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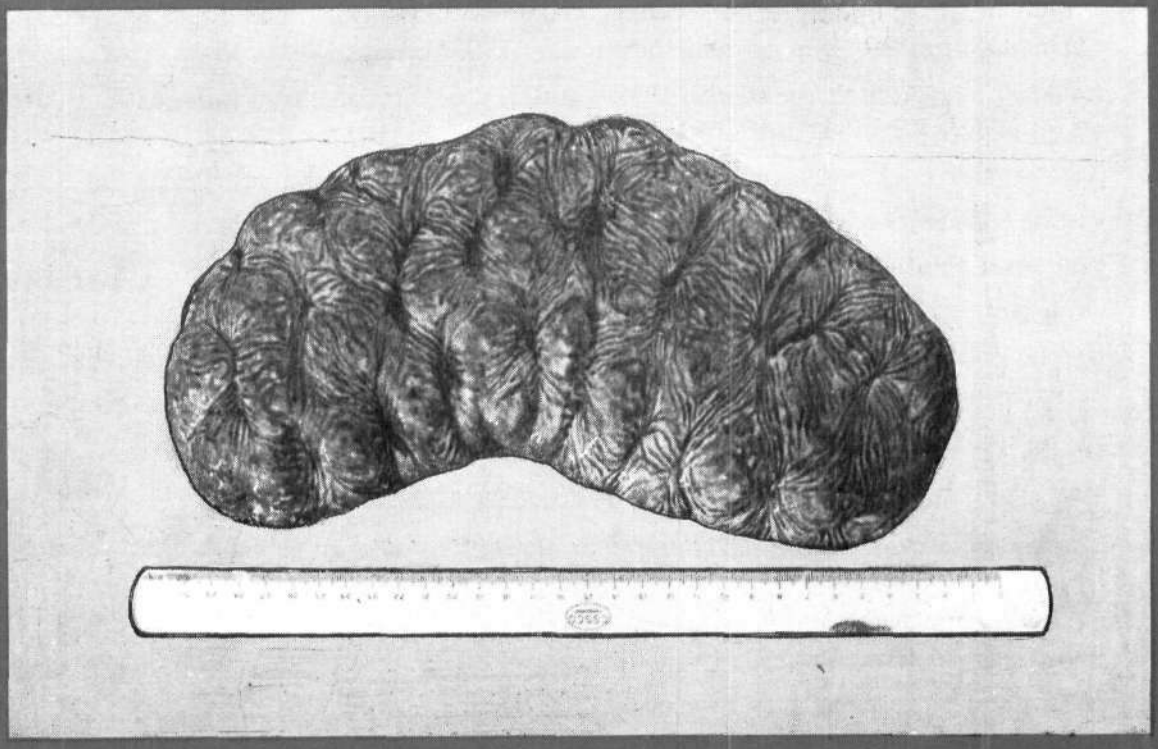

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887 *HOLOTHURIA (MICROTHELE) FUSCOGILVA* CHERBONNIER, A NEW RECORD FROM INDIA WITH A NOTE ON ITS EXPORT POTENTIAL AND PROCESSING

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While collecting data on lobsters at Kayalpatnam fish landing centre, 30 km south of Tuticorin, one specimen of *Holothuria (Microthele) fuscogilva* was obtained from the bottom-set gill net at 10 m depth on 10-10-'96. Although nearly 100 species of echinoderms are recorded from the Gulf of Mannar during the last 100 years, this species never came across in the samples. Obviously, this species is not distributed in the intertidal region. Since this species is a new record from India, a brief description of the same is given below.

Description

The specimen was 400 mm in length with a live weight of 2.5 kg. The body was massive and tubular in shape. Eight teat-like projections were seen on each side of the body. For this reason this species is known as teatfish or mammyfish. The bodywall was 10 mm in thickness. Pedicels and papillae were indistinguishable. Dorsal papillae were sparsely scattered than the ventral pedicels. Anus was surrounded by five calcified papillae. Calcareous ring was massive with distinctly scalloped anterior margin. The radials and inter-radials were squarish. Radials were twice the length of inter-radials. Tentacular ampullae were very large and cuvierian tubules were absent.

Spicules consisted of buttons and tables. Tables were robust with smooth discs and spires which terminated in 15-20 small spines. The diameter of the tables was 0.06-0.08 mm. The disc of the table was either irregularly rounded or square-shaped. The inner layer had closely packed, hollow fenestrated ellipsoides, which were 0.07 mm in length. They had four rows of holes. A few simple knobbed buttons were also present.

The colour in the fresh condition was yellowish-white. The body surface was covered with fine coating of coral sand.

Note on habits

Holothuria (Microthele) fuscogilva is found in deeper waters on clean sand and turtle grass. It is common on coral slabs near reef passages at the foot of the lagoon-side reef slopes. Young forms, usually few in number are found on turtle grass beds. Average density is about ten animals per hectare.

Remarks

Holothuria (Microthele) fuscogilva resembles *Holothuria (Micorthele) nobilis* in every respect except for the colour pattern, absence of cuvierian tubules and habits. *Holothuria (Microthele) nobilis* is common on shallow reef bottoms that are not subject to terrigenous influence. It is collected from Port Blair (Andamans) in the intertidal region and also from the Lakshadweep in the lagoons less than one metre depth.

Distribution

Holothuria (Microthele) fuscogilva is widely distributed in the South Pacific Islands. It is recorded from New Caledonia, Papua New Guinea, Solomon Islands, Fiji, Queenlands, Torres Strait and other places. It was collected by the author from the Maldives. It is likely to be present at Andaman and Nicobar Islands and the Lakshadweep in deeper waters.

Export potential

Holothuria (Microthele) fuscogilva is a high value species for processing. One kg of processed material of this species cost US $ 24.00 in 1990. In fact, *Holothuria (Microthele) fuscogilva* ranks only next to *Holothuria scabra* in value. It is quite likely that there exists a population of this species off Kayalpatnam at a depth of 10 m which can be exploited for processing are processed in different ways. The Chinese introduced processing of sea cucumber to India more than one thousand years back. The processing method they taught is mainly meant for *Holothuria scabra*. *Bohadschia marmorata* and *Holothuria spinifera* which have more calcareous material in their bodywall are also processed in the same way like *H.scabra*. The correct method of processing for *Holothuria (Microthele) fuscogilva* is given below. The same method can be used for *Holothuria (Microthele) nobilis* also.

The sea cucumbers are first squeezed assuming that the gut entrails have been eviscerated while putting them in heaps. They are introduced one by one slowly into boiling sea water. Relatively fewer number of teatfish should be handled at a time to give individual care during boiling. Teatfish tends to float as it seals water and air inside. This builds up pressure with rising temperature. The bodywall will break if they are not properly attended. Bloated teatfish are taken and punctured in the mid-dorsal region and put back into the boiling pan for the completion of the cooking process. The sea cucumbers should be stirred frequently using a wooden spatula and boiled for 30-45 minutes. Since the material does not become rubber-like, the bouncing test cannot be applied. The teatfish are removed with a long handled ring net. They are then cooled by placing on a raised platform or wooden plank. They are cut open along the mid-dorsal line, leaving some portions at the anterior and posterior ends. If there remain any visceral portions, they are washed out using lukewarm water. Then the product is again boiled for another 15-20 minutes. The product now shrinks and the bodywall becomes hard. Afterwards they are removed using the ring net and cooled. Wooden splinters of 3-4 cm. long are placed between the cut edges of the dorsal wall to expose the inner portion and are then sun dried on drying platforms.

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