

A LARVAL GNATHIID FROM SETO, JAPAN  
(CRUSTACEA : ISOPODA)<sup>1)</sup>

SABURO NISHIMURA

Seto Marine Biological Laboratory, Sirahama

With 1 Text-figure

Through the courtesy of Drs. R. BIERI and T. TOKIOKA, the gnathiid specimens collected in the vicinity of Seto by their quantitative meio-epibenthos sampler 'Dragonet II' (BIERI & TOKIOKA 1968) were placed at my disposal for examination. The collection consisted of nine individuals in the larval stage, the largest measuring 1.56 mm long  $\times$  0.48 mm wide and the smallest 0.98 mm  $\times$  0.32 mm. On closer examination, they were revealed to be a member of the genus *Gnathia* LEACH, 1813. The specific identification is impossible, however, since the gnathiid fauna of Japan has been practically left untouched except for a few species reported by RICHARDSON (1909) and MONOT (1926). Below is given a short description of these specimens, together with a few sketches to show their morphological characteristics.

*Acknowledgments*—I am deeply grateful to Dr. R. BIERI of the Antioch College, U.S.A., and to Dr. T. TOKIOKA of our laboratory for their kindness in giving me the chance to study these interesting specimens.

*Gnathia* sp., larva

(Fig. 1)

Body oblong-ovate, 3.0–3.3 times as long as wide. Cephalon relatively large, about 0.6 time as long as wide, with the front produced in a truncated lobe. The mouth parts protrude conspicuously forward from the cephalon. The eyes are large, composed each of about 44 ocelli, situated at the sides of cephalon and occupying almost the whole of the lateral margin. The antennae are rather short and as usual in structure; the relative lengths of segments are  $16+15+26+3+25+11+4=100$  for the first antenna and  $11+11+17+26+5+5+5+5+5+5+5=100$  for the second antenna. The pleotelson is triangular, slightly longer than wide, and bidentated

---

1) Contributions from the Seto Marine Biological Laboratory, No. 482 and Studies of Meiobenthos by Dragonet, No. 4.

at the extremity. The lateral margin is sublinear. The uropods bear plumose and simple setae distributed in the following way:

Endopodite	{	Inner margin: 6 plumose setae + 1 simple seta
		Outer margin: 2 simple setae
		Dorsal surface: 7 plumose setae (1+2+1+1+2)
Exopodite	{	Inner margin: 4 plumose setae
		Outer margin: 6 simple setae (1+1+1+3)

The specimens were collected at 6 km west of Cape Seto-zaki, on the southwest of the mouth of Tanabe Bay, 100 m deep sandy bottom, on October 24, 1966.

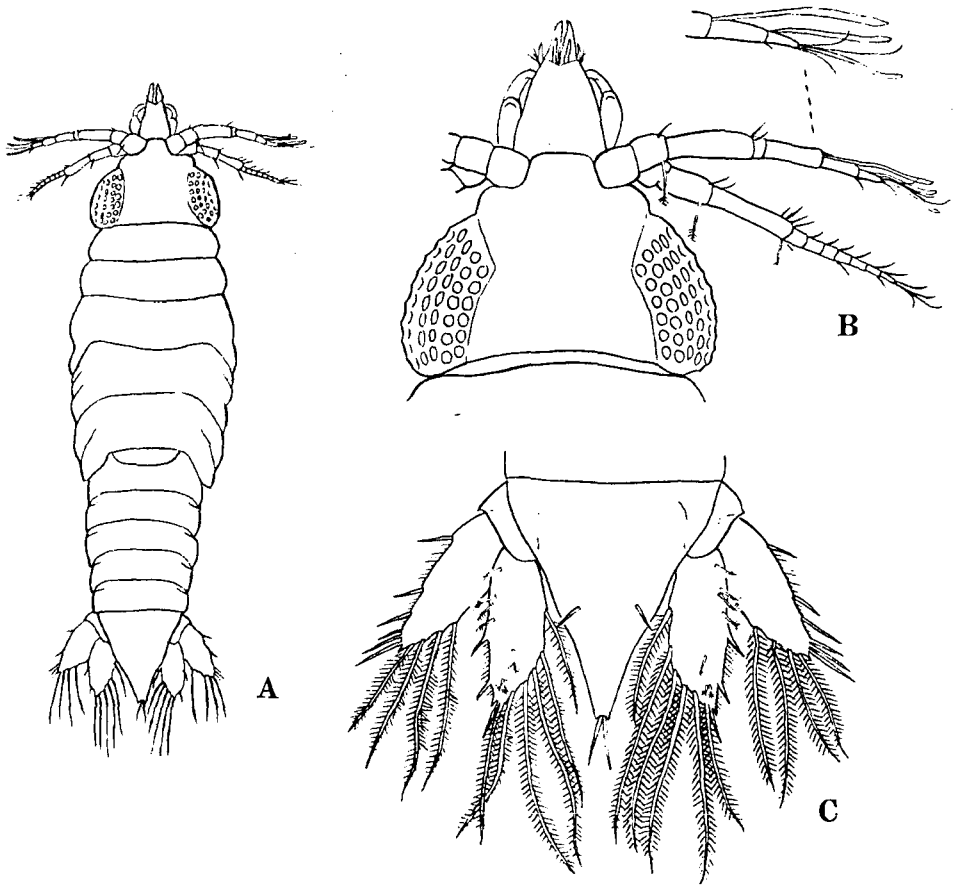


Fig. 1. *Gnathia* sp., larva.

A—dorsal aspect, legs omitted,  $\times 48$ ; B—cephalon, tergal view,  $\times 115$ ; C—pleotelson and uropods, tergal view,  $\times 115$ .

**REFERENCES**

- BIERI, R. & TOKIOKA, T. 1968. Dragonet II, an opening-closing quantitative trawl for the study of microvertical distribution of zooplankton and the meio-epibenthos. Publ. Seto Mar. Biol. Lab., vol. 15, pp. 373-390.
- MONOT, TH. 1926. Les Gnathiidae. Essai monographique (morphologie, biologie, systématique). Mém. Soc. Sci. Nat. Maroc, no. 13, 668 pp., 1 col. pl.
- RICHARDSON, H. 1909. Isopods collected in the northwest Pacific by the U.S. Bureau of Fisheries steamer "Albatross" in 1906. Proc. U.S. Natl. Mus., vol. 37, pp. 75-129.