

OCCURRENCE OF JUVENILE MACKEREL AT MANDAPAM, GULF OF MANNAR COAST

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ABSTRACT

The occurrence of juveniles of the Indian mackerel, *Rastrelliger kanagurta*, (TL 80-110 mm) at Mandapam is reported for the first time.

The occurrence of youngones of mackerel, *Rastrelliger kanagurta* (Cuvier), in the inshore waters along the Indian coasts as reported by various authors has been reviewed by Rao (1962). But so far there is no report of their occurrence in the southeast coast of Tamil Nadu. Sekharan (1962) gave an account of mackerel occurring in the fishery at Mandapam from 1951-56. But in this also, sizes below 150 mm are not reported.

On 27-10-1983, 600 kg of fish were landed by shoreseine operated around the Appa Island off Mandapam. Out of this, 6 kg, forming 1%, were juvenile mackerel. Other fishes caught were juveniles of oil sardine (90%) and lesser sardine (9%).

A total of 66 fish were measured for length-frequency. The total length ranged from 80 to 110 mm. The length-frequency distribution, given in the figure 1, showed that the size 90-94 mm dominated. The weight varied from 4.5 to 10 g, with an average of 6.5 g. The stomach-content analysis showed the presence of *Pleurosigma*, sea grass and digested matter, besides sand grains, only in two out of the 25 fish examined. In others only sand grains and fish scales were seen. Noble (1962) also noticed the presence of these besides the food items and digested matter in the samples from shore-seine at Karwar. He is of the opinion that these items may have entered the stomach while fishing in this particular mode.

With regard to the occurrence of these sizes in October, it is pertinent to refer to the spawning season of mackerel at Mandapam. Though Mackerel was said to have two spawning seasons, viz. one in October-November and

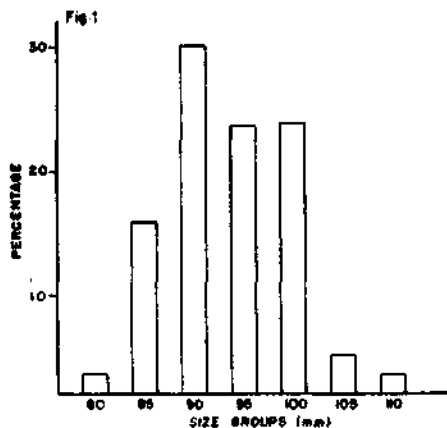


FIG. 1. The length-frequency distribution of the mackerel larvae.

another, a more major one, in May-June, later studies showed that the spawning started by April itself (Venkataraman 1970). The juveniles in the present study might be the product of the April-June spawning.

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