Redescription of Idotea (Pentidotea) rotundata Richardson, 1909

富山市科学博物館研究報告第32号，pp.71-74；(2009)

Redescription of *Idotea* (*Pentidotea*) *rotundata* Richardson, 1909*

Noboru Nunomura
Toyama Science Museum
1-8-31 Nishinakano-machi, Toyama 939-8084, Japan

ヘラムシ属の一種，*Idotea*（*Pentidotea*）*rotundata*（等脚目：甲殻類）の再記載

布村　昇
富山市科学博物館
939-8084富山県富山市西中野町1-8-31

北海道大学の五嶋聖治博士が「環境省による知床半島沿岸域における浅海域生物相調査の一部」の調査時に北海道知床から採取した *Idotea*（*Pentidotea*）*rotundata* を調査した。本種は当初青森県鮫から記載されたが，従来，付属肢の形態が十分に記載されていなかったため知床産の標本をもとに再記載した。また，和名「マルオヘラムシ」を提唱する。

キーワード：等脚目，ヘラムシ，再記載，マルオヘラムシ
Key words：Isopod, Idoteidae, *Idotea* (*Pentidotea*) *rotundata*, redescription

Idotea (*Pentidotea*) *rotundata* was described from Same, Aomori, Pacific side of Northern Japan by Richardson (1909). After that, Gurjanova (1936) and Kussakin (1974, 1982) recorded the present species. But the morphology of all the apendages have not been drawn yet. Recently, Prof. Gohima of the Hokkaido University collected a series of marine isopod crustaceans entitled "Fauna and flora survey of the shallow sea area along the Shiretoko coast" in Shiretoko Peninsula, north Northern Japan. The samples were sent to me for identification, and I found some specimens of *Idotea* (*Pentidotea*) *rotundata* and recdescribed the species.

Before going further, I would like express my sincere gratitude to Prof. Seiji Goto, Hokkaido University, for his kindness in giving me a chance to the important specimens. This survey was conducted by the financial support of the Japanese Ministry of Environment.

Idotea (*Pentidotea*) *rotundata* Richardson, 1909
(Jap. name: Maruo-heramushi, new)

(Figs. 1 and 2)

Material examined; 1 ♂(36.6 mm in body length). Tip of Shiretoko-Cape. Hokkaido, May 30, 2007, coll. Seiji Goshima 2007; 3♀♀, Chashikotsu-zaki, near Utoro, Shiretoko Peninsula, Hokkaido, Aug.27, 2007,coll. Seiji Goshima; 2exs, Chashikotsu-zaki, near Utoro, Shiretoko Peninsula, Hokkaido, Aug. 16, 2008, coll. Seiji Goshima; 1ex, intertidal, Kabutoiwa, Shiretoko Peninsula, Hokkaido, Aug. 26, 2007, coll. Seiji Goshima.

Description: Body (Fig.1A and B) slender, 6.8 times as long as wide. Color pale yellow in alcohol. Cephalon square, with a small medial concavity on arterial margin. Eyes located at the medial area on lateral margin. Each eye composed of about 70 ommatidia. Pereonal somites parallel. Coxal plates visible in dorsal view on pereonal segments

*Contributions from the Toyama Science Museum, No.361

5-7. Dorsal two perfect suture lines on pleotelson. Pleotelson with a very shallow concavity at the mediolateral part.

Frontal lamina (Fig. 1C) pentagonal; clypeus short. Antennule (Fig. 1D): segment 1 big and oval; segment 2 with 4-5 setae at distal-lateral angle; segment 3 as long as segment 2; terminal segment with 12-14 aesthetascs on the distal margin. Antenna (Fig. 1E) long, reaching third pereonal somites; peduncle 5-segmented and flagellum 9-segmented. Right mandible (Fig. 2F): pars incisiva 4-headed; lacinia mobilis not chitinzed and 3-headed; 10 hairs; processus molaris with lacinia mobilis wide. Left mandible (Fig. 1G): pars incisiva 3-headed; lacinia mobilis chitinzed and 3-headed; 12 hairs; processus molaris with more than 25 setae; processus molaris wide. Maxillula (Fig. 1H): inner lobe with 3 plumose setae and a small simple seta on distal margin; outer lobe 10 simple setae at the tip. Maxilla (Fig. 1I): inner lobe with 17 setae; inner ramus of outer lobe 7 with setae at the distal margin and 6 setae at the tip of outer ramus of the same. Maxilliped (Fig. 1J): endite relatively narrow, with 13-14 plumose setae at the tip; palp 5-segmented, segments 1-2 almost square; segment 4 longest, with more than 20 setae on inner margin and 11 setae on outer margin; terminal segment semicircular, with 12-13 setae around the margin; epipodite narrow lanceolate.

Pereopod 1 (Fig. 2A): basis rectangular, 2.1 times as long as wide; ischium 0.6 times as long as basis; merus rectangular; carpus short, with 9-10 stout setae and several small setae on inner margin; propodus rectangular, with more than 20 setae on inner margin.

Pereopod 2 (Fig. 2B): basis rectangular, rectangular, 2.1 times as long as wide; ischium 0.4 times as long as wide; merus rectangular; carpus short; propodus rectangular, with 12-14 setae on inner margin.

Pereopod 3 (Fig. 2C): basis 2.8 times as long as wide; ischium 0.4 times as long as wide; merus 0.2 times as long as basis, with a series of short setae on inner margin; carpus a little longer than merus, with many short setae on inner margin; propodus with basal part protruded, bearing 3 stouter and several shorter setae on inner margin.

Pereopod 4 (Fig. 2D): basis 2.4 times as long as wide, with 5-10 relatively short setae on both margins; ischium half the length of basis, with 6-7 setae on inner margin ; merus 0.7 times as long as ischium, with 4-5 setae on inner

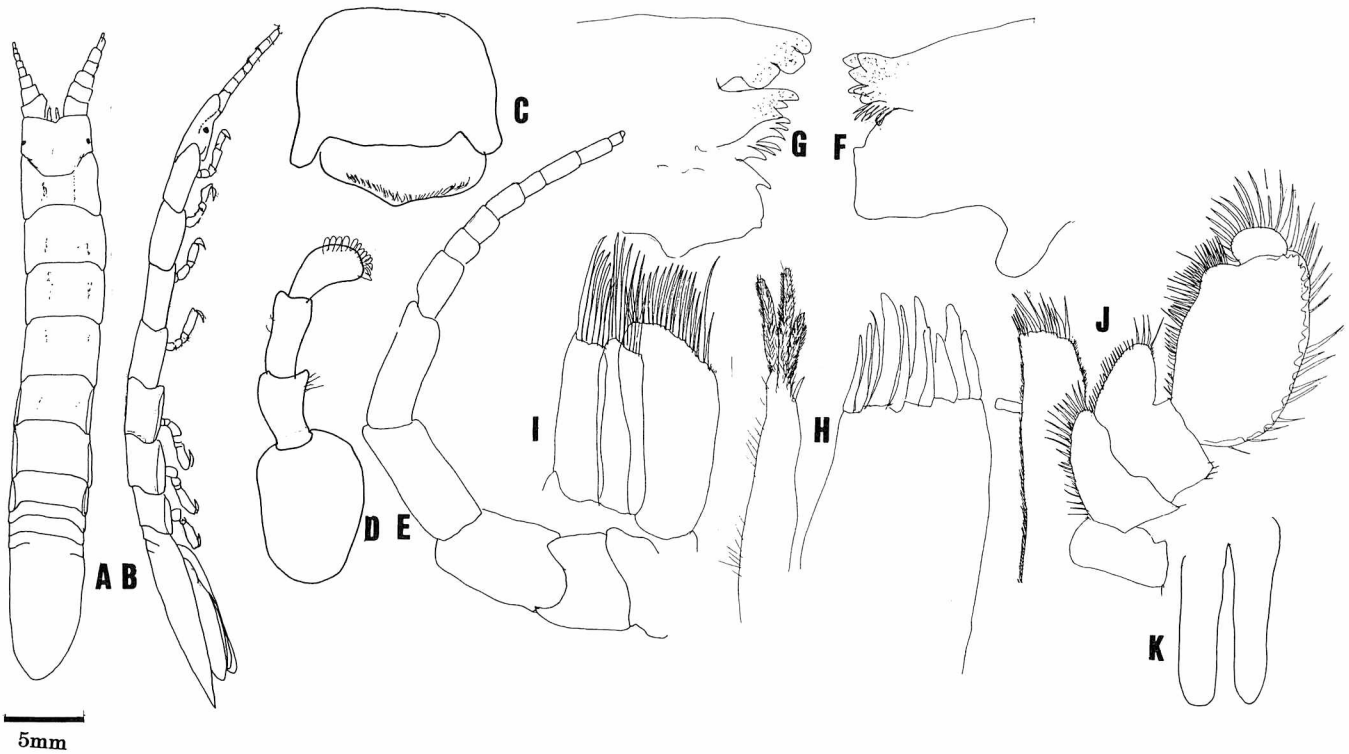

Fig. 1. ***Idotea*** **(*Pentidotea*)** ***rotundata*** **Richardson, 1909**

A: Dorsal view; B : Lateral view; C: Clypeus and frontal lamina; D: Antennule; E: Antennta; F: Right mandible; G: Left mandible; H: Maxillula; I: Maxilla; J: Maxilliped; K: Penes (All: male from Shiretoko).

margin; carpus as long as merus, with 4-5 setae on inner margin; propodus with 3 stout setae on basal half of inner margin.

Pereopod 5 (Fig. 2E): basis 2.1 times as long as wide; ischium 0.4 times as long as basis; merus 65% as long as ischium; carpus short; propodus 3/4 as long as propodus, with 4 stout setae on basal half of inner margin.

Pereopod 6 (Fig. 2F): basis twice as long as wide; ischium 2/3 as long as basis; merus 35% as long as ischium; carpus short and as long as merus; propodus 0.7 times as long as basis; dactylus 0.6 times as long as propodus.

Pereopod 7 (Fig. 2G): basis rectangular, 1.9 times as long as wide; ischium 45% as long as basis, merus, a little shorter than ischium, with many setae on inner margin; carpus short; propodus a little shorter than basis, with 3 stout setae on basal half of inner margin; dactylus half the length of basis.

Penes (Fig. 1K) paired; each penis 5 times as long as wide.

Pleopod 1 (Fig. 2H): both rami rectangular, with many short setae on distal half.

Pleopod 2 (Fig. 2I): both rami 3.7 times as long as wide; stylus 20% exceeds beyond the tip of endopod.

Pleopods 3-5 (Fig. 2J-L): basis small; both rami elongated.

Uropod (Fig. 2M): basis long, 75% of the whole length; both rami rectangular.

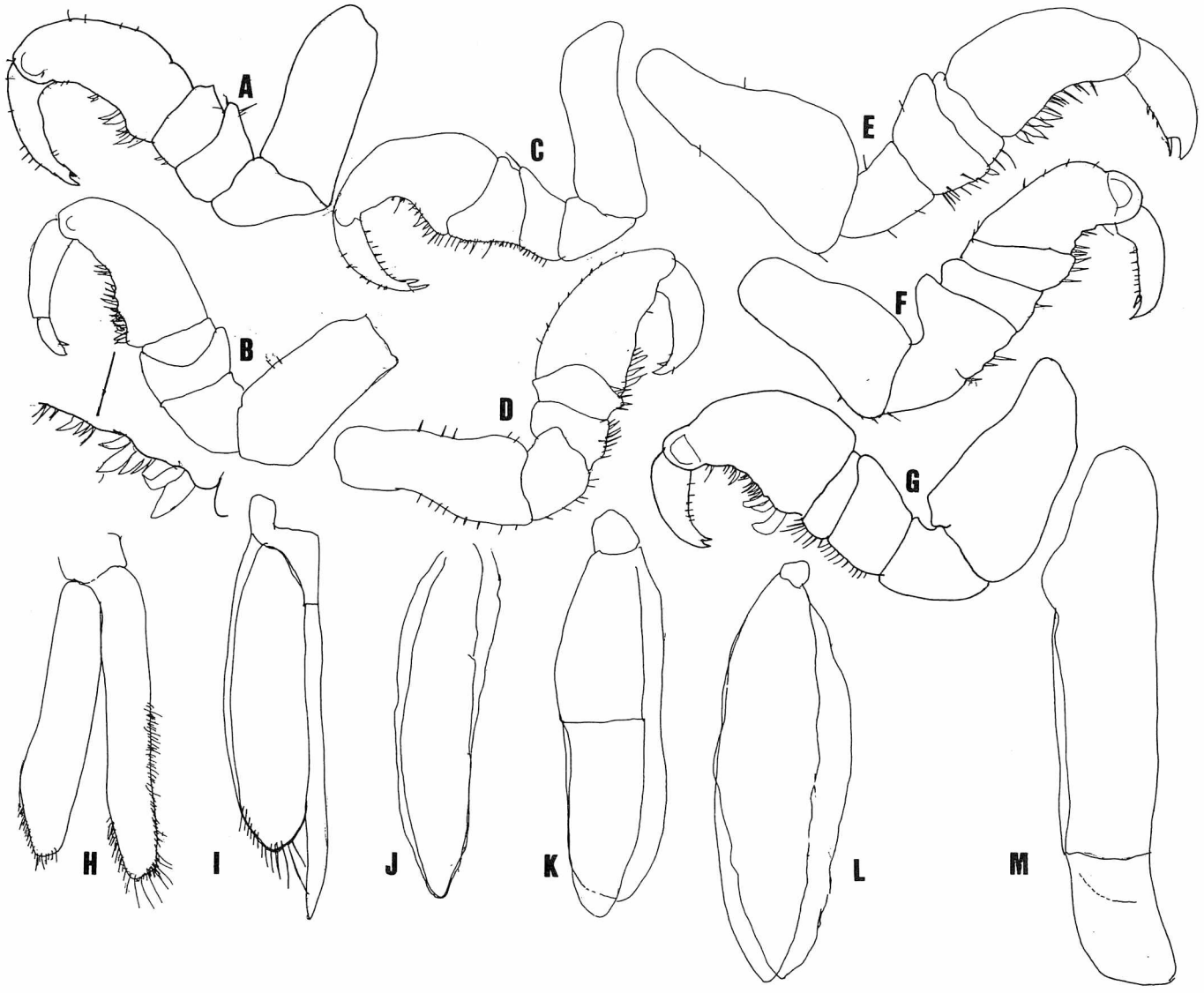

Fig. 2. *Idotea* (*Pentidotea*) *rotundata* Richardson, 1909

A-G: Pereopods 1-7; H-L: Pleopods 1-5; M: Uropod (All: A male from Shiretoko).

References

Brusca, R. C., 1984. Phylogeny, evolution and biogeography of the marine isopod Subfamily Idoteinae (Crustacean: Isopoda: Idoteinae). *Translations of the San Diego Society of Natural History.* 20 (7):99-134.

Gurjanova, E., 1936. Ravnonogie dalnevostochnykh morei. *Fauna SSSR, Rakoobraznye,* 7 (3): 1-279 (in Russian).

Kussakin, O. G. 1974. Fauna and Ecology of isopods (Crustacea) from the intertidal zone of the Kuril Islands. *Transactions of the Academy of Science of the U. S. S. R, Far East Center, Institute of Marine Biology,* 1: 222-275. (in Russian).

Kussakin, O. G., 1982. Marine and brackish Isopoda of cold and temperate waters of the northern hemisphere II, suborder Valvifera, Anthuridea, etc. *Acad. Sci. U. S. S. R., Leningrad,* 1-462. (In Russian).

Richardson, H., 1909. Isopods collected in the northwest Pacific by the U. S. bureau of fisheries steamer "Albatross" in 1906. *Proc. U. S. Nat. Mus.,* 37 (1701): 75-129.