

## ON A SWARM OF AMPHIPODS *ATYLUS MINIKOI* (WALKER) IN THE SHALLOW WATERS OF THE KARWAR BAY

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### ABSTRACT

The occurrence of a swarm of amphipods *Atylus minikoi* (Walker) in the shallow waters is reported for the first time from the seas around India.

Normally only a few amphipods are encountered in the plankton of the Karwar Bay. But a swarm of gammarid amphipods was observed in the shallow waters of the Bay, close to the shore, on 26-3-1979. At the time of observation the temperature of the water was 28.4°C. and the values for salinity and dissolved oxygen were 31.58‰ and 4.28 ml/L respectively. The total number of amphipods having a displacement volume of 11.4 cc., in the collection made using a velon screen net was 10944, of which 67% belonged to a single species that was identified as *Atylus minikoi* (Walker). A notable feature is the preponderance of females as the males formed a negligible 0.3% of the total. Among the females 27.34% were having 8 to 10 eggs in their brood pouches and 4.68% were with 7 or 8 juveniles and the rest of the specimens looked as though they had just spawned.

Reports on the occurrence of gammarid amphipod swarms in the shallow waters are rare. Goswami et al (1977) observed gammarid amphipoda at 30 m depth region off Karwar during March and recorded 5.1 m<sup>3</sup> as the highest concentration of these organisms. Sivaprakasam (1966) collected the specimens for the description of this species *A. minikoi* (Walker) from the sea weeds and plankton from different places along the east coast of India.

The presence of 32.02% of egg-bearing females and those with a cluster of juveniles perhaps indicate a breeding swarm of this species. According to Davis (1955) certain benthic species of amphipods or those which live among the plants leave the bottom in vast swarms during their breeding season and at other times also.

Nair (1972) noticed on the night of 9th April 1970 a dense patch of amphipods of a single species *Hyperia sibaginis* Stebbing in and below a diffused thermocline layer over a wide area off Cochin where the depth ranged from

130 to 164 metres. He also observed a preponderance of males in the swarm which became denser as the depth increased and noted that the predation of these amphipods by flying fish etc., was going on at the time of his observation. The present record of breeding amphipods in such abundance in a shallow region when the ambient temperature is high indicates a possibility of using this species as a natural food supplement in mariculture.

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