

ON A MACKEREL LARVA (*RASTRELLIGER* SP.) FROM THE
INSHORE WATERS OF MADRAS

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The authors collected a mackerel larva measuring 2.98 mm in total length in a surface plankton tow (mesh size of net 0.33 mm) at 05.30 hours on 22-3-1973 from the 10-fathom zone off Madras. As two species of mackerel, *R. kanagurta* and *R. faughni* occur along this region (Gnanamuttu, 1971), specific identification of the larva is difficult. However, a description and a photograph (Fig. 1) of the larva are given here to facilitate identification.

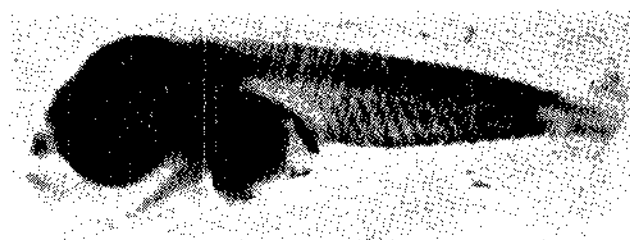


FIG. 1. Photograph of a 2.98 mm (Total length) mackerel larva from Madras
(The tip of the caudal fin is not included in the photograph).

Measurements: Total length 2.98 mm; length of head 0.78 mm; height of head 0.8 mm; body depth 0.76 mm and 0.62 mm at stomach and vent respectively. Eyes well pigmented, diameter 0.33 mm; larval pectoral fin 0.29 mm in length.

The larva has 31 myosepta of which 6 or 7 are preanal. The myosepta are oblique without any zigzagging. The notochord is straight. The maxilla, mandibles, parasphenoid, hyoid arch and opercles appear ossified. One or two teeth are present on the mandible and upper jaw on each side. Melanophores are conspicuously seen on the ventral side and their disposition resembles the general pattern of pigmentation described for *Rastrelliger* larvae by Matsui (1963). In the abdominal region three distinct pigment spots are present apart from the pigmentation on the walls of the peritoneal cavity. One of these is situated along the ventro-median line of the stomach and one each on the an-

terior and posterior sides of the vent. From the 12th to the 24th myosepta the melanophores are placed one each along the ventro-median line and a single one in the larval caudal fin. No distinct pigments are seen on the head region at this stage.

A few differences are noticeable in the morphometric measurements of the present material from that given by Peter (1967). According to him, the head length of the larva measuring 2.7 mm in total length is 1.4 mm, whereas in our specimen of 2.98 mm (T.L.) the head length is 0.78 mm.

Gnanamuttu and Girijavallabhan (MS) have observed February to May as the peak spawning season for *R. kanagurta* and *R. faughni* along the Madras coast. Incidentally, the occurrence of oozing males and females of mackerel during this period in the commercial catches is of added interest.

We are thankful to Dr. E. G. Silas for confirming our identification of the larva.

GNANAMUTTU, J.C. 1971. *Indian J. Fish.*, 18:170-173.

GNANAMUTTU, J. C. AND K. G. GIRIJAVALLABHAN. 1972. Proc. Symposium on the Pelagic fisheries resources of the seas around India (MS).

MATSUI, T. 1963. Report on Results of Naga Expedition, Scripps Institution of Oceanography. 59:69.

PETER, K.J. 1967. *Bull. Nat. Inst. Sci. India, Symposium on Indian Ocean*, No. 38 (2): 771-777.
