

Notes on the cumacean Crustacea from Suruga Bay*

By

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Only three species of Cumacea—*Bodotria* sp. (off Omai Zaki Lighthouse) and *Symphodomma diomedae* (CALMAN) (off Ose Zaki) (CALMAN, 1912) and *Cumella* sp. (Yeno-ura) (ZIMMER, 1943)—were ever described from Suruga Bay.

The present short report, however, deals with a small collection of Cumacea gathered *later* (July 14th, 1967) from off the west coast of Suruga Bay by the 'Suruga Maru'—the fishery research ship of the Sizuoka Prefectural Fishery Experimental Station, while it was engaged in its biological survey in Suruga Bay, taking part in the Biological Survey of Productivity of Marine Communities in Sagami and Suruga Bays—an annual fixture planned by the Japanese National Committee for the International Biological Programme. And those cumaceans were collected by a beam trawl net at Station 1 (off Kuno-zan) and Station 4 (off Wadahana-zaki), both from the sandy-mud bottom (depth 80 m or so). They were kindly offered to me by Dr. Masaaki MURANO of the Ocean Research Institute, University of Tokyo, at my disposal for identification.

Among them were found the following seven species:—

- Iphinoe sagamiensis* GAMÔ
- Symphodomma diomedae* (CALMAN)
- Eudorella* sp. (A)
- Eudorella* sp. (B)
- Cumella* sp.
- Dimorphostylis coronata* GAMÔ
- Dimorphostylis* sp.

I wish to express my sincerest thanks to Dr. Masuoki HORIKOSHI of the Ocean Research Institute for giving me an opportunity to study those specimens and to Dr. M. MURANO for offering them.

Family Bodotriidae

Iphinoe sagamiensis GAMÔ

(Fig. 1)

Material: St. 1, 1♀ ovigerous 9.4 mm.

The adult female bears 21 teeth on the dorsum of the carapace and carries

* This study is carried out as part of JIBP project, reporting the classification and biology of cumacean Crustacea.

94 embryos in the marsupium. The following two stages were found:—

Four were found in their early manca stage (Fig. 1, B); the first four pereopods and uropods are armed with setae and spines, and the ocular lobe prominent; there is a stout spine on the frontal lobe; the antero-lateral corner of the carapace has serrations.

The rest of them were embryos in a later stage, with rudimentary appendages (Fig. 1, A).

Distribution: Sagami Bay, Kii Peninsula, Amakusa.

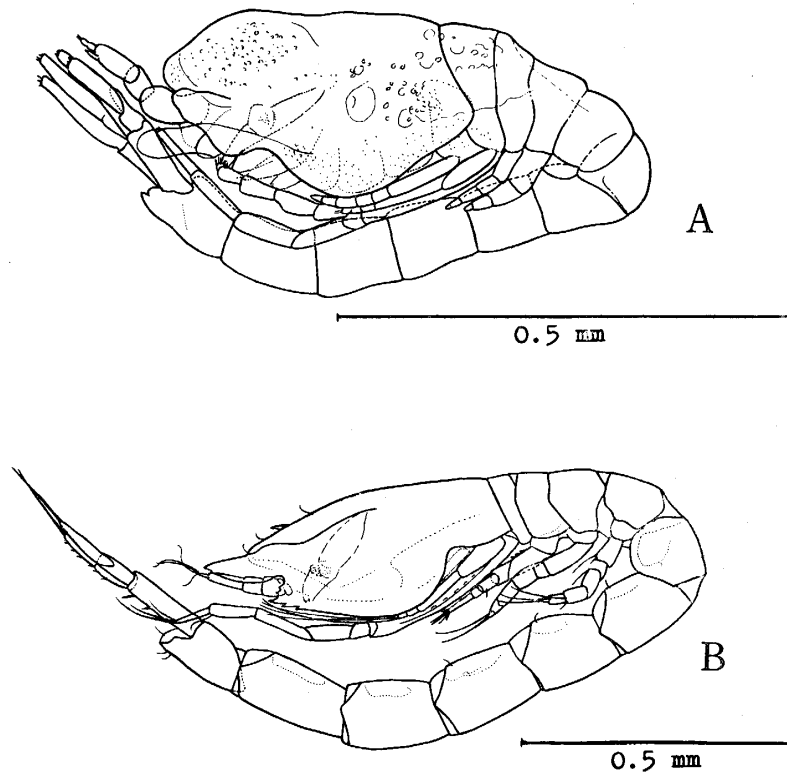


Fig. 1. *Iphinoe sagamiensis* GAMÔ. A: embryo in a later stage.
B: early stage of manca larva. (lateral view)

Sympodomma diomedea (CALMAN)

Material: St. 1, 1♀ ovigerous 13.1 mm, 1♀ with rudimentary marsupium 12.8 mm.

The specimens well agree with the CALMAN'S original description and figures. The ovigerous female carries 91 embryos (0.46×0.33 mm in diameter) in the marsupium.

Distribution: Sagami Bay, off Ose Zaki (in Suruga Bay) and Amakusa, sandy bottom, 10-128 m.

Family Leuconidae

Eudorella sp. (A)

(Fig. 2)

Material: St. 4, 1♀ with marsupium 5.8 mm.

The carapace is nearly 1/5 of the animal length and nearly 1 1/4 times

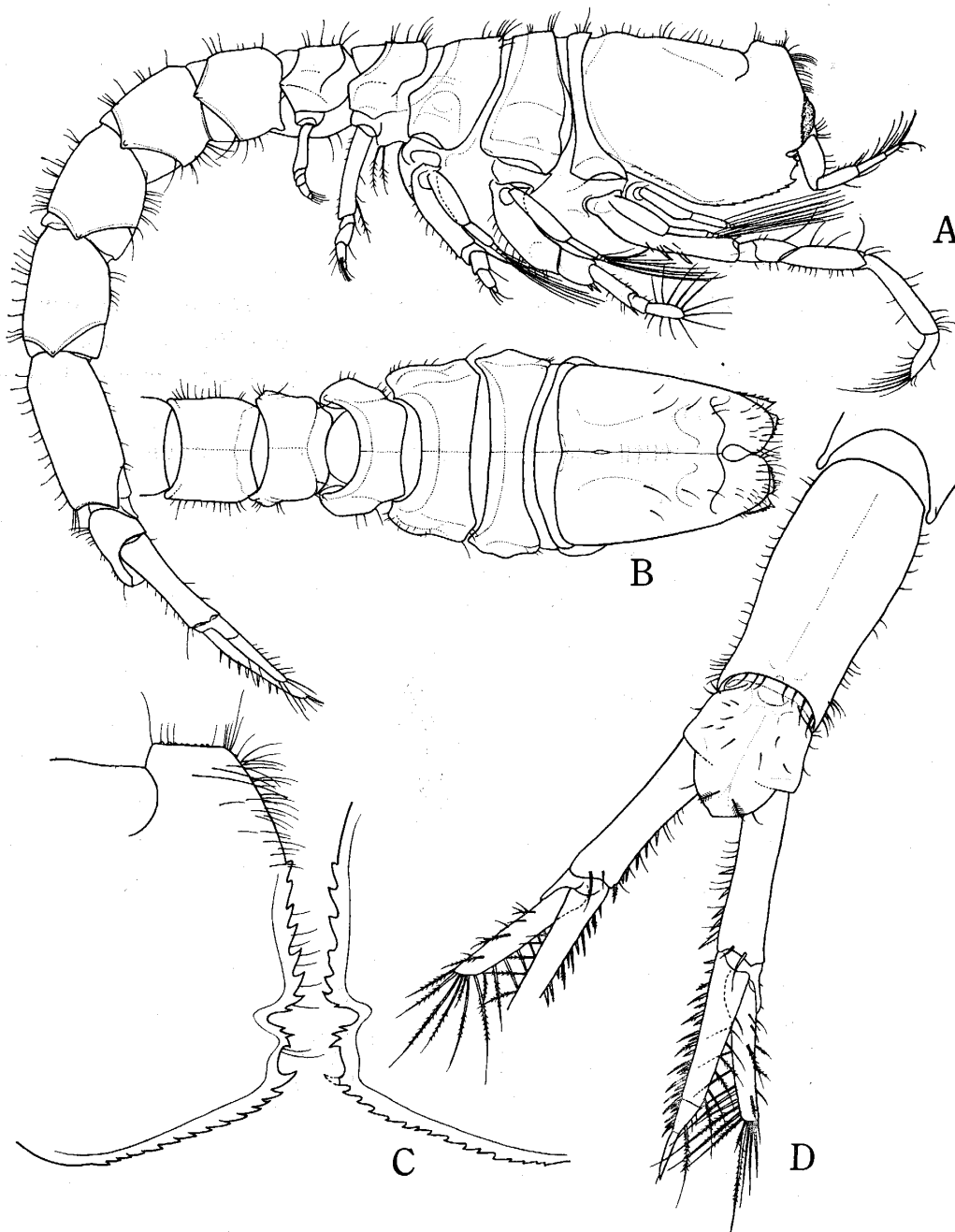


Fig. 2. *Eudorella* sp. (A). Adult female with marsupium (5.8 mm).
A: lateral view. B: anterior portion of body, dorsal view. C: anterior portion of carapace, viewed from both sides (marginal hairs on right side edge of carapace are omitted). D: uropods with last three abdominal segments.

the width which is more than the depth. The teeth on the anterior margin of the carapace are as shown in Fig. 2, C. The peduncle of the uropod is nearly $1\frac{1}{4}$ times the length of the last abdominal segment and furnished with five spines on the hairy inner margin. The endopod is two-segmented and almost equal to the peduncle in length; the proximal segment has 18 spines on its inner border and 7 setae on its outer. The distal segment is very short, about $\frac{1}{4}$ of the proximal one, bearing five spines on its inner border, three setae on its outer and one stout spine at its apex.

The female specimen resembles *E. hispida* SARS, *E. intermedia* HANSEN, *E. hirsuta* SARS and *E. monodon* CALMAN.

Eudorella sp. (B)

(Fig. 3)

Material: St. 1, 1♀ juvenile 2.7 mm.

The carapace of the juvenile female is partly broken. The specimen resembles *E. sp.* described by GAMÔ (1967) from Sagami Bay and above mentioned species, from which the species may be distinguished, having different armatures on its uropod.

The exact specific identification is reserved to further studies.

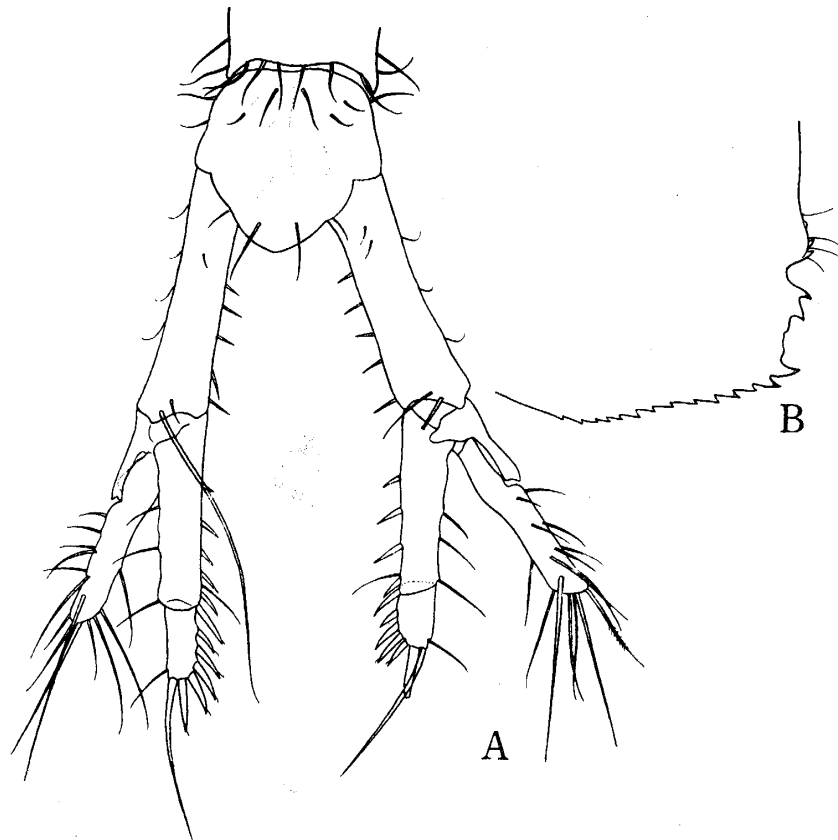


Fig. 3. *Eudorella* sp. (B). Juvenile female (2.7 mm). A: anterior portion of carapace, viewed from side. B: uropods with last abdominal segment.

Family Nannastacidae

Cumella sp.

(Fig. 4)

Material: St. 4, 2♂ adult 2.4 mm.

The carapace of the adult male is nearly 1/3 of the body length and about twice as long as its width which is a little less than its depth. On the dorso-median portion are found seven spines pointing forward. The free thoracic and abdominal segments are covered with minute spiniform granules and furnished with crests of spines on their dorsum. The peduncle of the uropod is almost equal to the last abdominal segment in length, and bears five spines on its serrated inner border. The endopod is nearly 3/4 as long as the peduncle, bearing five spines on its serrated inner border and one stout spine at its apex. The exopod, a little shorter than the endopod, is furnished with one seta near the distal portion of its inner border and with a long spine and a seta standing side by side and both on the apex.

The species somewhat resembles *C. pygmaea typica* SARS, *C. limicola* SARS, *C. forficula* CALMAN, *C. hispida* CALMAN and *C. serrata* CALMAN, from all of

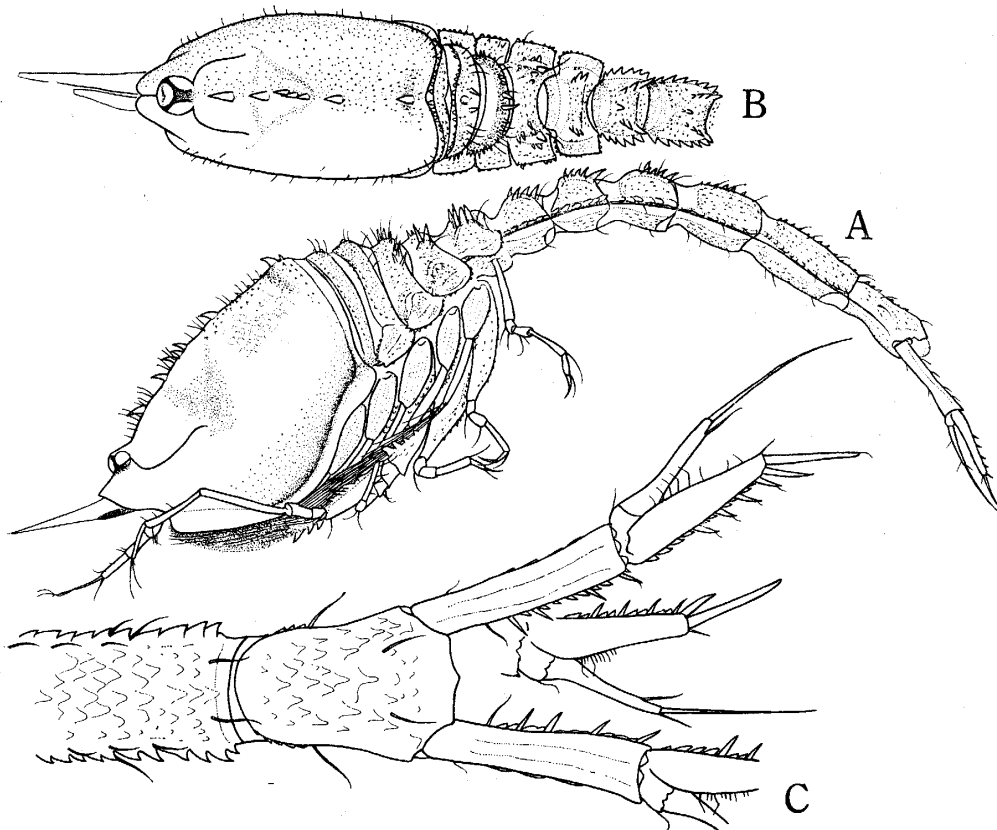


Fig. 4. *Cumella* sp., adult male (2.8 mm). A: lateral view. B: anterior portion of body, from above. C: uropods with last two abdominal segments.

which it can be distinguished by its armatures on the carapace and uropod and its length of segments of the uropod. It may be newly recorded from Japanese waters.

Family Diastylidae

Dimorphostylis coronata GAMÔ

Material: St. 1, 8♂ and 5♀ with rudimentary marsupium; St. 4, 1♀ with rudimentary marsupium, about 5 mm (exclusive of the telson).

Distribution: Sagami Bay, Amakusa, sandy bottom, about 20 m.

Dimorphostylis sp.

Material: 1♀ juv., 3.2 mm.

The specimen resembles *D. asiatica* ZIMMER. As the specimen is juvenile, the exact specific identification is impossible.

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