A new species of Gnathia (Crustacea, Isopoda) from the sea off Ibaragi, central Japan

Bulletin of the Toyama Science Museum No.12, pp.27-28 : (1988)

A New species of *Gnathia* (Crustacea, Isopoda) from the Sea off Ibaragi, Central Japan*

Noboru Nunomura
Toyama Science Museum

茨城県沖から発見されたウミクワガタの一新種

布村　昇
富山市科学文化センター

茨城県沖から発見されたウミクワガタ亜目(等脚目)の新種を、*Gnathia discolor*（和名：ソメワケウミクワガタ）として記載した。本種は大顎の形態や体色などの特徴から他の *Gnathia* 属と区別されるが、中でも *Gnathia biorbis* Holdich and Harrison と最も類似している。本種は *biorbis* と、染め分け模様の体色のほか、大顎の形態等で、新種と判断した。完模式標本は富山市科学文化センターで保管される（TOYA-Cr-7604)。

In summer, 1986, during a survey of the Sea off Ibaragi ken, a gnathiid specimen was collected by Mr. Hisao Inoue and then they were handed over to me for identification. At close examination, it proved to represent a new species of the genus *Gnathia*.

Before going further, I wish to express my sincere gratitude to Mr. Hisao Inoue for his kindness in collecting the sample.

Gnathia discolor sp. nov.

(Jap. name : Somewake-umikuwagata, new)

Figs. 1 and 2

Material examined : 1 ♂ (holotype, 6.2mm in body length including mandibles but excluding both antennae), from the sea off Isohara, Kita-ibaragi shi, Ibaragi ken, coll. Hisao Inoue, Aug. 10, 1986. Holotype is deposited at the Toyama Science Museum, (TOYA-Cr-7604). No female specimen has been collected.

Description : Body rather long, 2.9 times as long as wide. Body pale yellow with a black band in the posterior part of pereon. Cephalon rectangular and about 0.6 time as long as wide. Anterior margin with a medial concavity and a pair of submedial tubercles. Mandibles rather large with a triangular process on inner margin. Eyes lateral and mediocre in size, each eye composed of 42 ommatidia.

Antennule (Fig. 1 B) with peduncular segments 1 and 2 subequal in length and segments 1 and 2 together subequal to 3. Flagellum 5-segmented ; segment 1 reduced, segments 3～4 each bearing a single aesthetasc and segments 5 bearing 2 aestethascs at the tip.

*Contributions from the Toyama Science Museum, No. 76

Antenna (Fig. 1 C) with peduncle subequal to antennule; segment 1 short; segment 2 longer than segment 3, segments 2 and 3 together suequal to segments 4; segment 5 slightly shorter than segment 4. Flagellum with 7 segments.

Mandible (Fig. 1 D) long and bents innerwards, with all the blades without supra ocular lobes.

Pylopod (Fig. 1 F) 2-segmented; segment 1 with about 25 setae; segment 2 small and long with a series of short setae.

Pereopods (Fig. 2 A-E) of usual gnathiid form; basis oblong; ischium rectangular and shorter than basis; merus about 2/3 time as long as ischium; carpus slightly shorter and narrower than merus; propodus oblong with a series of short spines and a stouter spine in the middle part of inner margin.

Pleopod 2 in male (Fig. 1 G); stylus long, arising from the basal part of inner margin and exceeding both lobes.

Uropods (Fig. 1 H) both rami of equal length, slightly extending beyond apex of pleotelson. Both rami with 6~8 simple setae around the margin.

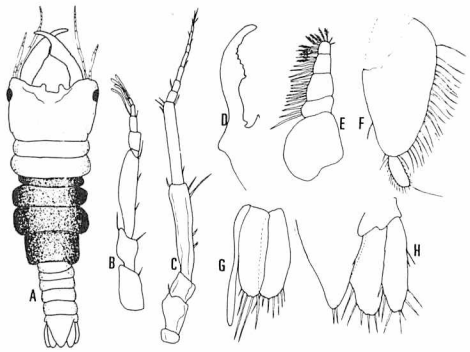

Fig. 1 *Gnathia discolor* sp. nov.
A. Dorsal view; B. Antennule; C. Antenna; D. Mandible; E. Maxilliped; F. Pylopod; G. Pleopod 2; H. Pleotelson and uropod (All: holotype male).

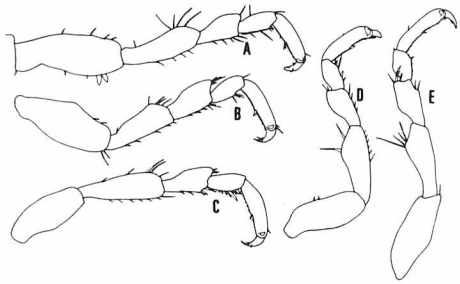

Fig. 2 *Gnathia discolor* sp. nov.
A-E. Pereopods 1~5 (All: holotype male).

Remarks: The present new species is most closely allied to *Gnathia biorbis* reported from Queensland but the former is separated from the latter in the following features: (1) color pattern, (2) shape of mandible, (3) only 2-segmented of pylopod, and (4) shape of a pair of tuberences on the anterior margin of cephalon.

References

Monod, T., 1926. Les Gnathiidés. Essai monographique (Morphologie, Biologie, Systematique), Mem. Soc. Sci. Nat. Phys. Maroc., 13: 1-668.

Holdich, D.M. & K. Harrison 1980. The crustacean Isopod Genus *Gnathia* from Queensland Waters with descriptions of nine new species. Aust. J. Mar. Freshwat. Res. 31: 215-240.