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First record of *Munidopsis scobina* Alcock, 1894, (Family: Munidopsidae) (Crustaea: Decapoda: Galatheidae), off Thoothukudi coast of gulf of Mannar

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Abstract

One species of the squat lobster genus *Munidopsis* Whiteaves, 1874, *Munidopsis scobina* Alcock, 1894 was recorded from deep-water off Thoothukudi waters. *Munidopsis scobina* is first recorded, off Thoothukudi coast of Gulf of Mannar. The present records show its extended distribution from Gulf of Mannar to South East coast of Arabia, Moluccas off West cost of Halmahera and further to Indonesia.

Keywords: *Munidopsis scobina*; Munidopsidae; Thoothukudi coast; Thoothukudi coast; Gulf of Mannar

1. Introduction

Ongoing studies on deep-sea decapods and marine invertebrates from off Thoothukudi coast have revealed the presence of several new record and species from the Southeast coast of India [13-30]. In present studies, one deep-sea squat lobster has reported for the first time, the occurrence of *Munidopsis scobina* (Alcock, 1894), in Thoothukudi coast of Gulf of Mannar, India. Opportunity is taken herein to elaborate on the taxonomy of this species. A total of 1513 specimens were obtained of which 95 were *Chirostylidae*, two *Galatheidae*, 285 *Munidopsidae*, and 1131 *Munididae*⁴. Of the species collected, 2.86% were only known from Gulf of Mannar, South-east-coast of Indian waters³⁰.

Taxonomical studies on the Chirostylid and Galatheid lobsters of India are dealt with [1-3, 7, 8, 11, 12, 27-30]. While examining the crustacean catches landed by larger trawlers, which operated in deeper waters off Thoothukudi, one specimen of squat lobster was obtained. On closer examination, it was identified as *Munidopsis scobina* and it was new to Thoothukudi waters. However, practically no work has been done on the deep sea forms along the east coast and more especially along the Tamil Nadu coast of Gulf of Mannar, Southeast coast of India.

Family	Genus	Superfamily
Munidopsidae	<i>Munidopsis</i>	Galatheaidea Samouelle, 1819
		<i>Munidopsis scobina</i> Alcock, 1894
		Alcock, 1894: 300
		Alcock and Anderson, 1894:167
		Alcock and Anderson, 1895: pl. 13, fig 1
		Alcock, 1901: 254
		Lloyd, 1907: 2
		Tirmizi, 1966: 222, fig 35
		Baba, 1988, 162, fig. 64
		Baba, 2005: 294
Macpherson, 2007: 97		

2. Materials and Methods

2.1. Materials examined

One specimen of total length 51 mm; carapace length 14 mm; weighing about 5 gm was collected from Thoothukudi beach between 08° 35' 22.5" N lat. 78° 27' 40.9" E long and 08° 31' 91.2"N lat. 78° 25' 32.7"E long at a depth of 305-310 m (Fig 1), Thoothukudi district, Tamil Nadu, India (Figs 2, 3, 4, 5, and 6).

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The reference materials are deposited in the museum collections of the Department of New Drug Discovery (Marine Invertebrate Division), RARBIO Energies Private Limited, Chennai, Tamil Nadu, India.



Fig 1: Location of Thoothukudi coast of Gulf of Mannar, Southeast coast of India



Fig 2: *Munidopsis scobina* Alcock, 1894



Fig 3: *Munidopsis scobina* Alcock, 1894 Carapace



Fig 4: *Munidopsis scobina* Alcock, 1894 Anterior part of antennal segment

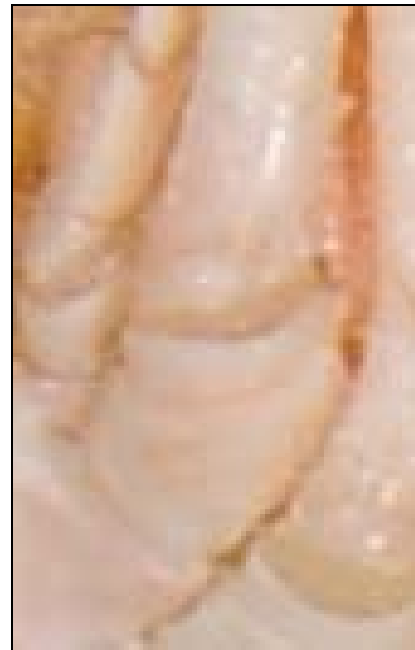


Fig 5: *Munidopsis scobina* Alcock, 1894 – Basal Segment



Fig 6: *Munidopsis scobina* Alcock, 1894 Upper part of Sternum

2.2. Distribution

The present record of this species is collected from the incidental by-catch in the trawl catch off Thoothukudi coast of Gulf of Mannar from India. *Munidopsis scobina* Alcock, 1894 is widely distributed in the Indo-Pacific from Andaman Sea, Bay of Bengal, the Moluccas off the west coast of Halmahera and the South Arabian coast, Between 353 and 1046 m, Indonesia, Banda Sea, between 528-582 m, Kei Islands, 443-468 m. The present material was collected, off Thoothukudi coast of Gulf of Mannar, between 08° 35' 22.5"

N lat. 78° 27' 40.9" E long and 08° 31' 91.2"N lat. 78° 25' 32.7"E long at a depth of 305-310 m.

2.3. Diagnostics

Carapace, excluding rostrum, slightly longer than wide (Figure 3). Body and appendages almost devoid of hairs, but with the spinature sharp and distinct. No epipodites are present on any of the appendages behind the external maxillipeds. The greatest breadth of the carapace is about six-sevenths of its length (Fig 3). The rostrum, which is styliform and slightly recurved at tip, is not quite half the length of the carapace; the frontal border is very slightly oblique and, and except for one or two small spinelets above the base of the antennae, is smooth; the lateral borders, which are convergent anteriorly, are from six spined (Fig 3); the posterior border is raised and is surmounted by a series of about eleven spines; the gastric region bears a pair of spines at the base of the rostrum and a row of spines along the middle line, and this row is continued along the cardiac region, some of the spines there being bifid or trifid; on the branchial regions are numerous sharp tubercles and spines.

2.4. Description

The eyestalks are very short, free and freely movable, and not prolonged beyond the the ovoid eyes. The spines on the joints of the antennal peduncles are remarkably distinct and flagellum is about twice as long as the body. The ischiopodite of the external maxillipeds is evenly toothed along the inner edge and has a terminal spine on the lower edge, and the meropodite has two spines near the proximal end on the lower edge. The second and third abdominal segments each have two or three spines on the anterior and posterior ridges. The thoracic legs are granular, or squamous, or spinate. The abdominal legs of all but the first two pairs are rudimentary in the male; those of the first pair are absent in the female.

2.5. Remarks

The specimen examined agrees quite well with the original description and figures provided ^[2, 5, 6, 9, 10] (Fig 2). The second and third abdominal segments each have two or three spines on the anterior and posterior ridges.

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