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PELAGOSPHERA LARVA FROM THE ARABIAN SEA

ABSTRACT

Pelagosphaera larva of *Sipunculus* sp. was present in the plankton of four stations (352, 362, 365 and 369) of Cruise No. 11 of FORV SAGAR SAMPADA and reported for the first time from the Arabian Sea. Only one specimen was present in the plankton collection of each station and they ranged from 2.0 mm to 3.0 mm in diameter.

A PELAGIC LARVA collected in the South Pacific between New Caledonia and New Zealand by the Italian ship *Liguria* was considered as an adult form of Sipunculid by Mingazzini (1905) and named it as *Pelagosphaera*. Senna (1906) found some more smaller specimens in the collection of *Liguria* from the Indonesian and Sri Lankan waters and described them. He stated that *Pelagosphaera* is not an adult form, but the larva of some species of *Sipunculus*. Spengel (1907) also considered it as a larva of *Sipunculus* sp. Subsequently, *Pelagosphaera* was reported from Monterey Bay, California by Health (1910), on the east coast of Annam by Dawyd off (1930), of southeast coast of Africa (Discovery Expedition) by Stephen (1941) and by Fischer (1947) in West Indian region. Fischer (1947) considered the west Indian *Pelagosphaera* larva belong to

Sipunculus polymotus. Occurrence of *Pelagosphaera* larva in the Arabian Sea is recorded for the first time from Indian waters and reported here.

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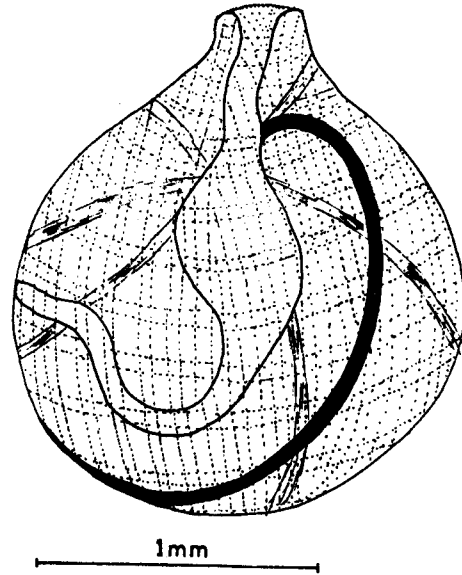
Out of fortyfour plankton samples collected at different stations during cruise No. 11 of FORV SAGAR SAMPADA, *Pelagosphaera* larva were present in the plankton of four stations only and particulars about them are given below.

The larva is spherical in shape and quite transparent showing internal structures clearly. The mouth is situated at the anterior pole and

TABLE 1. Station details from where pelagosphaera larvae were collected

Station	Date	Time (hrs)	Latitude	Longitude	Surface Temp (°C)	No. of specimen	Diameter (mm)
352	8.1.86	0930	11°00'N	72°00'E	24.6	1	2.5
362	12.1.86	0915	11°00'N	74°00'E	26.2	1	2.0
365	13.1.86	1400	09°00'N	73°00'E	26.6	1	2.3
365	15.1.86	0015	08°00'N	74°00'E	24.2	1	3.0

digestive tract is recurved with dorsal anus. The digestive tract has a short oesophagus, small expanded stomach and slightly long intestine which turns half way to run and open dorsally by the anus. Two ventral structures arise from the oesophagus and are said to be glandular in nature. They disappear at the time of metamorphosis and their role in larval life is not understood. From the anterior end to the posterior end, the ventral nerve cord runs midventrally without showing any evidence of metamerism. A pair of nephridia are present laterally in the anterior region. The main muscles of the interior are the retractor muscles. They cross the coelom as free longitudinal band extending from the beginning of the oesophagus to the trunk wall. In one specimen (Station 352) protoch was clearly visible.

Fig. 1. *Pelagosphaera* larva.

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