FOOD OF THE CATFISH *TACHYSURUS THALASSINUS* (RÜPPEL) ALONG THE VISAKHAPATNAM COAST

ABSTRACT

Food habits of *Tachysurus thalassinus* which accounts for about 95% of the catfish caught by small commercial trawlers operating off Visakhapatnam during 1982-88 were examined. A total of 2966 fish in 60-599 mm length were analysed. The method of 'Index of Preponderance' was employed for analysis of the stomach contents. Crabs formed the dominant food item followed by stomatopods and prawns, the three items together accounted for 82% of the food consumed. The other items met with were squids and fishes. Intensive feeding activity was observed during June-July and December.

THE CATFISH *Tachysurus thalassinus* accounts for 95% of the total catfish catches landed by small commercial trawlers operating off Visakhapatnam. There is little information on the food of this species from these fishing grounds. The only information on the food of this species along the northeast coast of India is that by Majumder (1969), based on samples collected from Government of India trawlers which operated off the Andhra and Orissa Coasts. Hence the results of studies made on the food of this species caught off Visakhapatnam are presented in this account.

The author is thankful to Dr. G. Luther for the helpful discussions he had while preparing this account and to Shri V. N. Bande for reviewing the manuscript. He is also thankful to Shri C. V. Seshagiri Rao and Shri K. Narayana Rao for assistance given in sample collections and analysis of data.

Material and methods

Samples of *T. thalassinus* were collected every week from the catches landed by small commercial trawlers at Visakhapatnam during 1982-1988. After taking the total length of each specimen the condition of feed was recorded as 'Full,' '¾ full', '½ full', '¼ full' and empty, each category receiving 100, 75, 50, 25 and 0 points respectively. Separate points were allotted for each food item based on its relative volume. From the values obtained for individual fish, monthly averages were computed and percentages calculated. The 'Index of Preponderance' which aids in grading the gut contents thereby providing indication of the food preferences of the fish was constructed from volume and occurrence indices as proposed by Natarajan and Jhingran (1961). During the period of study, a total of 2966 stomachs were examined of fish in the total length range of 60-599 mm. There was no differences in the food items taken by fish in the different size groups. Therefore the monthly data on food for the entire length range were pooled.

Results and discussion

Intensity of feeding was generally ¾ full or full during June-July and December and ¼ full — ½ full during the other months. Empty stomachs were more common during April. The index of preponderance of the different food items revealed that crabs (37.5%), stomatopods (23.1%) and prawns (21.7%) form the main food accounting for 82% of the combined index (I) of the food items. The other items met with together with their indices are as follows: squids 3.26%, silverbellies 1.91%, ribbonfishes 1.44%, whitebait 0.36%, young eels 0.32%, miscellaneous fishes 4.25% and semidigested matter 6.14%.

Crabs were mainly represented by *Portunus sanguinolentus*, stomatopods by *Oratosquilla* spp., prawns by *Acetes* spp., *Metapenaeus* spp., *Leander* spp., *Solenocera* spp., *Trachypenaeus curvirostris*, squids by *Loligo duvaucelii*, silverbellies by *Leiognathus bindus*, ribbonfishes by *Trichiurus lepturus*, anchovies by *Stolephorus* spp. Among the miscellaneous fishes the most common were *Upeneus* spp., *Saurida* spp., nemipterids, *Sphyraena* spp., etc. Semidigested matter comprised mostly by fish remains.

Chacko (1949) reported the food of *T. thallassinus* from the Gulf of Mannar comprising as fishes and algae. Suseelan and Nair (1969) from Bombay waters reported crabs, fishes, prawns, stomatopods, polychaetes. Mojumdar (1961) from off the North Andhra and Orissa Coasts reported the food of this species comprising mostly of crabs, prawns, *Squilla* spp. and demersal fishes. Menon (1979) reported echiurids, crabs, prawns, polychaetes, stomatopods and fishes from Palk Bay (Mandapam area) and *Philine* sp., crabs, alpheids, prawns, ostracods, amphipods and fishes from the Gulf of Mannar (Mandapam area) forming the dominant food items of this species. The present study largely confirms the results of earlier studies on the food of this species from different localities indicating that *T. thalassinus* is a carnivore subsisting mainly on crabs, stomatopods, other crustaceans, squids and a variety of teleostean fishes.

Central Marine Fisheries Research Institute, Cochin-682 014.

Y. APPANNA SASTRY*

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* Present address : Visakhapatnam Research Centre of Central Marine Fisheries Research Institute, Visakhapatnam-530 003.

FIRST RECORD OF *BENTHOMISOPHRIA PALLIATA* SARS, 1909 (COPEPODA, MISOPHRIIDAE) FROM THE INDIAN OCEAN

ABSTRACT

The present note reports the record of *Benthomisophria palliata* Sars, 1909 (Copepoda : Misophriidae) for the first time from the Indian Ocean and fifth in the world oceans. These specimens were collected in a vertical zooplankton haul at 24°09'N and 64°27'E on March 29, 1967. Both the specimens are copepodite V, female measuring 1.56 mm and 1.66 mm. Some of the characteristics slightly differ from those previously described by the other authors.

THE BATHYPELAGIC copepods from all oceans are less known compared to the epipelagic forms and the bathypelagic copepods from the Indian Ocean are particularly poorly known compared to those of other oceans. This note records *Benthomesophria palliata* (Family