

**NEW RECORDS OF FOUR SPECIES OF
MYSIDS (CRUSTACEA) FROM COASTAL WATERS
OF THE NORTHERN ARABIAN SEA**

Q. B. Kazmi, N. M. Tirmizi and N. Ghani

ABSTRACT. - Four species of mysids, *Gastrosaccus muticus*, *Acanthomysis indica*, *A. pelagica* and *Siriella* sp., hitherto unknown from the northern Arabian Sea, are recorded for the first time from the region. They are described briefly and illustrated.

INTRODUCTION

While preparing an illustrated key for the malacostracans of the northern Arabian Sea, we obtained four species of mysids: *Gastrosaccus muticus*, *Acanthomysis indica*, *A. pelagica* and *Siriella* sp., which were not previously recorded from this region. These species were picked from three plankton collections of the Manora Channel (24°48'N, 66°57'E) from 19 November to 25 November 1990; the net was hauled horizontally from a depth of 3 m to the surface with average water temperature 25.5°C and average pH 7. *G. muticus* was abundant and attained a large size. The species under study, though agreeing with the existing descriptions in most respects show some differences which are given in the following very brief account of the specimens.

The specimens are housed in the Marine Reference Collection Centre. The measurements are given for the total length taken from the front to the posterior margin of the telson.

TAXONOMY

FAMILY MYSIDAE
GASTROSACCINAE

***Gastrosaccus muticus* W. M. Tattersall, 1915**
(Fig. IA-G)

Gastrosaccus muticus Tattersall, 1915: 152, Fig. 1; Pillai, 1957: 4, Fig. 11, 1-5; 1961: 24, Pl. III, Figs. C-H; 1965: 1698, Fig. 28.

Q. B. Kazmi, N. M. Tirmizi and N. Ghani - Marine Reference Collection Centre, Karachi University, Karachi 75270, Pakistan.

Material. - 50 specimens, size: 4-8mm.

Distribution. - India (Orissa, Gangetic Delta, Kerala) and now from Karachi, Pakistan.

Remarks. - The rostrum (Fig. 1A) is only slightly produced. The hind margin (Fig. 1B) of the carapace has 9-11 filaments, while in the Indian specimens, only nine filaments are mentioned (Pillai, 1961, 1965).

In males, the third pleopod (Fig. 1C) is characteristic, the ultimate segment of the exopod (Fig. 1C') has two spines and a finger-like process arising from the middle of the segment, laterally, the tip bears two unequal barbed spines, as also described by Pillai (1961).

The telson (Fig. 1F) is deeply notched, the lateral borders are armed with 10-12 spines, which may also vary on the two sides. The endopod of the uropod (Fig. 1E) bears four spines.

***Acanthomysis indica* (W. M. Tattersall, 1922)**
(Fig. 2A-D)

Neomysis indica Tattersall, 1922: 483, Fig. 20; Pillai, 1957: 14 Fig. 7.

Acanthomysis indica - Pillai, 1961: 26 (in key); Pillai, 1965: 1722, Fig. 86

Material. - 20 specimens, size: 4-7 mm.

Distribution. - India (Andaman Islands, Gulf of Mannar, Mormugoa Bay, Travancore) and now from Pakistan (Karachi).

Remarks. - The specimens agree with the Indian specimens (Pillai, 1965) except in having fewer spines below the statocyst and more blunt spines at the apex of the telson.

The rostrum is blunt and only slightly produced (Fig. 2A). The telson (Fig. 2B, C) has the same arrangement of spines as described by Pillai (1965: 1722) in having three lateral spines proximally and alternating long and short spines distally. The spines at the apex of the telson are quickly distinguished by being slightly bulbous and in the majority of specimens there are four pairs of apical spines.

In our specimens, there are invariably three spines below the statocyst (Fig. 2D), whereas in the Indian specimens there may be 4-5 spines (Pillai, 1965).

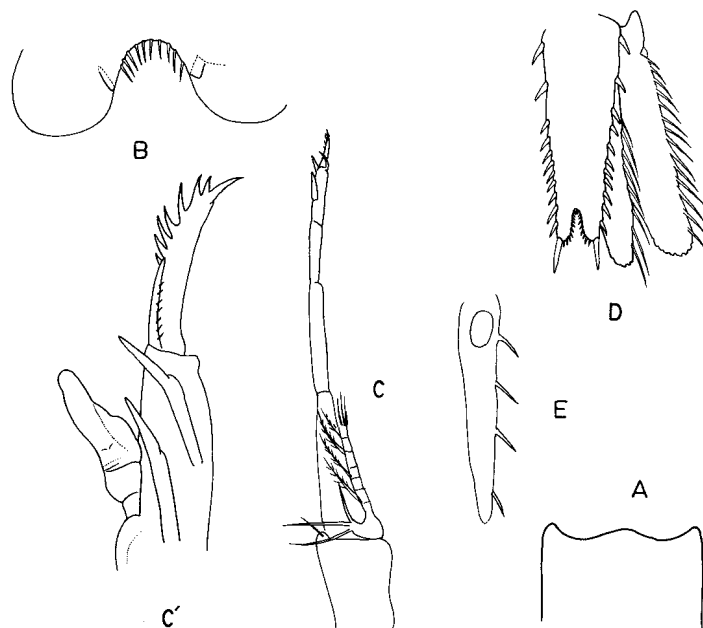


Fig. 1. *Gastrosaccus muticus*. A, front; B, posterior margin of carapace; C, third pleopod of male; C', same, tip enlarged; D, telson and right uropod; E, endopod of uropod.

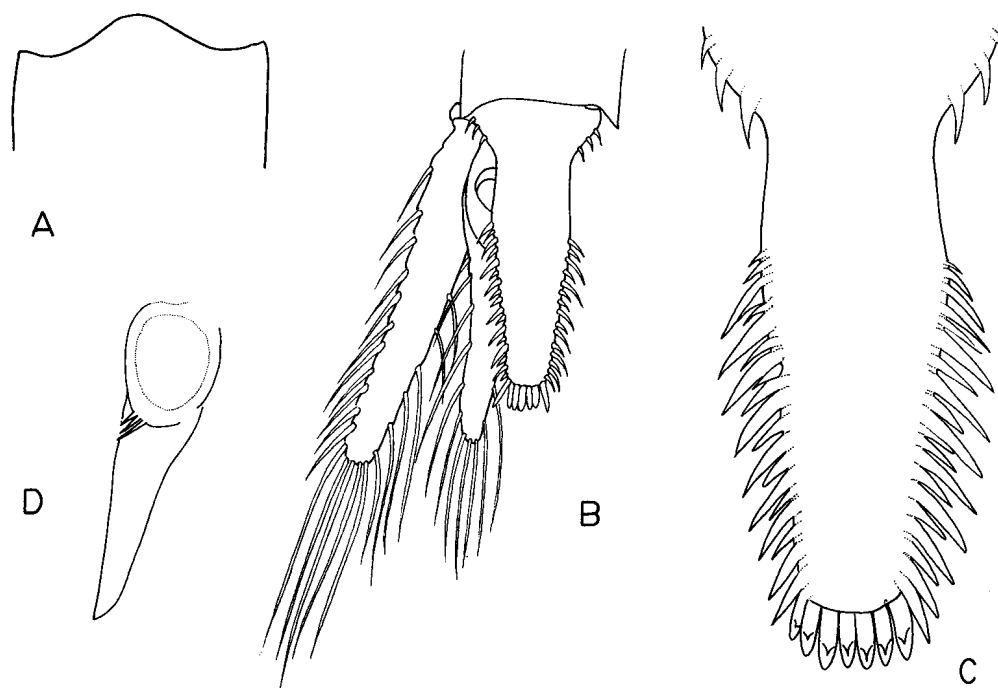


Fig. 2. *Acanthomysis indica*. A, front; B, telson and left uropod; C, telson; D, endopod of uropod.

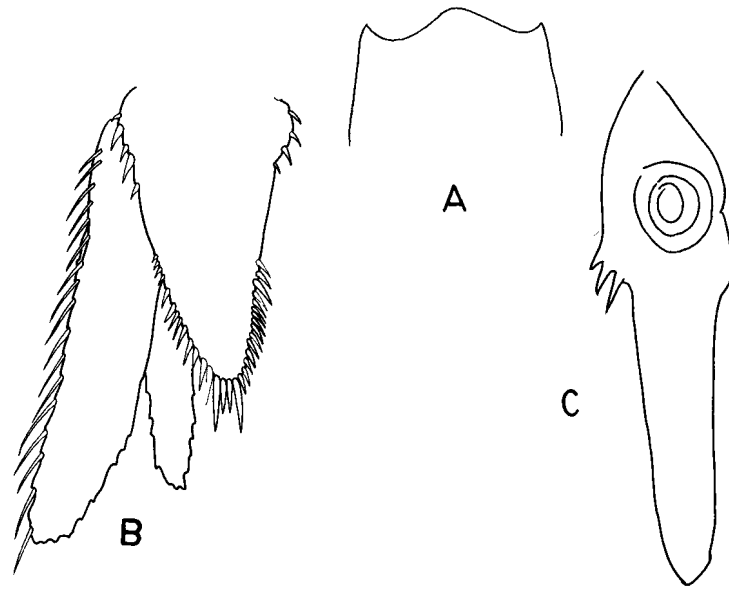


Fig. 3. *Acanthomysis pelagica*. A, front; B, telson and left uropod; C, endopod of uropod.

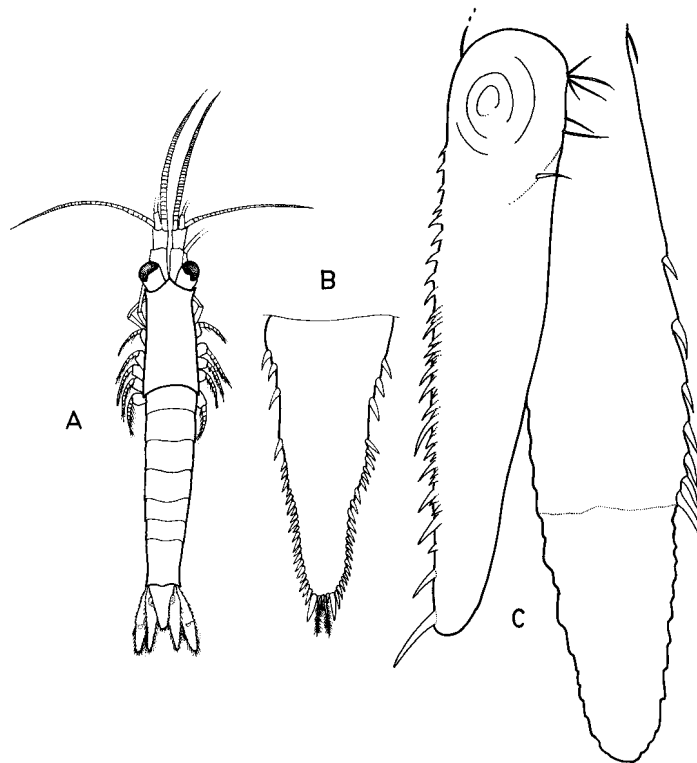


Fig. 4. *Siriella* sp. A, entire specimen; B, telson; C, uropod.

Acanthomysis pelagica (Pillai, 1957)
(Fig. 3A-C)

Neomysis pelagica Pillai, 1957: 15, Fig. 8

Acanthomysis pelagica - Pillai, 1961: 26 (in key); 1965: 1722, Fig. 88.

Material. - 18 specimens, size: 4-5 mm.

Distribution. - Previously known only from Kerala coast (India).

Remarks. - The rostrum (Fig. 3A), as in the previous two species, is blunt and only slightly produced. The telson (Fig. 3B) is characteristic in having a distal group of similar spines. Of the four apical spines, the two outer spines are much longer than the inner two spines. The telson in Pakistani specimens differs from that of the Indian specimens in having 4 to 5 lateral spines proximally, instead of only four spines. The endopod of the uropod (Fig. 3C) has only three spines below the statocyst instead of four spines (Pillai, 1965).

Siriella sp.
(Fig. 4A-C)

Material. - 4 specimens, size: 7.5 mm.

Remarks. - This species is close to *S. vulgaris* Hansen, 1910 especially in the shape of the anterior margin of carapace and length of the exopod of the uropod. The rostrum (Fig. 4A) is narrowly triangular and pointed apically. The exopod of the uropods overreach the endopods (Fig. 4C). However, the telson (Fig. 4B) differs from the Indian specimens of *S. vulgaris* Hansen, 1910, in being armed with three pairs of spines at its base and having lateral spines of equal length. For Indian specimens, Pillai (1965: 1692) has described two pairs of spines at the telson base and the lateral spines gradually increasing towards the apex.

Acknowledgements. - Dr. J. Mauchline, Oban, Scotland is acknowledged for kindly reading the MS and confirming the identification of the species. The work was done under the grant of the Pakistan Science Foundation Project No. SKU-BIO (167).

LITERATURE CITED

- Hansen, H. J., 1910. The Schizopoda of the Siboga Expedition: *Siboga Exped.*, **37**: 1-20.
- Pillai, N. K., 1957. Pelagic crustacea of Travancore. II. Schizopoda. *Bull. Res. Inst. Univ. Travancore*, **5**: 1-28.
- Pillai, N. K., 1961. Additions to the Mysidacea of Kerala. *Bull. Res. Inst. Univ. Travancore*, **8**: 15-35.
- Pillai, N. K., 1965. A review of the work on the shallow water Mysidacea of the Indian waters. *Proc. Symp. Crus. Mar. Biol. Ass. India*, **5**: 1681-1728.

Kazmi *et al.*: New records of Arabian Sea mysids

Tattersall, W. M., 1915. Fauna of the Chilka Lake. The Mysidacea of the lake with the description of a new species from the coast of Orissa. *Mem. Ind. Mus.*, **5**: 149-161.

Tattersall, W. M., 1922. Indian Mysidacea. *Rec. Ind. Mus.*, **24**: 445-504.