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ON THE OCCURRENCE OF *EUPHAUSIA DISTINGUENDA* HANSEN IN THE NORTH-WESTERN BAY OF BENGAL

THERE are no records of *Euphausia distinguenda* Hansen, north of 7° 01'N from the Bay of Bengal although it has been reported to be the dominant and characteristic species of euphausiids in the Indian Ocean.[1-6] Several specimens of this euphausiid were obtained from the gut contents of *Carangoides malabaricus* (Bloch and Schneider) collected from trawl catches from north-western parts of the Bay of Bengal, first on 18th July 1964, and again on 8th August 1966. The first sample of fishes was from a depth of 55 m. at the station 18° 35'N., 84° 35'E., and the second from 46 to 49 m. at the station 17° 35'N., 83° 25'E. In both cases the euphausiids were very fresh and showed no signs of having been even partially digested.

The present material shows all the characters of *E. distinguenda* as described by Hansen.[7,8] The length (from the tip of the rostrum to the tip of the telson) of the males varies from 7·5 to 12·5 mm. and that of the females from 8·0 to 13·5 mm.

All the specimens of *E. distinguenda* in the collection made on 8-8-1966 are adults while those on 18-7-1964 comprised both adults and sub-adults. Completely formed spermatophores are observed in the sperm sacs of males. The thelyca of females are invariably found with spermatophores attached. Sebastian[6] while giving drawings of a few stages in the development of thelycum of *E. distinguenda* has shown two spermatophores attached to it. Bargmann[9] describing the life-history of *E. superba* states that as a general rule, two spermatophores are found on each female. He also reports the occurrence of 8 spermatophores which, in his opinion, may be presumably cases of multiple pairing. In the present material, 1 to 8 spermatophores, mostly 2, have been observed on the thelycum, some of them half empty. According to Bargmann,[10] "The spermatophores are expelled from the ejaculatory duct and are caught by the pleopods which transfer them into the thelycum. This operation must be a rapid one, for although male specimens have been obtained with spermatophores extruding from the genital pores, they have never been seen holding them in the pleopods". In one male specimen of *E. distinguenda* of the present material, it is seen that a single spermatophore is held by the processes of the modified endopod of the right side of the second pair of pleopods (Fig. 1). This observation gives support to the assumption that spermatophores are passed from the second to the first pair of pleopods which then fix them to the thelycum of the female.

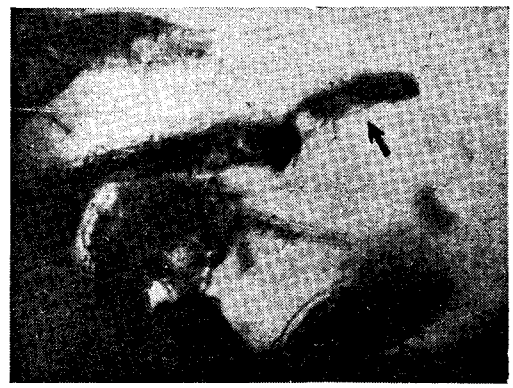

FIG. 1. Spermatophore (indicated by arrow) held by the processes of the modified endopod of the second pleopod of right side in a male specimen of *E. distinguenda* Hansen.

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