

Marine Fisheries Information Service

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**Association of a commensal fish *Carapus* sp.
with *Holothuria spinifera***

Pearl fish belonging to the family Carapidae is generally found living inside different invertebrate hosts like holothurians, sea stars and bivalves. The fishes under the genus, *Carapus* are commensals and often use their hosts as shelters. They are found in the respiratory tree or inside the body cavity of different holothurians.

A single specimen belonging to the genus *Carapus* was noticed within the coelomic cavity of a mature male specimen of *Holothuria spinifera*, while assessing the annual reproductive cycle of the latter.

The fish appeared like eel with a scaleless moderate body having a length of around 6 cm. The colour was translucent with pink

sheen and silvery out line on the dorsal side.

The taxonomic position of *Carapus* sp. is as follows, Phylum- Chordate, Subphylum- Vertebrata, Class- Actinopterygii, Order- Ophidiformes, Family - Carapidae, Genus - *Carapus*.

A total of 294 specimen of *H.spinifera* of length ranging from 110-403 mm were collected around the Van Island of Gulf of Mannar, on the southeast coast of India. Specimens were dissected by making incisions through their anal opening. The fish was collected from the coelomic cavity of a specimen and the chances of occurrence were worked out around 0.34%.

Earlier, association of fishes like *Jordanicus gracilis*, *Carapus parvipinnis* and *C. homei* with sea cucumber *Bohadschia marmorata*, *Encheliophis gracilis* with *Holothuria arenicola* and *E. vermicularis* with *H. hilla* were reported from Indian waters. Though the present account is the first report of a commensal fish from *Holothuria spinifera*, detailed studies have to be carried out on aspects like pattern and frequency of occurrence, host specificity of the fish etc., to understand the type of relationship between the two and its implications.

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