

29.—THE EGG MASS OF A DOLIID GASTROPOD MOLLUSC
FROM KRUSADAI ISLAND

(With a plate)

During a visit to Krusadai Island in 1947 we found a few gelatinous ribbons washed ashore at Kundugal point on 25-2-47. On examination, these proved to be the egg masses of a gastropod mollusc. In addition to the fresh spawn mass in which the embryos were alive, there were four other ribbons which on account of exposure to the sun had become tough and leathery, superficially resembling the cast skin of snakes.

The spawn masses were brought to the laboratory and kept alive for three days. The ribbons were from 250 to 380 mm. long, 60 to 70 mm. wide with a wavy margin and a thickness

of about 1.5 to 2 mm. Inside each ribbon were numerous transverse rows of 28 to 34 capsules arranged in curved rows (photo 1). Each capsule was oval in shape, of an average diameter of 2 to 3 mm, and with a wall of fibrous texture and having a round aperture on the surface. On an average 75 to 85 veligers were found inside each capsule except in those which were empty. Most of the veligers were in the early stages of development but clearly showed sculptured shells of a brown colour. An operculum and a velum consisting of several lobes were also present.

Subsequent examination of the material was not possible as the veligers died and the material remained unidentified. Inquiries at Krusadai revealed that similar spawn masses were not previously recorded from that area; nor are there any descriptions of similar egg masses in Hornell's Common Molluscs of South India.¹

A comparison of the description and figures of the egg mass of *Dolium* (? *maculatum* Lam.) from the Iranian Gulf given by Thorson² with our notes and illustrations and the preserved spawn brought with us leave no room for doubt as to the identity of our material. The Iranian egg mass was 300 mm. long, 90 mm. wide and 2 mm thick with curved rows of capsules numbering about 30 across the ribbon, each capsule containing 91 to 101 embryos, a number much larger than in our material. These broad gelatinous ribbons without sand incrustations are said to be characteristic of the genus *Dolium* and were first described by Lo Bianco³ from the Mediterranean. From the dried ribbons we have been able to make out that in the early phases, the eggs inside the capsule are distributed in a semilunar mass as described by Thorson and, presumably, when the eggs develop, they spread out and occupy the whole cavity of the capsule (photo 2).

It seems certain that the egg masses which we collected at Krusadai can be referred to a species of the genus *Tonna* (= *Dolium*) but specific identity can be established only by further work. Gravely⁴ has recorded four species of Dolids as occurring in South India. These are:—

- Tonna dolium* (Linnaeus) (= *Dolium maculatum*)
- Tonna cumingii* (Reeve) (= *Dolium cumingii*)
- Tonna fasciata* (Lamarck) (= *Dolium fasciata*)
- Tonna pomum* (Linnaeus) [= *Dolium (Malea) pomum*]

As there do not appear to be any published photographs of the egg ribbons of *Dolium*, we feel the accompanying photographs will be of interest.

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REFERENCES

1. Hornell, J. (1922): Common Molluscs of South India. *Madras Fisheries Bulletin*, xiv: 97-215.
2. Thorson, G. (1940): Studies on the egg masses and larval development of Gastropoda from the Iranian Gulf. *Danish Scientific Investigations in Iran* Copenhagen, Pt. 2: 159-236 (pp. 192-95).