NOTES 145

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NOTE ON AN ABNORMALITY IN THE PENAEID PRAWN METAPENAEUS MONOCEROS FABRICIUS

Abnormalities extending more or less to hermaphroditism have been observed in the Decapoda by several authors. A number of the pandalid prawns are normally protandrous hermaphrodites. Among records of nonfunctional hermaphrodites either with internal organs only affected or with both internal and external modifications, the observations of Hay (1905) in the crayfish Cambarus sp., Ridewood (1909) in Homarus vulgaris, Marshall (1902) in the Norway lobster Nephrops norvegicus, Matsumoto (1955) in the crab Potamon dehaani, Gordon (1957) in the lobster Homarus gammarus and Hartnoll (1960) in the spider crab Hyas coarctatus, may be mentioned.

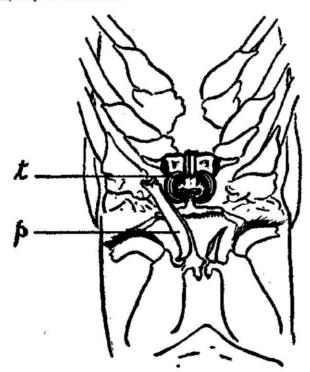


Fig. 1. Ventral view of the posterior region of the cephalothorax and the anterior of the abdomen of Metapenaeus monoceros. t—thelycum, p—petasma.

10

146 NOTES

While examining penaeid prawns from the offshore catches off Cochin the author came across an unusual abnormality suggestive of hermaphroditism, externally though, in a specimen of *Metapenaeus monoceros* Fabricius. The specimen measuring 158 mm. in total length and 42 mm, in carapace length is one among 16,870 numbers of the species examined from samples from both backwater and offshore commercial catches during the past 10 years. It was collected from the offshore catches on 27th October, 1960 from a depth of 15 fathoms off Cochin.

The abnormality is shown in fig. 1. The specimen has the secondary sexual character of the male, namely petasma, in addition to the sexual features of the female. On dissection it was found to have only the female gonad fairly well developed with the ovary in the late maturing stage. No evidence of the male gonad could be noticed. Apparently except for the petasma it is a normal female specimen in all other respects.

Even the petasma is not fully developed in proportion to the size of the specimen. Although the specimen is of adult size the petasma is not of the actual adult size and shape. The left half is not as much developed as the other half. Other secondary sexual modifications of the adult male such as the notched proximal end of the merus of the last leg bounded anteriorly by large hook-like spine and posteriorly by a lobule of the ischium are also wanting.

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A NOTE ON THE PRAWN FISHERY OF KUTCH

The estimated annual average marine fish production in Kutch for the last four years is about 1250 m. tons, of which nearly 60% is constituted by the prawns.* There is no information available on the prawn fisheries of Kutch. The account given by Srivatsa (1953) relates mainly to a general survey of the prawn fisheries with particular reference to the Saurashtra coast of the Gulf of Kutch. Lacumb (1960) has dealt with the prawn fishing industry of Kutch from the economic point of view. Hence investigations on the biological aspects of the prawn fisheries of Kutch with reference to the annual fluctuations, composition of the catch, growth, migration, maturity and food of the commercial species are in progress at the Central Marine Fisheries Research Unit, Kandla, since May 1959.

The present note deals with the composition of the catch along the Kutch coast. The following centres, commencing from the inner to the outer regions of the Gulf of Kutch have been chosen for observation:— Cherowari, Kandla, Tuna-

[.] Through the courtesy of the Directorate of Fisheries, Gujarat.