

## NOTES

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### FOOD AND FEEDING OF THE POST-LARVAE AND JUVENILES OF *MEGALOPS CYPRINOIDES* (BROUSS.)

A. NOBLE

*Central Marine Fisheries Research Institute, Cochin-18*

Post-larvae of *Megalops cyprinoides* collected from the inshore area off Karwar were reared in the laboratory into juveniles. They were fed in the laboratory with live plankton and their food and feeding were noted. They ate only the zooplankton and distinguished the edible from the non-edible, the big from the small and the live from the dead.

In June 1964, post-larvae of *Megalops cyprinoides* appeared in plenty in the inshore waters off Karwar and nearby places and were washed ashore with the waves. One hundred and fiftysix specimens of 22.0 - 28.0 mm size range were collected by the author of which 38 were reared in the laboratory. Considerable shrinkage took place initially. After shrinkage the smallest of the larvae measured 14.5 mm in total length. Subsequently some of them grew into juveniles. The last one survived for 103 days in the laboratory and measured 44.6 mm in total length. The following observations on their food and feeding were made during this period.

In the laboratory they were fed on live identified plankton. They consumed zooplankton, preferably copepods. During the analysis of the stomach contents of the larvae collected at Madras, Kuthalingam (1958) also observed copepods as their dominant food item. The post-larvae reared in the laboratory could to spot out and catch individual items but the juveniles mopped them up in groups.

The post-larvae appeared to prefer small copepods such as *Acartia erythraea*, *Acrocalanus longicornis*, *Paracalanus aculeatus* and *Oithona plumifera*. Juveniles ate bigger species like *Acrocalanus gibbor*, *Eucalanus* sp., *Centropages furcatus*, *C. orsinii*, and *Lucifer hansenii* also. Even when starved the post-larvae and juveniles avoided very big forms like the amphipods. But Kuthalingam (1958) seems to have observed that the larvae of 24.6 mm size fed

on big items like *Penaeus* sp., *Squilla* sp., *Acetes* sp., and on the pro-larvae and post-larvae of *Ambassis* sp., *Therapon* sp., and *Etroplus* sp. In the laboratory, the tintinnid *Cyrtarocylis ehrenbergi* was consumed largely whenever given.

The post-larvae as well as the juveniles consumed only the actively swimming forms. For this reason phytoplankton was never taken in. Kuthalingam (1958) also did not find any phytoplankton element in the stomach of the larvae he examined at Madras. Even sinking sand grains and the air bubbles which escaped from their bladder were captured but released suddenly. No dead organisms were consumed. Sinking dead organisms which were mistakenly taken in were immediately spat out. It was so with the dead and decaying forms as also the just dead or killed and given immediately. Even starved ones did not take the fresh prawn meat given in lumps or mashed and sprinkled over the water. Mashed pieces were caught while sinking, but thrown out forthwith.

At times they extruded their live prey also, as though it was disagreeable in some way. *Sagitta bedotei* and *Evadne tergestina* caught by them were quickly ejected. The fish paid no attention to *Noctiluca miliaris* which floats passively at the surface. A copepod-feed of the juvenile mixed up with a good number of *Noctiluca* was expelled. When the non-edible forms occurred insignificantly in the groups of planktonic organisms mopped up by the juveniles, they were taken in unnoticed. The post-larvae and juveniles thus showed selective feeding, distinguishing the edible from the non-edible, the big from the small, and the live from the dead.

KUTHALINGAM, M. D. K. 1958. Studies on post larvae and feeding habits of some fishes found in the Madras plankton. *J. Madras Univ.* 28 B (1):1-11.