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A New Species of the Genus *Aega* (Crustacea Isopoda) from the Sea off Okinawa*

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グソクムシ科等脚目の一新種、*Aega giganteocula* の記載

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沖縄本島糸満市沖から採集されたグソクムシ科（甲殻類、等脚目）の１種を新種 *Aega giganteocula*（和名：メダマグソクムシ）として記載した。本種は北大西洋から知られている *Aega ventrosa* Cars と類似するが（１）腹尾節各節が広いこと（２）尾節の先端が丸いこと、（３）両複眼が大きく、また接していること、（４）胸節基板があまり、発達しないこと（５）第一触角が短いこと、（６）第二触角が長いこと、（７）オスの第二腹肢の交尾針がまっすぐに伸長すること等によって区別される。

Some aegid specimens were collected in the sea, off Itoman, Okinawa Island, Southern Japan and they were sent to me by the coutesy of Dr. H. Sekiguchi, Mie University, Then at the close examinations of mine, they proved to be represent a new species belonging to the genus *Aega*.

Before going further, I wish to express my sincere gratitude to Dr. Hideo. Sekiguchi for offering me to examine such interesting samples.

Aega giganteocula sp. nov.

(Jap. name : Medama-gusokumushi, new)

Figs. 1 and 2

Material examined : 5 ♂♂ (1 ♂ holotype, 16.8mm in body length and 4 ♂♂ paratypes, 12.1～16.2mm in body length) and 1 ♀ (allotype, 10.3mm in body length), from the sea off Itoman, 40m in depth, Okinawa Island. coll. Hideo Sekiguchi, July, 1985. Type series is deposited as follows : holotype (TOYA Cr-7647), allotype (TOYA Cr-7648) and 2 paratype (TOYA Cr 7649～7650) at the Toyama Science Museum, a paratype (OMNH-Ar 3254) at the Osaka Museum of Natural History and a paratype (NSMT-Cr 9388) at the National Science Museum, Tokyo.

Description : Body ovate, 2.9 times as long as wide. Pleon not much narrower than pereon. Eyes very large and contiguous, each eye composed of about 180 ommatidia. Anterior margin of cephalon not produced a remarkable rostrum.

*Contributions from the Toyama Science Museum, No. 74

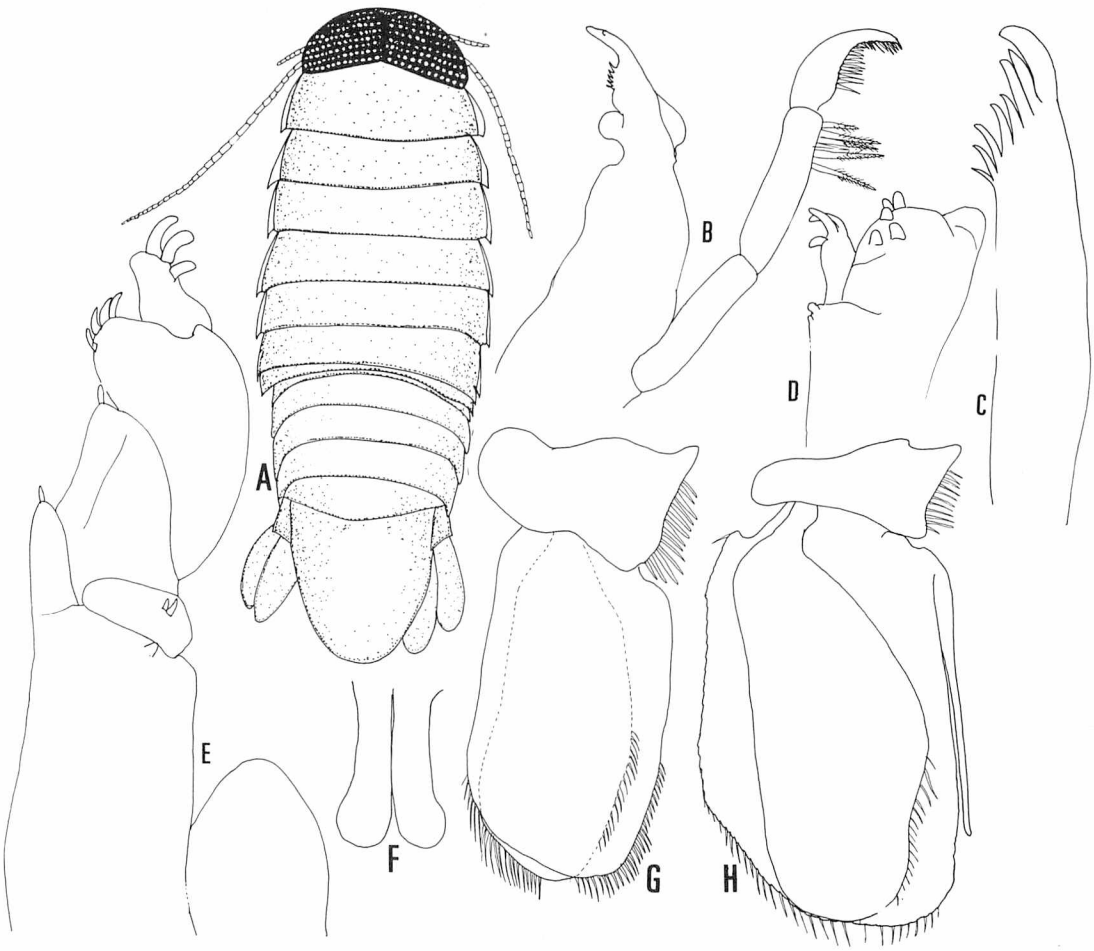


Fig. 1 *Aega giganteocula* sp. nov.
A. Dorsal view ; B. Mandible ; C. Outer lobe of maxillule ; D. Maxilla ; E. Maxilliped ; F. Penes ; G. Pleopod 1 ; H. Pleopod 2. (All : Holotype male).

Antennule (Fig. 2 A) with peduncular segment 1 almost square ; segments 2 and 3 rectangular. Flagellum composed of 13～14 segments.

Antennta (Fig. 2 B), reaching the middle part of the 5th pereonal somite. Flagellum composed of 30 ommatidea.

Mandible (Fig. 1 B). Pars incisiva strong and composed of a single tooth ; lacinia mobilis composed of 5 small spines. Palp composed of 3-segmented ; segment 1 oblong, segment 2 slightly as long as the 1st ; segment 3 0.7 times as long as the second, bearing about 19 spines on outer margin.

Maxillule (Fig. 1 C) ; outer lobe with 8 teeth at the tip.

Maxilla (Fig. 1 D) ; inner lobe narrow with 3 spines ; outer lobe rather stout and with 5

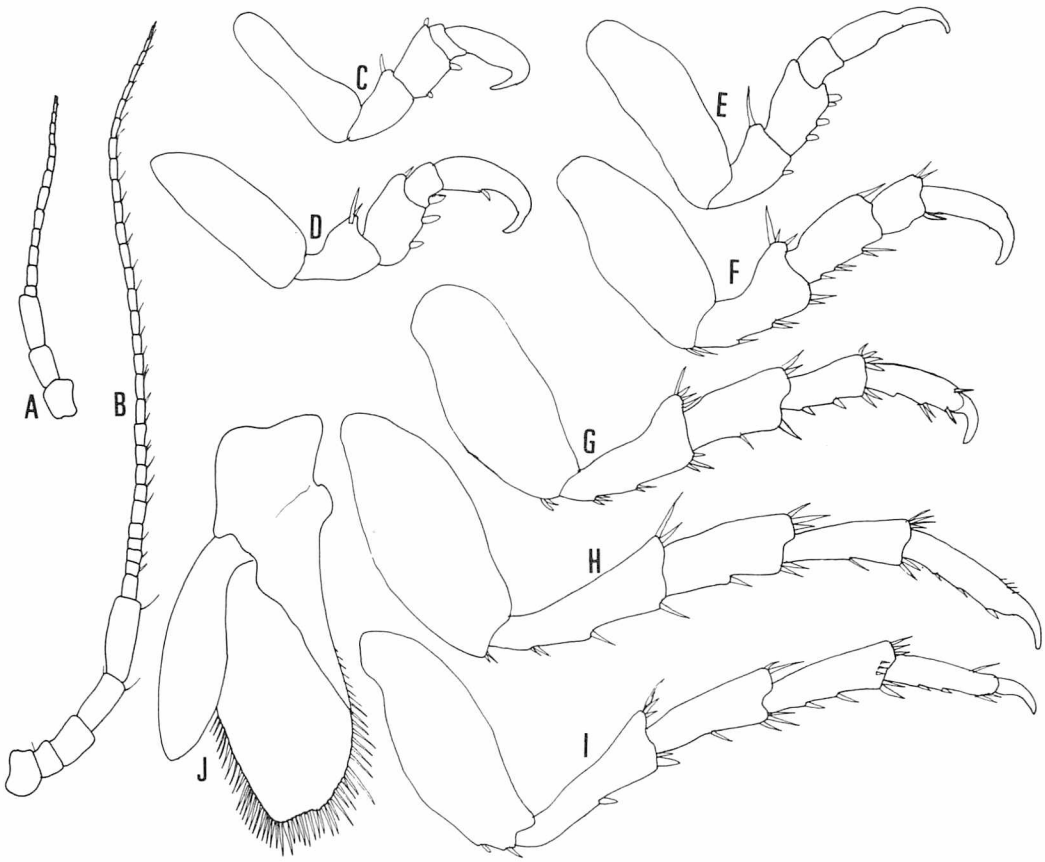


Fig. 2. *Aega giganteocula* sp. nov.
A. Antennule ; B. Antenna ; C-I. Pereopods 1~7 ; J. Uropod (All : Holotype male).

robust spines.

Maxilliped (Fig. 1 E) ; endite small. Palp well developed and 4-segmented.

Pereopod 1 (Fig. 2 C) ; basis oblong ; ischium triangular ; merus rectangular with 2 spines on inner margin ; carpus short ; propodus and dactylus form a subchelate form.

Pereopods 2 and 3 (Fig. 2 D-E) ; basis oblong ; ischium triangular ; merus rectangular with 2~4 spines ; carpus square and small ; propodus and dactylus forms a subchelate form.

Pereopods 4~7 (Fig. 2 F-I) ambulatory and increasing in length posteriorly ; basis stout ; ischium oblong and tapering toward the distal end ; merus rectangular and shorter than ischium ; carpus rectangular but narrower than merus ; dactylus simple.

Penes (Fig. 1 F) paired and swollen in apical part.

Pleopod 1 (Fig. 1 G) ; basis rectangular with 13 coupling hooks ; both rami broad and lanceolate.

Pleopod 2 (Fig. 1 H) ; basis rectangular with 11 coupling hooks ; inner rami broad and

lanceolate with short and narrow stylus ; exopod also broad-lanceolate.

Uropod (Fig. 2 J) basis long ; endopod broad lanceolate with a series of marginal spines ; exopod narrow.

Remarks : The present new species is most closely allied to *Aega ventrosa* Cars collected from Northern Atlantic Ocean, but the former is separable from the latter in the following features : (1) wider pleonites, (2) rounded tip of pleotelson, (3) bigger and contiguous each eye, (4) less remarkable epimera of all the pereonites, (5) shorter antennule, (6) longer antenna, and (7) straight stylus on the endopod of male 2nd pleopod.

References

Brusca, R.C., 1984. A monograph on the isopod family Aegidae in the tropical eastern Pacific. I. The genus *Aega*. Allan Hancock Fd. Monogr. Mar. Biol. 12, 1-39.

Kussakin, O.G., 1979. Marine and brackish water Isopoda of the cold and temperate waters of the Northern Hemisphere, Suborder Flabellifera. Opredelitili po Faune SSSR, 122 : 1-470 (in Russian).

Richardson, H., 1905. A monograph on the isopods of North America. Bull. U.S. Nat. Mus. 54 : 1-727.

Richardson, H. 1909. Isopods collected in the Northwest Pacific by the U.S. Bureau of Fisheries Steamer "Alba Tross" in 1906.

Sars, M., 1859. Oversigt over de i den norsk-arctiske region forekommende Krebsdyr. Forhandl. Vidensk. selsk. for 1958., 1859, ; 122-163.

Schioedte J.C. et Meinert. F. 1879. Symbolae ad monographiam cymothoarum Crustceorum Isopodum Familie I. Aegidae-Naturhist. Tiddskr. Kjöben haven, ser. 1879, v. 12, 321-379.

Thielemann, M., 1910. Beiträge zur Kenntnis der isopodenfauna Ostasiens. Abhndl. Wiss., suppl. 3 : 1-109.