

ON A SWARM OF *CRESEIS ACICULA* RANG (PTEROPODA) IN THE KARWAR WATERS

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ABSTRACT

The swarming of *Creseis acicula* Rang observed for the first time in the waters off Karwar on the west coast of India is reported.

The pteropods represented by *Creseis acicula*, *Diacria* sp. and *Cavolinia* sp. occurred occasionally in the zooplankton samples collected from the fishing grounds of the Karwar region. Generally the frequency of occurrence of *C. acicula* was greater than those of the others during the years 1980-'82. The number of specimens of *C. acicula* per sample used to be a few and never exceeded 7,216 recorded on 10-4-1980 until an unusually large number 140,656 was observed in a surface haul of zooplankton on 16-10-1982.

The sample was collected from the fishing grounds off Karwar where the depth was 12 m, using an outrigger canoe driven at a speed of 1 knot by a Yamaha out-board engine of 5 H.P. for a duration of 10 minutes. The net used for the collection of the sample was half a metre in diameter made of nylon material of mesh size 0.33 mm. The temperature of the seawater having a salinity value of 29.66‰ and a dissolved oxygen content of 3.85 ml/l at the time of sampling between 0630 and 0730 hrs was 29.3°C. The sample preserved in 5% buffered formalin made in seawater recorded a displacement volume of 43 ml. The size of *C. acicula* ranged from 5 to 11 mm. The numerical abundance of the different organisms present in the sample are given in Table 1.

A notable feature was the preponderance of *Penilla avirostris* observed off Karwar along with the swarm of *C. acicula*. However,

TABLE 1. Numerical abundance of organisms

Name of organism	No. per 10 minutes haul
<i>Creseis acicula</i> Rang	1,40,656
<i>Penilla avirostris</i> Dana	69,568
<i>Evadne tergestina</i> Clans	2,208
Copepods	56,080
Appendicularia	2,408
Chaetognatha	1,752
Adult lucifers	288
Ostracods	25
Hydromedusae	456
Siphonophores	1,784
Doliolids	360
Cirripede larvae	792
Decapod larvae	30,58
Polychaetous larvae	56
Brachiopod larvae	43
Molluscan larvae	3,472
Fish eggs	3,784
Fish larvae	256

the numerical abundance of *Penilla* and that of *Evadne* recorded in September or October 1982 was far less than those recorded in