## Systematic Study of Amphipoda (Crustacea) in Korea V. Descriptions of One Hitherto Unrecorded Species and Two Known Species from Korean Waters.

## Kyung Sook Lee

(Department of Biology, Dankook University)

韓國產 端脚類의 系統分類學的 研究 V. Caprella 屬의 韓國未記錄 1 種 및 2 既知種의 記載

> 李 敬 淑 (단국대 생물학과) (Received June 20, 1986)

## 적 요

저자는 1985년 제주도 모슬포 항구에서 체접된 표본이 한국 미기록종(Caprella gigantochir, Mayer 1903)으로 동정되었기에 이에 보고하고자 한다. 또 저자가 1981년 고군산 군도의 해양동물 채집보고에서 2종의 한국 미기록종(C. algaceus Vassilenko, 1967, C. monoceros Mayer, 1890)을 기재없이 보고한 마였다. 이들도 함께 기재하였다. 이로써 한국해역에서 보고된 Caprella속의 종은모두 21종이 되었다.

Kim and Lee (1975, 1978) reported 15 caprellid species from Korea and Lee and Kim (1981) listed another two unrecorded caprellid species C. algaceus Vassilenko, 1967, C. monoceros Mayer, 1890 from Kogunsangundo I. without descriptions in their local survey report. Three caprellid specimens from Chejudo I. on August 16, 1985, are recognized to be unrecorded species in Korea. The present author will describe this unrecorded species and the two known species. The collecting sites where the material was made are shown in Fig. 1.

1. Caprella gigantochir Mayer, 1903 Fig. 2.

Caprella gigantochir Mayer, 1903:103, pl. 4, fig. 14, pl. 8, figs. 7-9; Hiro, 1937:314, pl. 22, figs. 9-10; Utinomi, 1947:74; Utinomi, 1968:287, fig. 5; Utinomi, 1973:33; Arimoto, 1976:156-159, figs. 83-84; Arimoto, 1980:110-111, fig. 11.

Material examined: 2 ♣ ♣, 1♀, August 16, 1985, Mosŭlpo Chejudo I., K.S. Lee.

Diagnosis: Basal segment of gnathopod 2 longer than pereonite II, its propodus extremly

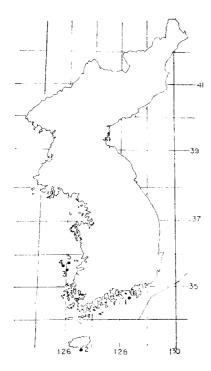


Fig. 1. The map showing the localities where the materials were collected; 1. Yǒnwado I. (蓮花島) 2. Mosulpo (慕瑟浦) 3. Durido I. (串里島) 4. Munyǒdo I. (巫女島) 5. Sinsido I. (新侍島)

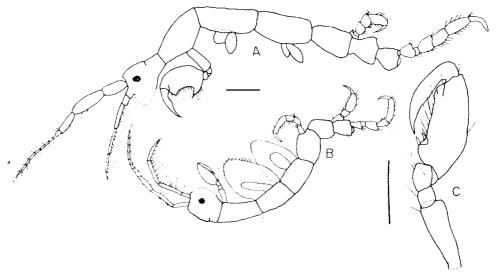


Fig. 2. C. gigantochir. A: lateral view of male(a); B: lateral view of female(a); C: gnathopod 2 of male(b); D: gnathopod 2 of female(b); E: Pereopod 7 of of male(b). All scales: 1mm.

long and spoon-shaped. Head with acute projection, pereopods with submedial grasping spines. Pereonite V is the longest segment.

**Description:** Length of male 7 mm. It is smaller size compared with the Mayer's specimens(bis 26 mm) and Arimoto's (24 mm). Body slender and smooth except head. Antenna 1 a little longer than one-third of body length, flagellum with 9 articles but article 1 with 2~3 joints. Antenna 2 longer than peduncle of antenna 1. Head with acute projection. Pereonite I slightly longer than two times of Head. Pereonites II~IV are subequal, almost two times of pereonite I. Pereonite II with flat and triangular lateral tooth on each side of body, this ofrm shows variability according to body size (Mayer, 1903, p. 103). Pereonite V is the longest segment, important character to this species. Pereonites VI and VII much smaller than any other segment. Gnathopod 2 attached nearly to middle of pereonite II, basal segment longer than pereonite II, it's propodus extremly long and spoon-shaped, has a palmar spine, and a subpalmar spine, poison tooth small, and triangular tooth on palmar margin in adult male. Gills elliptical. Pereopods 5~7 increasing in length, propodus of pereopods 5~7 with a pair grasping spines on submedial palmar margin. In female, length of 6 mm. Antenna 1 with 2 fused articles and 6 articles. Antenna 2 slightly shorter than antenna 1. Pereonite I shorter than head. Pereonite II longer than two times of pereonite I. Pereonites II~IV are subequal. Pereonite V is the longest segment. Gnathopod 2 attached to rather front of pereonite II, propodus very different from male, in shape, having a projecting spine on one third palmar margin and a subpalmar spine. Distribution: Warm waters of Japan, Korean Straits, Korea (Chejudo I.)

2. Caprella algaceus Vassilenko, 1967 Fig. 3.

Caprella algaceus Vassilenko, 1967; Vassilenko, 1974:149-150, fig. 77; Arimoto, 1976: 181-183, fig. 77; Lee and Kim, 1981:112.

Material examined: See, Lee & Kim, 1981, p. 112.

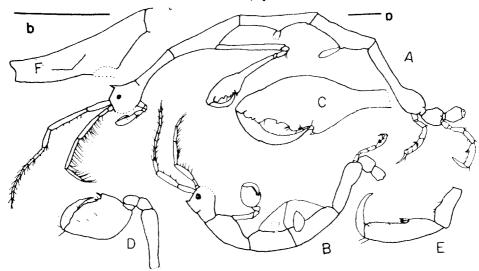


Fig. 3. C. algaceus. A: lateral view of male; B: lateral view of female; C: gnathopod 2 of female. Scales: A, B: 1 mm; C: 0.5 mm.

**Diagnosis:** Head without projecting spine, but rather angularly projecting in front, basis of gnathopod 2 shorter than pereonite 2. Propodus of pereopods 5~7 without grasping spine.

**Description:** Length of larger male 9.5 mm, body smooth and slender. Antenna 1 slightly shorter than half of body length, flagellum with 11 articles. Antenna 2 slightly longer than peduncle of antenna 1. Head short and rather angularly projecting in front. Pereonite 1 shorter than head. Pereonites  $2\sim4$  are subequal, pereonite 5 slightly shorter than pereonite 4. Gnathopod 2 attached nearly to middle of pereonite II. The length of basis of gnathopod 2 half of the pereonite 2, propodus a little shorter than twice of basis, a grasping palmar spine at base of palm, a large triangular tooth at distal angle of palm, palmar margin fringed with long setae, its whole shape looks like that of *C. penantis*. Gills 3, 4 are elongated form and attached to the middle of pereonites 3, 4. Pereopods  $5\sim7$  without grasping spine but with tufts of strong setae.

Female relatively smaller than male, about 4.5mm. Gnathopod 2 attached to front of pereonite 2, propodus of gnathopod 2 with palmar spine and subpalmar spine proximally. Distribution: Possjet Bay, Japan Sea; Korea (Yellow Sea)

3. Caprella monoceros Mayer, 1890 Fig. 4.
Caprella monoceros Mayer, 1890:87, pl. 7, fig. 32; Utinomi, 1947:75; Utinomi, 1973:33;

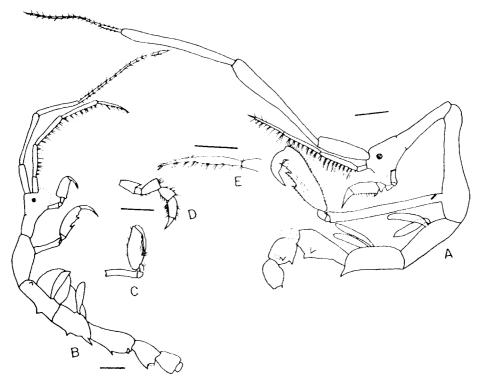


Fig. 4. C. monoceros. A: lateral view of male; B: lateral view of female; C: gnathopod 2 of female; D: percopod 5 of male; E: tip of second antenna of male. Scales: A, B, C, D: 1 mm; E: 0.5 mm.

Arimoto, 1976:86-88, fig. 44; Lee & Kim, 1981:109-114. Material examined: 3 \$ \$, 1 \, Yŏnwado, July 19, 1978, H.S. Kim(new material); see, Lee & Kim, 1981, p. 112.

**Diagnosis:** Head, pereonites I $\sim$ III smooth, pereonite IV with a process inclining backwards at distal end. Basis of gnathopod 2 longer than the length of pereonite 2.

Description: Length of larger male 14 mm. Antenna 1 a little shorter than body length, it's flagellum about one-third of peduncle in length and 15 articles but first segment with 4 joints. Antenna 2 slightly exceeds middle point of the second basal article of peduncle of antenna 1. Head smooth about half of the pereonite 1, pereonite II, slightly shorter than twice of pereonite 1. Pereonites III, IV approximately equal in length. Pereonite IV with a process inclining back-wards at distal end. Pereonite V a little shorter than pereonite IV, with a pair of projections on the middle of back. Pereonite VI with a pair of projections rear of back. Gnathopod 2 attached to near distal end of pereonite 2; basis of gnathopod 2 longer than pereonite 2; propodus elongated form with proximal grasping spine on the half of palmar margin, with strong poison tooth on the half of the rest proximal palmar margin, with a acute triangular tooth at distal angle of palm, fine hair on its all surface. Gills long and elliptical. Propodus of pereopods 5~7 with two proximal grasping spines.

In female, length of larger female, 8.4 mm. Antenna 2 longer than peduncle of antenna 1. Pereonites II~IV are subequal, head, pereonite I and II smooth, pereonite III with a pair of lateral spines on the front part. Pereonites III~V with a pair of projections on the middle of back. Pereonite IV with a process inclining back-wards at distal end like male. Gnathopod 2 attached to rather front part of pereonite II; basis of gnathopod 2 shorter than pereonite II; propodus elongated form with a proximal grasping spine on the first proximal third of palmar margin, with a poison tooth on the second third of palmar margin.

Distribution: Japan (Kadsiyama, Tateyama Bay.), Korea (Yellow Sea, South Sea)

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