

## THREE NEW RECORDS OF MYSIDS (CRUSTACEA: MYSIDACEA) FROM THE NORTHERN ARABIAN SEA

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**ABSTRACT:** This paper deals with the systematic study of three species of mysids, collected by R/V "Dr. Fridtjof Nansen", which are new to the northern Arabian Sea. The three species are; *Siriella affinis* Hansen, *Afromysis macropsis* Tattersall and *Acanthomysis quadrispinosa* Nouvel. These are described and illustrated in this paper.

**KEYWORDS:** Mysids - new records - northern Arabian Sea.

### INTRODUCTION

The present study includes the description of three species of mysids viz. *Siriella affinis* Hansen, *Afromysis macropsis* Tattersall and *Acanthomysis quadrispinosa* Nouvel, which are new to the northern Arabian Sea. The previous records of *S. affinis* are by Hansen (1910) from the East Indies and Pillai (1965) from Gulf of Mannar. The species *A. macropsis* was recorded by Tattersall (1922) from Orissa and Waltair coast and subsequently Pillai (1957) found it off Travancore. Liu and Shaowu (1956) and Nouvel (1965) recorded *A. quadrispinosa* from South China Sea and Madagascar.

### MATERIALS AND METHODS

The present study is based on the samples collected by R/V "Dr. Fridtjof Nansen" during 1977, in the northern Arabian Sea (between 22°09'N to 25°21'N and 61°35'E to 67°55'E ) as shown in figure 1. A Bongo net of 180 mesh size was used and the organisms were preserved in 4% formalin in seawater. Drawings were made with the aid of a camera lucida and specimens were measured using an eyepiece micrometer. All the specimens are housed in the Centre of Excellence in Marine Biology, University of Karachi.

### SYSTEMATIC ACCOUNT

*Siriella affinis* Hansen, 1910  
(Figs.2A-D)

*Siriella affinis* Hansen, 1910, p.35; Tattersall, 1922, p.454; 1951, p.64; Li, 1964, p.89; Pillai, 1965, p.1692; Shyamasundari, 1973, p.391.

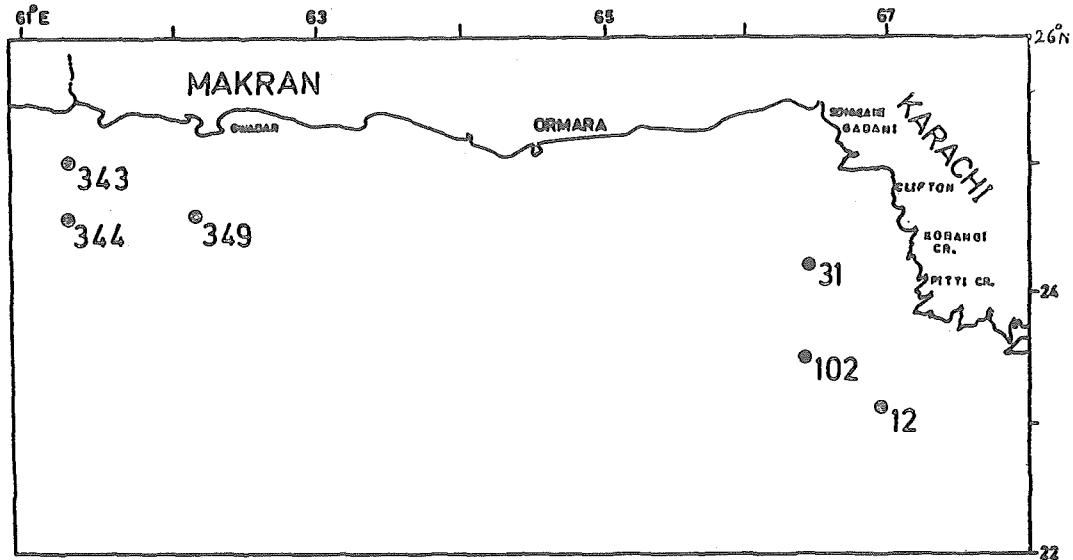


Fig.1. Map of the northern Arabian Sea showing the station positions referred to in the text.

#### MATERIALS AND MEASUREMENTS:

Sta.12; 23°17'N; 67°05'E, 22.1.77, hoz. haul, OOGMT, 1 female, total length (tl.)6.5 mm, carapace length (cl.)1.7 mm.; Sta.31; 24°24'N; 66°50'E, 26.1.77, hoz. haul, 13GMT, 1 female, tl.5.0 mm, cl.1.4 mm; Sta.102; 23°54'N; 66°49'E, 18.2.77, hoz. haul, 18GMT, 1 female, tl.5.2 mm, cl.1.4 mm.

#### DIAGNOSIS:

Carapace produced anteriorly. Frontal plate triangular with pointed apex, which is moderately narrow and slightly longer than broad. Antennal scale less than three times as long as broad. Pleopods rudimentary. Exopods of uropods longer than endopods, with 3 to 5 marginal spines, its distal joint more than half as long as proximal joint. Inner margin of endopod armed with spines of varying sizes. Telson reaches beyond articulation of exopods of uropods, is two and a half times as long as broad, widened basal part with two pairs of spines, its lateral margin occupied with small spines which gradually increases in length distally. The length of the present specimens vary from 5.0 to 6.5 mm as compared to 6.0 to 6.5 mm recorded by Hansen (1910).

#### DISTRIBUTION:

East Indies, Gulf of Mannar and now from the northern Arabian Sea (Pakistan).

*Afromysis macropsis* Tattersall, 1922  
(Figs.3A-D)

*Afromysis macropsis* Tattersall, 1922, p.472; Pillai, 1957, p.10; 1965, p.1715; Kurien, 1954, p.83.

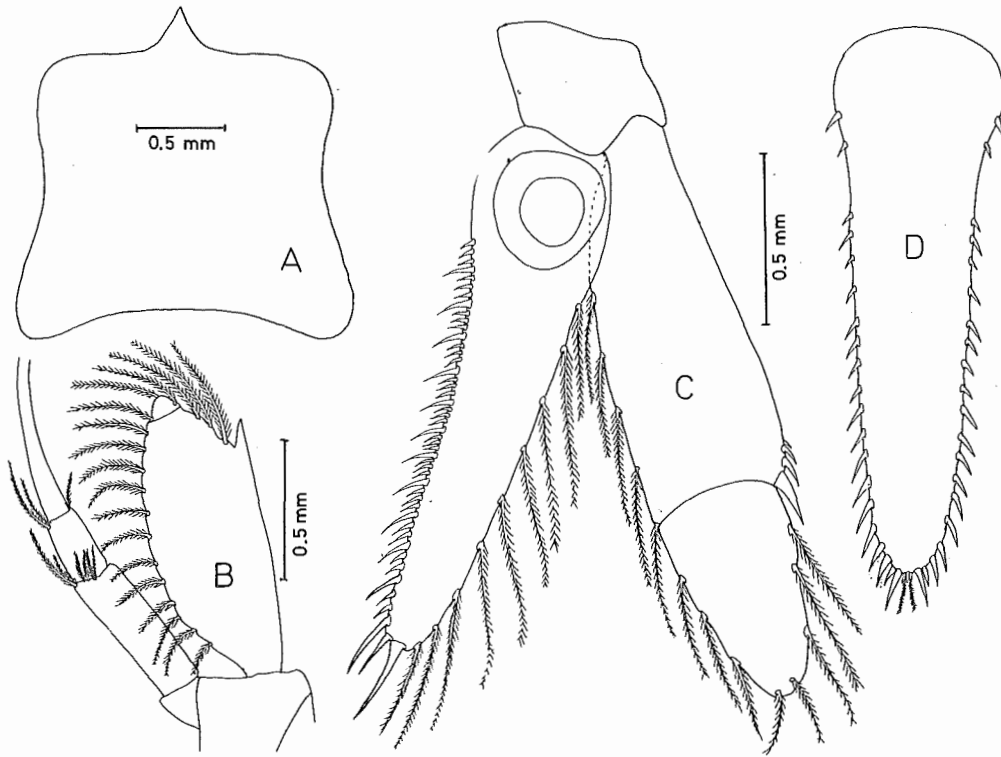


Fig.2. *Siriella affinis* Hansen, 1910, A, carapace; B, antenna; C, uropod; D, telson.

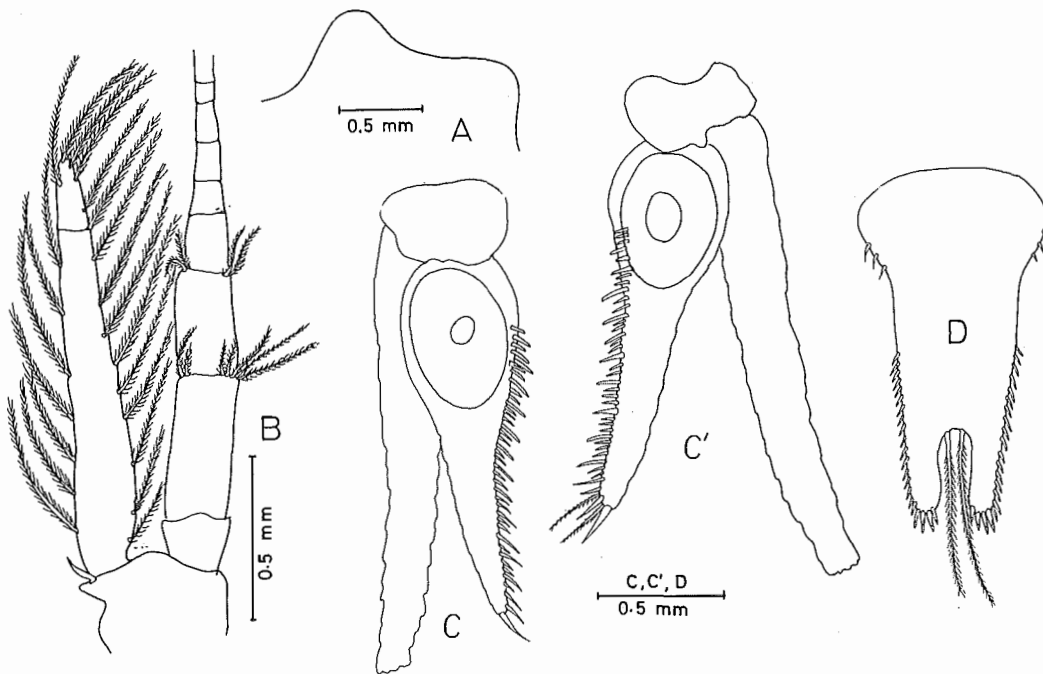


Fig.3. *Afromysis macropsis* Tattersall, 1922, A, carapace (anterior part); B, antenna; C, male uropod; C', female uropod; D, telson.

**MATERIALS AND MEASUREMENTS:**

Sta.343; 25°04'N; 61°35'E, 13.6.77, hoz. haul, 17GMT, 43 males, tl.4.5-5.5 mm, cl.1.3-1.5 mm; 16 females, tl.4.2-5.2 mm, cl.1.3 mm; Sta.344; 24°54'N; 61°35'E, 13.6.77, hoz. haul, 19GMT, 16 males, tl.4.5-5.0 mm, cl.1.4 mm; 6 females, tl.4.0-4.5 mm, cl.1.4 mm.

**DIAGNOSIS:**

Carapace produced in short triangular rostral plate with obtusely rounded apex. Antennal scale slightly shorter than antennal peduncle, narrow, seven times as long as broad. Pleopods rudimentary. Endopod longer than telson, with outer margin occupied with long plumose setae and inner margin with 35 to 38 spines in females and 38 to 40 spines in males. Exopods of uropods longer than endopods. Telson one and a half times as long as broad with three pairs of spines on its much broader base and 20 to 22 distal most spines, cleft wider proximally with two long plumose setae.

The specimens under study are equipped with 38 to 40 spines in males on the inner margin of the endopods of the uropods, while Pillai (1957) mentioned 40 to 41 spines.

**DISTRIBUTION:**

Orissa, Waltair coast, Trivandrum and now from the northern Arabian Sea (Pakistan).

*Acanthomysis quadrispinosa* Nouvel, 1965  
(Figs.4A-D)

*Acanthomysis quadrispinosa* Nouvel, 1965, p.456.

**MATERIALS AND MEASUREMENTS:**

Sta.344; 24°45'N; 61°35'E, 13.6.77, hoz. haul, 20GMT, 1 mutilated specimen; Sta.349; 24°58'N; 62°20'E, 14.6.77, hoz. haul, 14GMT, 1 female (mutilated).

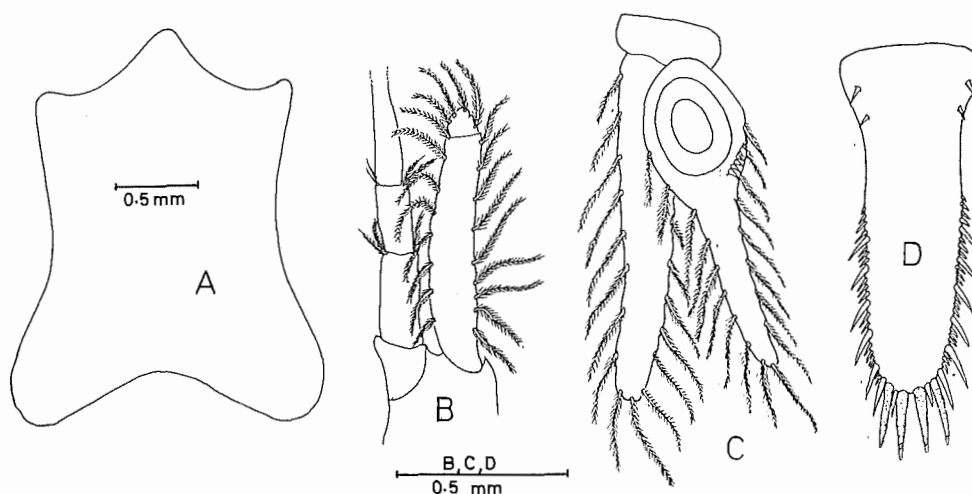


Fig. 4. *Acanthomysis quadrispinosa* Nouvel, 1965, A, carapace; B, antenna; C, uropod; D, telson.

**DIAGNOSIS:**

Carapace produced anteriorly into blunt triangular rostral plate. Posterior emargination of carapace leaving last two thoracic segments exposed. Antennal scale long, narrow, with rounded apex and nearly six times as long as broad. Pleopods in females rudimentary. Endopods of uropods shorter than exopods. Telson two and a half times as long as its maximum width, with four strong and two small spines at the apex.

**DISTRIBUTION:**

Madagascar, South China Sea and now from the northern Arabian Sea (Pakistan).

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