

A NEW CYMOTHOID OF THE GENUS *NEROCILA* FROM MADRAS

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ABSTRACT

A new species of cymothoid Isopod, *Nerocila madrasensis* parasitic on gills of the fish *Hemiramphus* sp. collected from Madras sea shore waters, is described. A key to the Indian species of the genus *Nerocila* Leach is provided.

INTRODUCTION

While determining some marine Isopods pertaining to the genera *Livoneca*, *Irona* and *Nerocila* received from S. G. S. Arts College, Tirupati, the authors came across interesting material of the genus *Nerocila*. The species described here as new is based on the material collected by the junior author from Madras sea shore waters. All the material referred to above including those pertaining to *Nerocila* were collected from their parasitic 'lodges' in the gills of the fish, *Hemiramphus* sp. This Isopod crop seems to present its parasitic bloom on the host gills in the months of September to November.

The genus *Nerocila* Leach, 1818 is so far, known by the following species from the Indian region viz. :

1. *Nerocila sundaica* Bleeker
Recorded off Godavari (Sacraments mouth)

Andhra Pradesh and Ganjam coast (Orissa).

2. *Nerocila serra* Sch. & Mein.

Reported off Devi river. Orissa coast-clining to the abdomen of *Arius sagor* (Hamilton). Vizagapatam coast-attached to throat of the sea-snake, *Hydrophis obscurus* Daud. and Ganjam coast (Orissa).

3. *Nerocila phaeopleura* Bleeker

Bay of Bengal-found ecto-parasitic on *Histiophorus gladius*.

The authors are grateful to Director, Zoological Survey of India and Prof. V. Chandrasekharam, Head of the Department of Zoology, S. G. S. Arts College, Tirupati for the opportunity afforded to them in studying the material. The illustrations used in this paper are prepared by Shri A. K. Sardar, Artist, Z. S. I. to whom the authors thanks are due.

SYSTEMATIC ACCOUNT

Order	ISOPODA
Tribe	FLABELLIFERA
Family	CYMOTHOIDAE
Genus	<i>Nerocila</i> Leach

Nerocila madrasensis sp. nov.

(Figs. 1-3)

Description: Body oblong oval (Figs. 1 & 2) little less than half as long as wide. Surface glabrous with reticulate network. Cephalon large, sub-quadrate, much wider than medianally long, with anterior margin straight, and both corners of the front rounded. The posterior margins produced into three lobes, all equal in size. Eyes quite large, oval in shape and situated in postero-lateral angles of head. First pair

of antennae (Fig. 3C) stout and composed of eight articles and extend upto beginning of first thoracic somite. Second pair of antennae composed of ten articles extending upto middle of the first thoracic segment the last four articles being slender and gradually diminishing in size. Maxilliped (Fig. 3B) with a palp of two articles.

Thorax broadest at 6th segment diminishing in size at either ends gradually. First and sixth segments longer than others. post-lateral angles of last two segments

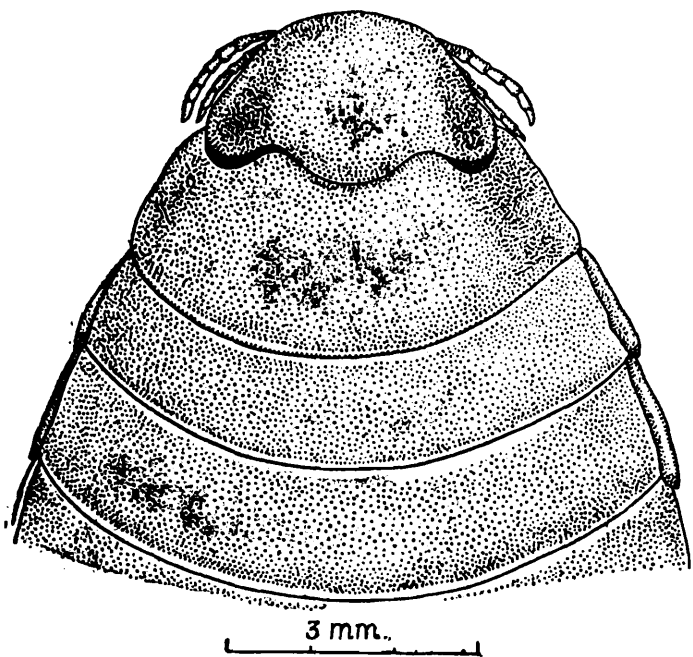


Fig. 1. *Nerocila madrasensis* sp. nov. Dorsal view of the cephalon and first few segments of thorax.

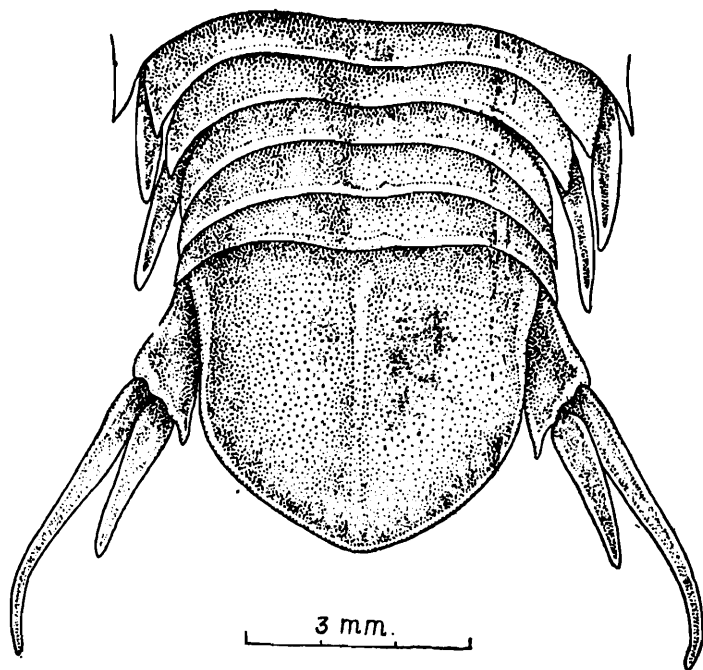


Fig. 2. *Nerocila madrasensis* sp. nov. Dorsal view of pleon and the uropoda

acutely produced and extend beyond epimera. Epimera distinct on all segments with exception of first, first four small with their posterior margins rounded, last three acutely produced, the epimera extending beyond posterior margins of segments.

All segments of abdomen (Fig. 2) distinct. Sixth or the terminal segment

broadly rounded posteriorly. Uropod (Fig. 3D.) lanceolate, inner branch broader at proximal and broadly pointed at distal ends. Outer branch twice as long as inner ramus, slightly narrower and produced to close extremities, outer branch also somewhat narrower at base compared with inner one.

Type specimens : *Holotype* : ♀, Madras (Tamil Nadu) Collector : P. Venkata Ramaniah, Reg. No. C. 1680/2

Paratypes : 2 ♀♀, with the same data as for the holotype, Reg. No. C. 1681/2.

All the specimens (females only) are incor-

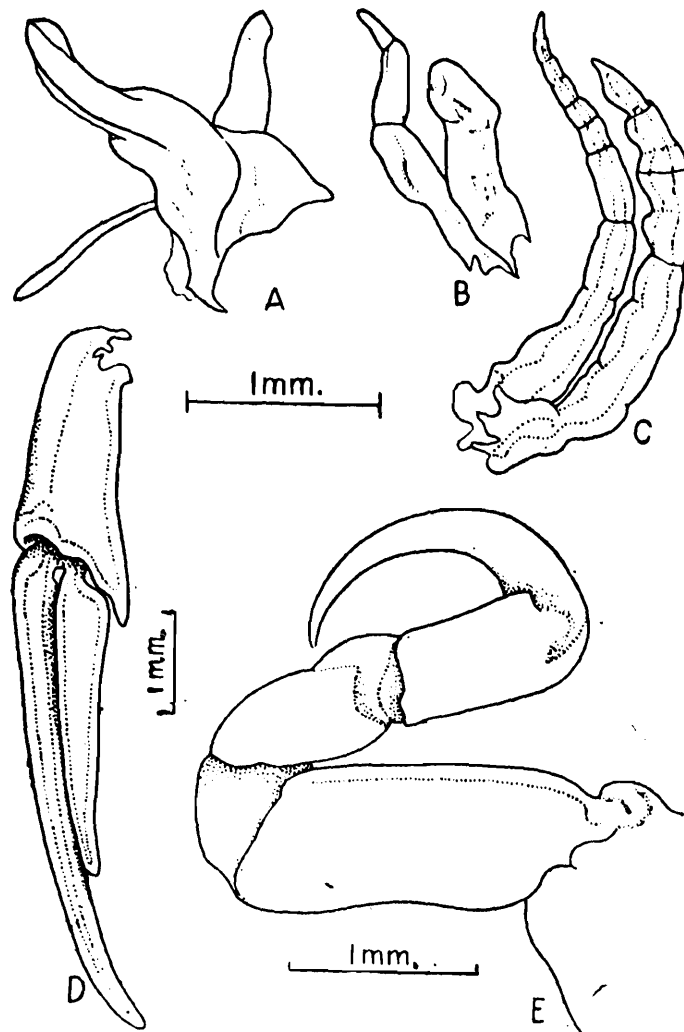


Fig. 3. *Nerocila madrasensis* sp. nov. (a) Maxilla (b) Maxilliped (c) Antennae (d) Uropoda (e) Seventh leg

Seventh leg (Fig. 3E) prehensile and terminate in long curved dactyli. Dark brown in colour except for one, with a little bluish tinge.

Length and breadth (greatest) of the holotype being 16 and 8 mm. respectively.

porated in the National Collections of the Zoological Survey of India, Calcutta.

Remarks :— This species resembles *Nerocila serra* and *Nerocila trich'ura* to some extent, specially in the shape and size of the body and last segment of the abdomen, and

with *Nerocila trichtura* and *Nerocila munda* regarding sub-quadrate shape of the cephalon. However, it differs from the above species in respect of shape and size of epimera of the thoracic segments, eyes, disposition, size and shape of appendages, specially the antennae, maxilla, maxilleped and the uropoda.

Key to the Indian species of the genus Nerocila

- a. Postero-lateral angles of all the peraeon segments backwardly produced.
- b. Cephalon almost quadrate with anterior border broadly rounded ; first antenna composed of nine articles and edges of endopod of Uropoda not serrate and one-third the size of exopod... *phaeopleura*
- bb. Cephalon almost quadrate with anterior border broadly rounded ; first antenna composed of eight articles and edges of endopod of Uropoda conspicuously serrate and more than half of exopod
..... *serra*
- aa. Postero-lateral angles of first peraeon segment only backwardly produced.

Cephalon triangular with anterior border broadly rounded ; first antenna composed of seven articles and endopod of Uropoda two-thirds that of exopod.... *sundaiica*

- aaa. Postero-lateral angles of the first five peraeon segments not backwardly produced. Cephalon sub-quadrate with anterior border straight; first antenna composed of eight articles and endopod of Uropoda half the size of exopod.... *madrasensis*

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