

## Observations on the spawning of mackerel

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Data on Indian mackerel, *Rastrelliger kanagurta* (Cuvier), on board FSI purse seiner Matsya Varshini during its cruise from 7 May to 20 May 1985 formed the basis of this report. The area surveyed was from Lat. 7° to 10° N, and Long. 75° 40' to 79° 00' E having a depth range of 30 to 200 m.

On 9 May 1985 mackerel shoals were observed off Quilon at Lat. 08° 49' N and Long. 76° 28' E (depth 44 m) at 1600 hr. Immediately purse seine net was operated. This yielded 3 tonnes of spawning mackerel. Four more shoals of mackerel were sighted in the vicinity during the fishing operations. The shoals were moving towards south.

A random sample of mackerel showed the following characteristics:

Length range:	217–283 mm
Modal value:	257 mm
Sex-ratio:	M : F
	1.29 : 1

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Maturity stages: All mature, but 23.64% were partly spent.

After the measurements were over a large deposit of transparent ova and milt was found at the bottom of the bucket in which the sample was taken. It was presumed that the ova and milt were exuded by the fish under stress.

Eggs taken from the bucket had diameter of 0.750–0.855 mm. (average 0.803 mm). Each egg had an oil globule 0.195 to 0.225 mm in diameter (average 0.211 mm).

Silas (1974) observed larvae of Indian mackerel in this area during May 1964. Balakrishnan (1975) collected mackerel measuring around 4 cm from Vizhingam in May. Our observation supports the view expressed by Yohannan (1982) that in the southern area an intensive spawning of mackerel takes place around the month of May.

### REFERENCES

- Balakrishnan V. 1957. *Current Science* 26 (2) : 57–58.  
Silas E G. 1975. *Indian Journal of Fisheries* 21 (2) : 233–253.  
Yohannan T M. 1982. *Indian Journal of Fisheries* 29 (1 & 2) : 50–62.