

**Size at first maturity in *Selaroides leptolepis* (Cuvier and Valenciennes) as evidenced by the occurrence of individuals in the Commercial Catches**

During the course of investigation on the life-history of *Selaroides leptolepis*<sup>4,5,6</sup>—a common carangid in the Palk Bay and the Gulf of Mannar in the vicinity of Mandapam—it was observed that males mature slightly earlier than females. This phenomenon has also been observed, in other fishes<sup>1,3</sup>.

Examination of fish during the months of July to September in 1957 and 1958, and again during January to March 1958 and 1959 indicated that males mature earlier than females. It was found that in July to September 1957 samples (fig. 1) 17.4 per cent of the

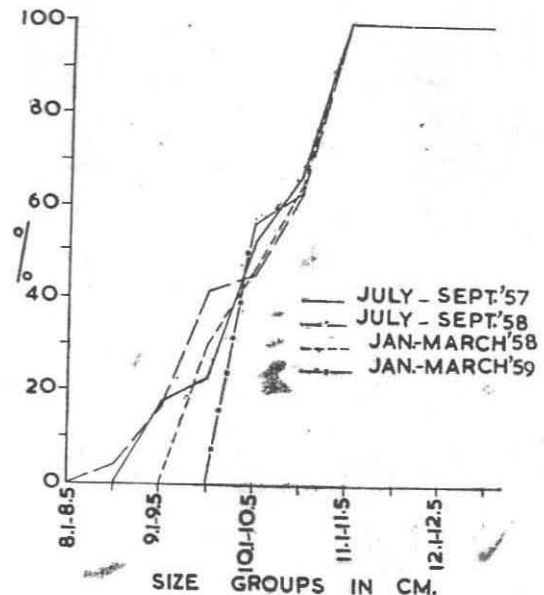


Fig. 1. Size at first maturity in males as evidenced by the occurrence of mature individuals during the spawning seasons.

males reached first maturity in the group 9.1 to 9.5 cm. and in the subsequent groups the percentage of the mature males increased considerably. All individuals above 11.0 cm. were mature in the catches. In July to September 1958 samples first sign of maturity in males

appeared in the size 8.6 to 9.0 cm., when only 4.2 per cent were mature. Examination of samples in the months of January to March 1958 and 1959 revealed that mature individuals first appeared in 9.6 to 10.0 cm. and 10.1 to 10.5 cm. groups respectively. On the basis of four spawning seasons it may be concluded that males first mature at about 8.7 cm.

Females were first noticed to mature in 8.6 to 9.0 cm. group (fig. 2) in the samples of

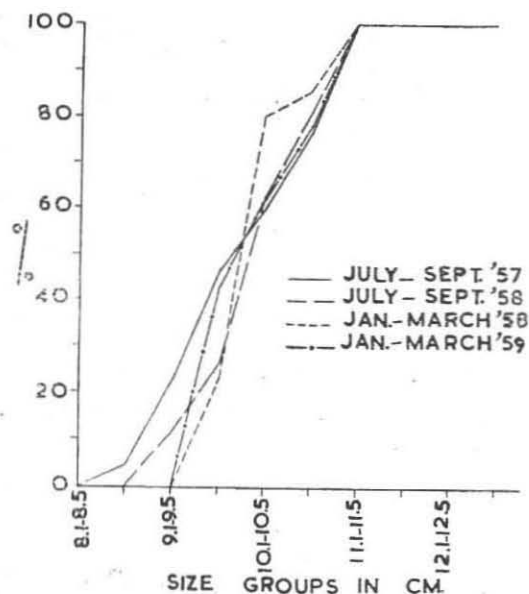


Fig. 2. Size at first maturity in females as evidenced by the occurrence of mature individuals during the spawning seasons.

July to September 1957 when 4.7 per cent attained maturity. All the females at 11.0 cm. and above were mature. In the July to September 1958 samples, size at first maturity in females was recorded in the group 9.1 to 9.5 cm. Similarly in the January to March 1958 and 1959 samples mature females were noticed in the group 9.6 to 10.0 cm. It may thus be concluded from fig. 2 that females first start maturing when they are about 8.8 cm. in length and this was also confirmed by the ova diameter studies. Prabhu<sup>2</sup> found that females mature at 13.9 cm. which is significantly different from the present observations.

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<sup>1</sup> H. M. Kyle, *The Biology of Fishes*, London, 1926.

<sup>2</sup> M. S. Prabhu *Indian J. Fish.* **3**, 59, 1956.

<sup>3</sup> G. Seshappa & B. S. Bhimachar, *Ibid.*, **2**, 180, 1955.

<sup>4</sup> K. K. Tandon, *Ibid.*, **7**, 1960 (in Press)

<sup>5</sup> K. K. Tandon, Unpublished.

<sup>6</sup> K. K. Tandon, *Curr. Sci.*, **29**, 62, 1960.