

ON THE OCCURRENCE OF *OPLOPHORUS SPINOSUS* (OPLOPHORIDAE, CARIDEA) IN BAY OF BENGAL

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ABSTRACT

An advanced post larva of a male caridean shrimp, *Oplophorus spinosus* (Oplophoridae, Caridea) is reported for the first time, from Bay of Bengal, in the Indian Ocean. This species has been recorded earlier in the Indo-Pacific, from south west of Indian Ocean to west of Australia and Indonesia and south of Japan, as also the Atlantic.

Key words: *Oplophorus spinosus*, Caridea, Bay of Bengal.

One specimen of post-larva, total length 31 mm, rostral length 11 mm, collected during the 155th cruise of *R. V. Gageshani* at Station No. 3599 off Madras (Lat. 13°00'N and Long. 82°00'E) on 1st June, 1985, at 2345 Hrs forms the material for this report. The collection was made from a vertical haul (200-0m) using an HT net from a region with sounding-depth of 3000 m.

The presence of a long median spine on the third abdominal segment and median spines on the 4th and 5th segment; exopodites on all the legs (reduced exopod on leg 5); spines on the outer margin of the antennal scale and the presence of 8+1 + 8 telsonic processes in the telson are the diagnostic characters, and the present specimen agrees well with the characters (Fig. 1) of those of *Hoplophorus grimaldii* of Gurney and Lebour (1941), recently synonymised with *Oplophorus spinosus* (Crosnier and Forest 1973).

Developmental stages of the genus *Oplophorus* H. M. Edwards have not been fully described except for the early larval stages and a post-larva taken at Bermuda from 'Discovery Plankton' (Gurney and Lebour 1941). The Bermudan specimen had a dorsal and ventral tooth in excess than the present specimen did. The occurrence of this excess rostral teeth can be of a temporary nature as the slender body, longer spines on abdominal segments, and the position of the last ventral tooth indicate more of larval nature than the adult characters. In addition to this the presence of pleopods with setose exopods and endopods, and

the development of endopod of the first pleopod into a petasma in the present specimen show that the specimen is definitely in an advanced post larval stage.

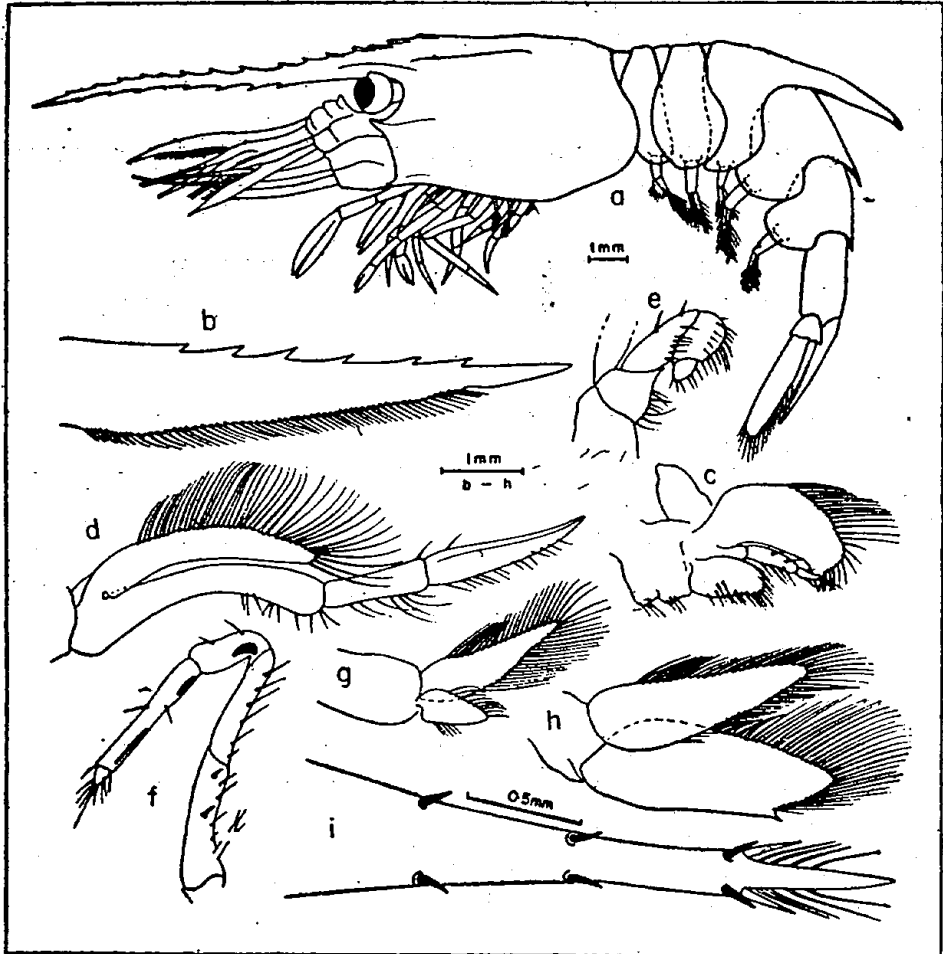


Fig. 1. Advanced post larva of *Oplophorus spinosus*

a. entire animal; b. antennal scale; c. maxilla; d. 1st maxilliped; e. 2nd maxilliped; f. 5th thoracic leg; g. 1st pleopod; h. uropod; and i. telson.

O. spinosus is reported to be widely distributed from south west of Australia and Indonesia and South of Japan (Crosnier and Forest 1973) as also the Atlantic.

O. gracilirostris is the most common species occurring in Bay of Bengal (Alcock 1901, De Man 1920, George and Rao 1966), but not *O. spinosus*. The occurrence of this member therefore is of significant interest.

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REFERENCES

- Alcock, A., 1901. A Descriptive Catalogue of the Indian deep-sea crustacea, decapoda, macrura and anomala in the Indian museum, Revised Account of the Deep-sea Species collected by the Royal Marine Survey ship "Investigator," Calcutta, India, 286 pp.
- Crosnier, A., and J. Forest., 1973. Les Crevettes Profondes De L'Atlantique Oriental Tropical — Oplophoridae. *Fauna Tropicale No. XIX*: 24-27.
- De Man, J. G., 1920. Decapoda. Part IV. *Siboga-Expedito*. (Monograph) 39a. 1-318.
- George, M. J. and P. Vedavyasa Rao., 1966. On some decapod crustaceans, from the south-west coast of India. *Proceedings of the symposium on crustacea*; Marine Biological Association of India. Part 1,; 327-336.
- Gurney, R., and M. V. Lebour., 1941. On the larvae of certain crustacea, macrura, mainly from Bermuda. *The Linnean Society's Journal - Zoology, XLI* (No. 277): 89-181.