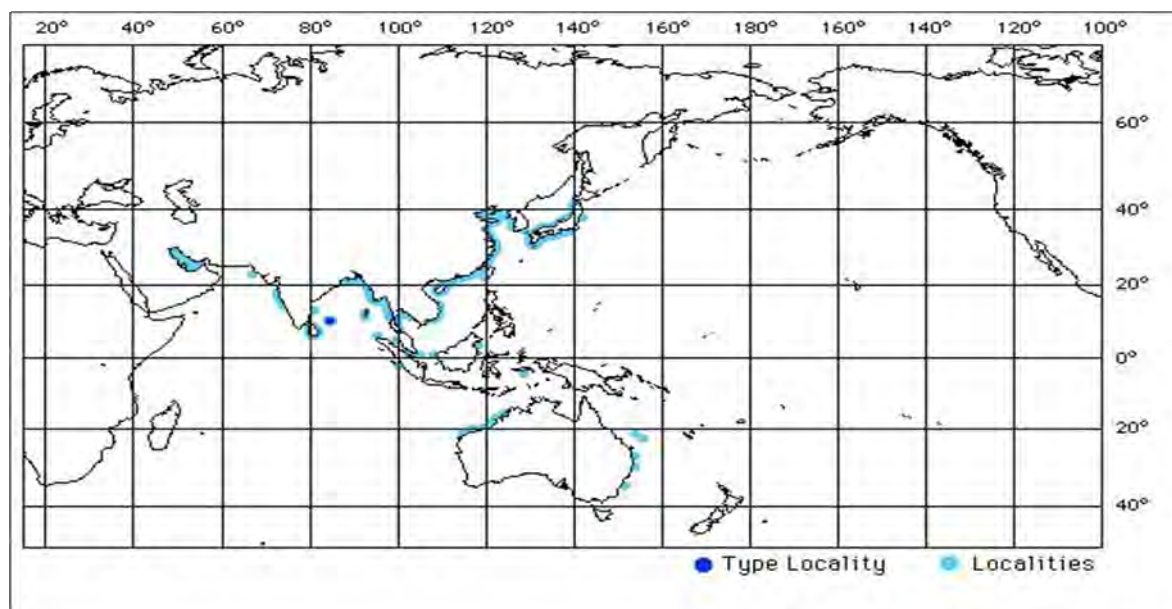


Fig. 2 Distribution map for *Matuta planipes* (courtesy: Ocean Biogeographic Information System).

4 Discussion

The present record matches well with the earlier descriptions and illustrations of *Matuta planipes* was reported by Alocock (1896) from Indian Ocean. Dana (1852) was reported 16 genera of Calappidae family from Indian waters. Sankarankutty (1965) were reported the species from Andaman and Nicobar islands. Ng et al (2008) has been reported the species from Singapore coastal waters. Meher Fatima (2003) has recorded two species of Matutidae family from Karachi in Pakistan. Recently Varadharajan et al (2012) have reported the species from Pondicherry coast, South east coast of India. Although, *Matuta planipes* and *Matuta victor* are very similar morphologically certain distinctive characters have been described in having a single spine on external surface of male chela, straight lateral frontal lobes (Galil and Mendelson, 2013). Hence, this species report is an extended distribution and a new record from the Bay of Bengal at Indian water.

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