

ON A COPEPOD PARASITE, *PENNELLA DIODONTIS* OKEN, WITH
EPIZOIC CIRREPEDE *CONCHODERMA VIRGATUM* SPENGLER ON A
NEW HOST *ZANCLUS CANASCENS* (LINNAEUS)

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ABSTRACT

An incidence of occurrence of *Pennella diodontis* infesting the fish *Zanclus canascens* is reported. One of the copepods was with an epizoic cirrepede, *Conchoderma virgatum*. The parasite, the epizoite, nature of infestation of the parasite, and effect of infestation are briefly described.

The occurrence of eight species of the genus *Pennella* Oken, which are known to infect the fishes of the families Scombridae, Histiophoridae, Exocoetidae, Carangidae and Diodontidae, have been listed by Pillai (1965). The present authors collected two specimens of *Pennella diodontis* Oken from *Zanclus canascens* (Linnaeus) of the family Zanclidae for the first time. These parasites were found penetrating the body between the pelvic fins. On one of these parasites was found attached an epizoic cirrepede, *Conchoderma virgatum* Spengler, whose occurrence was observed earlier by Daniel (1955) on a lernaecid copepod and subsequently by Natarajan and Nair (1970) on *Lernaenicus hemiramphii* Kirtisinghe.

Pennella diodontis Oken.

Fig. 1 (A).

Pennella diodontis Oken, 1815. *Lehrbuch der Naturgeschichte*, 2.

Pennella diodontis Kirtisinghe, 1935. *Parasitology*, 27 : 332

Host and record

Two sub-adults were found attached to near the pelvic fin of the fish collected on 24-9-1971. One of them lying between two ventral fins and its neck and genital segments passed through the visceral cavity and reached the liver in which its head and two horns were buried and this specimen was harbouring the epizoic cirrepede. Second specimen was found lying closely behind the first but without epizoite.

Distribution

So far known to occur on the fish *Diodon maculifer* Kaup from the Atlantic area, Bay of Bengal and Ceylon.



FIG. 1 Parasitic copepod, *Pennella diodontis* (A) with epizoic cirrepede, *Conchoderma virgatum* (B)

Description

Head broad, with deep anterior concavity lodging the antennae ventral by side, with branched papillae, small ones around the mouth and longer ones marginally, the anterior most pair projecting forwards prominently. Immediately behind the head a pair of horns originate from the base of neck and directed obliquely behind the head. The neck is almost uniformly round, merges gently with the genital part of the trunk, the latter as long as former but thicker. Abdomen short. Neither abdominal processes nor the egg strings visible.

Measurements

First specimen: Total length 26 mm; head length 3 mm; horn length 4.5 mm; head width 2.5 mm. Second specimen: Total length 16 mm; head length 2 mm; head width 2 mm; horn length 3 mm.

Effect of parasite on the host

The normal development of the right pelvic fin was arrested probably due to the constant inflammation caused by the presence of the parasite. Greater part of the liver of fish was also found to be damaged by the infection.

Attachment of *Conchoderma virgatum*

A single specimen of the pedunculate cirrepede, *C. virgatum* (Fig. 1; B) was found attached to the abdomen of the copepod parasite. Effect of the

epizoite on the copepod is not understood though such attachment causing inflammation, absence of egg strings and puncturing of the substratum was reported (Natarajan and Nair 1970).

The fish host (No. CMFRI - F 124/676), copepod parasites (No. CMFRI - J 17/200) and the epizoite (No. CMFRI - J 17/200 a) were deposited in the Reference Collection Museum of CMFRI at Mandapam Camp.

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MONSTRILLA TURGIDA SCOTT (COPEPODA - MONSTRILLOIDA)
 A NEW RECORD FROM THE INDIAN SEAS

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ABSTRACT

A description of the monstrolloid copepod *Monstrilla turgida* Scott, recorded for the first time from Indian Ocean is given here. The specimens, obtained in surface plankton tows in the lagoon waters of Minicoy Island, show some variations in the morphological characters from the type specimen described by Scott from the Pacific Ocean and these are discussed.

The following ten species of the monstrolloid copepod genus *Monstrilla* Dana 1849 (Genotype : *M. viridis* Dana; type locality : Sulu Seas) are known from the Indian Ocean : *Monstrilla grandis* Giesbrecht from Suez Canal (Gurney 1927); *M. anglica* Lubbock, *M. (?) conjunctica* Giesbrecht, *M. helgolandica* Claus and *M. investigatoris* Sewell from Nicobar Islands (Sewell 1949); *M. longipes* Scott from Nicobar Islands (Sewell 1949) and Red Sea (Al Kholy 1963); *M. sp.* from Madras coast (Krishnaswamy 1953); *M. lata* Desai and Bal (1962) from Bombay waters; *M. gohari* Al Kholy (1963); and *M. ghardaensis* Al Kholy (1963) from Red Sea. *Monstrilla turgida* reported here was first described by Scott (1909) based on two females collected during the Siboga Expedition off Laiwui, 0° 24'S 127° 36' E - Pacific Ocean, and there are no subsequent records of this species.