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RESEARCH ARTICLE

FIRST RECORD OF ISOPOD PARASITE, *NEROCILA PHAEOPLEURA* ON THE HOST FISH *RASTRELLIGER KANAGURTA* COLLECTED FROM BAY OF BENGAL, ODISHA COAST, INDIA

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ABSTRACT

The isopod parasite, *Nerocila phaeopleura* (Crustacea, Isopoda, Cymothoidae), collected from the caudal region of the host *Rastrelliger kanagurta* (Teleostei, Perciformes, Scombridae), has been recorded for the first time from the Bay of Bengal, Odisha coast.

Key words:

Nerocila phaeopleura, *Rastrelliger kanagurta*, first record, Odisha coast.

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INTRODUCTION

Cymothoid isopods are important parasites to many commercial fishes, which can cause damages of various ranges to the fisheries resources (Rabichandran *et al.*, 2009 and Sethi, 2012). The genus *Nerocila* of the family Cymothoidae includes around 65 species of fish parasites. Of them, only 17 nominal species have been reported from India. However, the parasite *Nerocila phaeopleura* has been recorded from about 20 different fish species from India, viz. *Carangoids malbaricus*, *Selaroids leptolepis*, *Chirocentus dorba*, *Dussumieria acuta*, *Sardinella brachysoma*, *Sardinella longiceps*, *Sardinella sindensis*, *Tenulosa ilisha*, *Stolephorus commersonnii*, *Thryssa dussumieri*, *Thryssa mystax*, *Ilisha melastoma*, *Parastomateus niger*, *Istiophorus platypterus*, *Rastrelliger kanagurta*, *Scomberomous guttatus*, *Arius jella*, *Gazza minuta*, *Leiognathus splendens* and *Sphyraena jello* (Trilles *et al.*, 2011, 2013). The present record of the parasite *Nerocila phaeopleura* on the host fish *Rastrelliger kanagurta* is the first report from the Bay of Bengal, Odisha coast.

MATERIAL AND METHODS

The host fish species *Rastrelliger kanagurta* was collected from a gill net operation on 23.04.2013 from Gopalpur-on-Sea, Bay of Bengal, Odisha coast. Identification of fish was based on taxonomic key characters (Talwar and Kacker, 1984). The

parasite was gently pulled up from the host body, preserved in 70% alcohol and deposited in the Zoological Museum, Animal Diversity Laboratory of Berhampur University, Odisha. The identification of the parasite was based on (Trilles *et al.*, 2011). The fish specimen was preserved in 2 % formalin and deposited in same museum.

RESULTS

The parasite *Nerocilla phaeopleura* was found attached to the posterior third of the body (caudal peduncle), below the lateral line, facing towards the head of the host (Fig. 1). Measurements: Total Length: 17.2 mm; Width: 7.1 mm (6th perionite); Length of antenna I: 2.8 mm; Length of antenna II: 2.7 mm; Length of the Pleotelson: 3.9 mm; length of exopod: 4.5 mm and endopod: 3.0 mm of Uropod. Description: Body is oblong and dorsoventrally flattened. Cephalon anterior margin rounded, posterior margin distinctly trilobed. A pair of sessile eye on the dorsal side of the cephalon. 2 distinct antennae. Antenna 1 is longer and stout with 9 segments. 7 perionites with 6th being the widest. 7 pairs of uniramous periopods having marginal spines and terminal claw like structure. 5 free pleonites and a 6th pleonite fused with telson (pleotelson). 6 pairs of biramous pleopods. Uropods extend beyond posterior margin of pleotelson having longer exopod than endopod.

Colour: Yellowish brown on dorsal surface. Dark strip along lateral side of the body, continued up to the exopods of uropods.

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Fig. 1. Isopod parasite: *Nerocila phaeopleura* on the host *Rastrelliger kanagurta*



Fig. 2. *Nerocila phaeopleura*

DISCUSSION

In India, The host fish species *Rastrelliger kanagurta* has been parasitised by 15 metazoan parasites, viz. three species of Monogenea, seven species of Digenea and five species of Copepoda (Madhavi *et al.*, 2011). However, two other species from the family Chymothidae (*Jryma brachysoma* and *Nerocila phaeopleura*) are the known parasites to the host species (Trilles, 2011). Of the two, the parasite *Nerocila phaeopleura* was recorded recently on the said host from Tamil Nadu coast (Rameshkumar and Ravichandran, 2010). Our present record of the species *Nerocila phaeopleura* from the same host, reported from the Bay of Bengal, Odisha coast, confirms its presence from an extended geographical range of East Coast of India.

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