## A note on the record of juveniles of *Rastrelliger* kanagurta (cuvier) in the distant waters off Ratnagiri

Mackerel fishery of India is constituted mainly by *Rastrelliger kanagurta*. Young stages of it are reported to be caught only occasionally from the east and west coast of our country<sup>1</sup>. Recently larval and post larval stages of the mackerel have, however, been

423

identified in the plankton<sup>2-3</sup>. The spawning ground of the species is not yet clearly known.

Small mackerel of 62-122 mm size were reported to occur off Ratnagiri in September. 1959 by George and Annigeri<sup>4</sup>. Narasimham communication) (Personal also reports occurrence of mackerel of 108-151 mm sizes there in October, 1961 in Rampan catches. Young mackerel of 10-130 mm sizes were reported from March to May in the areas along 10° to 30° N by PFP5. It also mentions about the occurrence of three mackerel larvae (3.7, 9.0 and 10.0 mm size) in the plankton samples collected in August, 1972 off Ratnagiri. Young mackerel were reported to occur in the shelf area extending from Tuticorin on the east coast to Ratnagiri on the West coast by PFP6 during March-August of 1972, 1973 and 1974.

Thirty one juvenile mackerel of size 73-87 and weight 3-5 g were collected from the trawl catches of M. T. 'Matsya Vigyani' operated at 30-35 m depth in Lat.  $17^{\circ}$ -20'N and Long.  $72^{\circ}$ -10'E on 4-11-77 at about 70 nautical miles in the distant waters off Ratnagiri. The dominant size contributing to 49% of it was 80 mm group.

The available record of young mackerel from Ratnagiri area indicates that they occur in shelf waters in March-August, PFP<sup>6</sup>. September, George and Annigeri<sup>4</sup> and October (Narasimham, Per. Com.). Presently it is recorded north of Ratnagiri in distant waters in November. The spawning of mackerel is said to extend up to November by Noble<sup>7</sup>. Peter<sup>8</sup> has reported the occurrence of mackerel larvae from deeper waters. Spawners also recorded in distant waters off Bombay<sup>9</sup> Juveniles also now reported in distant waters off Ratnagiri.

The stomach contents of 31 specimens consisted of mainly *Coscinodiscus* spp., copepods and young ones of *Acetes indicus*.

The authors are grateful to Shri K. V. Narayana Rao, Dr. A. Noble, for kindly going through the manuscript and for their suggestions.

> S. KRISHNA PILLAI G. SUBRAMONIA BHAT\*

I. C. A. R.,

Central Marine Fisheries Research Institute, Mandapam camp-623520.

Received : 5 February, 1990.

\*E. G. Silas, Indian J. Fish, 21, 233-253, 1974.

<sup>3</sup>PFP, UNDP/FAO Pelagic Fishery Project Progress Report No. 7, Fish eggs and larvae studies, 1974.

<sup>4</sup>P. C. George and G. G. Annigeri, *Curr. Sci.*, **29**, 319-320, 1960.

<sup>5</sup>PFP, UNDP/FAO Pelagic Fishery Project Progress Report No. 6, Survey Results, 1974.

<sup>6</sup>PFP, UNDP/FAO Pelagic Fishery Project Progress Report No. 10, young fish studies, 1975.

- <sup>7</sup>A. Noble, J. mar. biol. Ass. India, **16**, 826-829, 1974.
- <sup>8</sup>K. J. Peter, *Nat. Inst. Sci. India*, Part II, **38**, 771-777, 1969.
- \*S. Krishna Pillai, Indian J. Fish, 26, 237-238, 1979.

SCIENCE AND CULTURE, OCTOBER, 1990

<sup>\*</sup>Central Marine Fisheries Research Institute, Mangalore-575001.

<sup>&</sup>lt;sup>1</sup>K. V. Rao, Pro. Symposium on Scombroid fish, Marine biological Association of India, Part I, 1962. p. 469-482.