

**TAENIACANTHUS DENTATUS SP. NOV., A COPEPOD PARASITE  
OF THE FISH *BEMBROPS CAUDIMACULATA* STEINDACHNER\***

By M. J. SEBASTIAN

*Central Marine Fisheries Research Institute, Mandapam Camp*

BASSETT-SMITH (1898) was the first to describe a piscicolous taeniacanthid, *Irodes tetradontis* (Bassett-Smith), from the Indian region. However, taeniacanthid copepods of the genus *Taeniacanthus* Sumpf, 1871, have never been reported from Indian fishes until quite recently, when eight species of taeniacanthids belonging to five different genera, including one new genus and seven new species, were described by Pillai (1963) from South Indian fishes. Of these, three belonged to the genus *Taeniacanthus* and were new. Herein is described a fourth species, *T. dentatus*.

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***Taeniacanthus dentatus* sp. nov.**

(Figs. 1-10)

*Material*—Eleven females were collected by the author from the inner surface of the opercle of a single specimen of the fish, *Bembrops caudimaculata* Steindachner, caught from Palk Bay on 24th June, 1962.

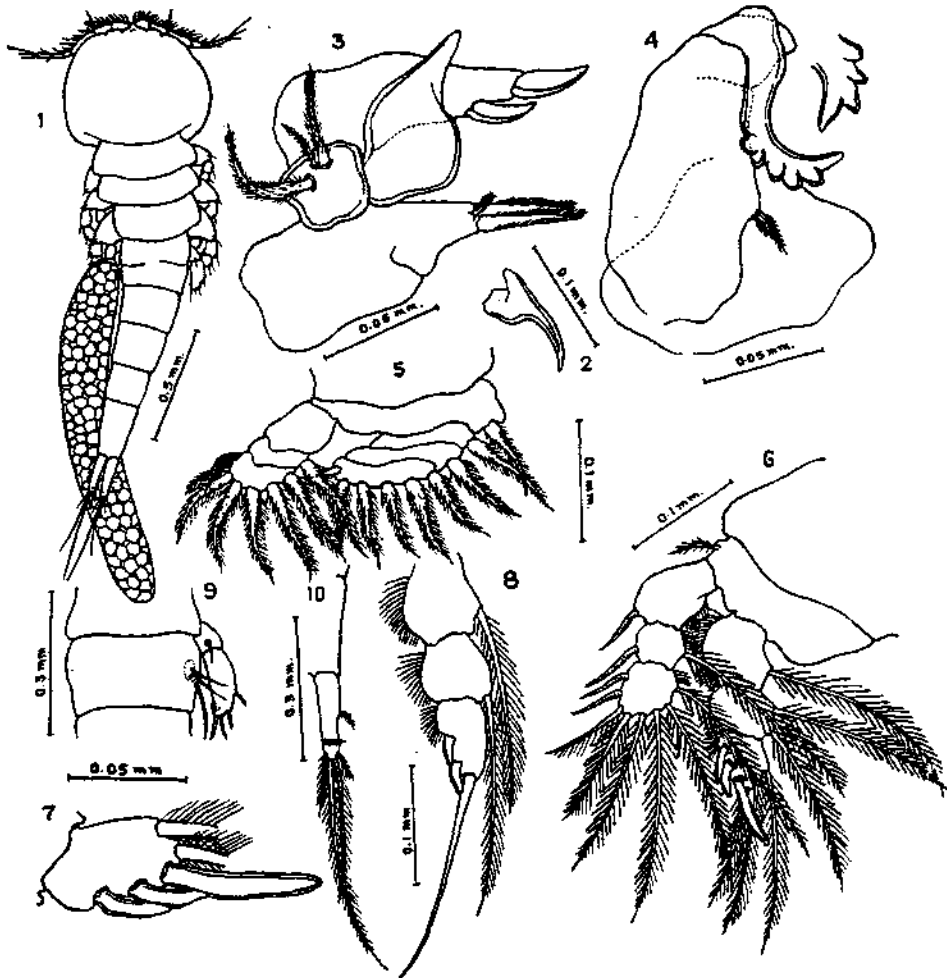
The holotype, a female, is deposited in the Reference Collection Museum of the C.M.F.R. Institute, Mandapam Camp, S. India (C.M.F.R.I. No. 75).

*Female*—Body is slender and elongated. Cephalothorax is slightly broader than long and dorsally convex. Its anteromedian part is produced into a very small rostral process. Lateral border of the cephalothorax is provided with a thin flexible membrane originating from the ventral side. First thoracic segment is fused with the carapace, but the fusion is not complete. Thoracic segments two to five are comparatively short and subequal in length, the fourth being the longest. Genital segment is small and subequal to the fifth thoracic segment in length and breadth and these two segments show signs of getting fused. Abdomen is four-segmented and it steadily narrows backwards. Fourth segment is slightly longer than all the others. Anal laminae are long, only slightly shorter than the last abdominal segment; each carries a short seta in the middle of the outer border and a similar subapical inner seta; distal border has two pairs of setae, inner pair is very long and its inner member is longer than the outer; all the setae are plumose.

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The antennule is six-segmented, the proximal three segments are comparatively broad and armed with five, eleven and eight flattened pectinate setae respectively. The three distal segments are cylindrical, short and armed with simple non-plumose



FIGS. 1-10. *Taeniacanthus dentatus* sp. nov. 1. female, dorsal view; 2. maxillary hook; 3. mandible, first maxilla and second maxilla; 4. maxilliped; 5. first leg; 6. second leg; 7. third leg, third endopod segment; 8. fourth leg, endopod; 9. fifth and sixth legs; 10. anal lamina.

setae. Maxillary hook has a stout base and curved strong claw. Antenna is of the usual type, inner border of its third segment is very feebly denticulated and the distal border has two spine-setae and four strong claws. Mandible has a stout base, apical blades are rather broad, subequal in size and devoid of spines. First maxilla carries three setae, outer seta is stout and the middle seta is comparatively small. Inner expansion of the first maxilla is apically narrowed and overlaps the mandible. Second maxilla is stout and carries a small pectinate spine and two long strongly barbed blades. Maxilliped is three-segmented, basal segment is fused with the

body and hence not clearly visible, second segment is large and carries on its inner border a pair of setae, third segment is bent backwards and curved inwards and characteristically armed, on the distal half of its inner border with five comparatively stout, blunt teeth.

First leg is only moderately flattened, protopod is two-segmented and both exopod and endopod are three-segmented. Protopod of second leg is two-segmented, second segment has an outer seta, the rami are three-segmented and the endopod is slightly stouter than the exopod. First exopod segment carries an outer spine-seta, second-segment has an outer spine-seta and inner long plumose seta, third segment has two outer spine-setae and six plumose setae of which the first is naked on the outer side. First endopod segment has one inner plumose seta, second has two inner setae and the third has three strong outer claws and three setae. First claw is small, second slightly longer than the first and the third more than twice as long as the second. Outer border of the endopod and inner border of the exopod are hairy. Third leg is similar to the second except that the third endopod segment has only two plumose setae and the third claw is slightly longer. In the fourth leg, the third endopod segment carries only two stout claws and a single long naked seta. Fifth leg is uniramous and two-segmented, basal segment is nearly half the length of the distal and carries a single seta. Distal segment has three strong blunt spines and one seta and its inner distal part carries a patch of denticles. Sixth leg is composed of three setae.

Egg-sacs are cylindrical, slightly shorter than the body and whitish in colour.

Length—2.5 mm.

*Remarks*—*T. dentatus* sp. nov. (*dentatus*, alluding to the dentate structure of the maxilliped with five well-defined teeth) somewhat resembles *T. acanthocepholae* Yamaguti (1939), *T. neopercis* Yamaguti & Yamasu (1959), *Parataeniacanthus platycephali* Yamaguti (1939) and *P. longicervis* Pillai (1963) in possessing a dentate maxilliped. But *T. acanthocepholae* and *T. neopercis* differ from it in the shape of the body, that of the maxillary hook and the fifth leg and also in the claw of the maxilliped being produced inwards at its base. In the dentate nature of the maxilliped *T. dentatus* is closer to *P. platycephali* and *P. longicervis*. But *P. platycephali* is a much more slender species with the teeth on the maxilliped quite indistinct and *P. longicervis* has totally different armature of the legs. The other species described by Pillai (1963), Shiino (1957), Wilson (1911 & 1922), Yamaguti (1939) and Yamaguti and Yamasu (1959) are very much different from the present form.

According to Yamaguti (1939) *Parataeniacanthus* differs from *Taeniacanthus* in the incomplete fusion of the first thoracic segment with the head and of the fifth thoracic segment with the genital segment. These two characters are variable and are exhibited by species assigned to both the genera that it is extremely difficult to assign a species to one or the other. Therefore, the present species is placed under the older genus *Taeniacanthus*.

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