

Caprellids (Crustacea: Amphipoda) Collected by the T/S
UMITAKA-MARU in the Antarctic Sea, 1967

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海鷹丸による第4次南極洋調査(1967)にて採集
されたワレカラ類(端脚類)

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要 旨

東京水産大学の海鷹丸による第4次南極洋調査は、1965年11月から1967年3月にかけて行なわれた。

1967年2月3日に、Heard Islandに近く、52°55.7'S, 73°20.2'W、深さ177mのところから採集されたベントスのなかに、ワレカラの雄1、雌1が発見された。同日52°54.4'S, 73°19.5'W、深さ187mのところから採集されたベントスのなかからも、同種のワレカラが、雄3、雌2が発見された。いずれも *Protellopsis kergueleni* STEBBING で

1874年に、Greenland Harbour, Kerguelen Islandから STEBBING によって、雌2が発見されて以来のものであり、ここに雄を記載することができた。本種が南極に発見されたことは興味深い。

同船はまた1967年1月11日に、54°59.0'S, 34°59.0'Wの地点から54°58.9'S, 34°52.1'Wの地点にかけて、深さ110m(水温1.2°C)のところを、otter trawlによって10時間採集を行ない、*Caprellinoides mayeri* PFEFFERの雄9を得た。なお、地点番号不明の採集物のなかから雄37、雌2が発見された。本種はMAYERにより1890年にGeorgia産の雄2と雌6が記録されている。

Introduction

The 4th Antarctic Cruise made by the T/S UMITAKA-MARU of the Tokyo University of Fisheries during the period from November 1966 to March 1967 covered the Pacific and Antarctic Oceans, and carried out the benthos-collecting operations in the seas near the Antarctic Continent and between the Drake Passage and South Georgia. Among the benthos which were dredged near the Heard Island some caprellids were found. Besides, many caprellids were also obtained by some trawlings carried out near the South Georgia Bank.

Two species of caprellids thus collected from the Antarctic seas are described in the following.

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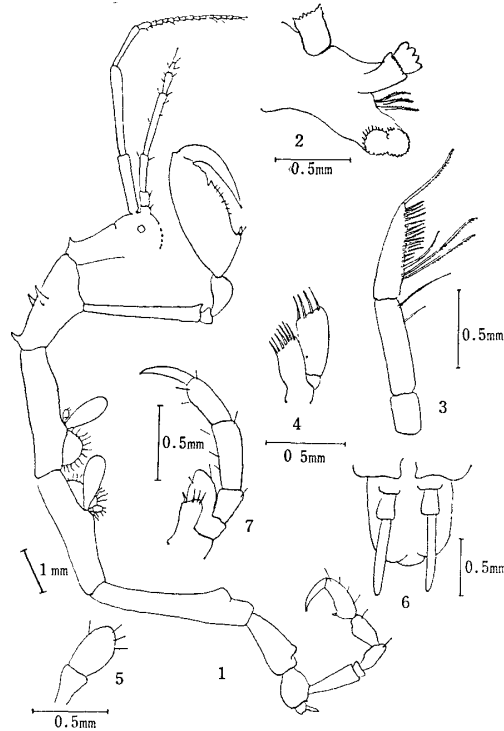


Fig. 1. *Protellopsis kergueleni* STEBBING.

1. female, 2. mandible, 3. palp of mandible, 4. 1st maxilla,
5. 1st pereopod, 6. abdomen, 7. maxilliped.

1. *Protellopsis kergueleni* STEBBING

(Fig. 1)

Protellopsis kergueleni: STEBBING, 1888, p. 1241.

Female: The body is 16 mm in length. The head is smoothly rounded on the upper surface, the 1st pereonite is longer than the head, with a dorsal spine at the posterior end. The 2nd pereonite has one pair of dorsal spines at about the center, and a single one at the posterior end. The 3rd pereonite is rather longer than the 2nd and smooth. The 4th pereonite is a little shorter than the 3rd. The 5th is longer than the 4th; the 6th is about half as long as the 4th and much longer than the 7th, the 7th pereonite being the shortest.

1st antenna: The 2nd segment is longer than the 1st, the 3rd shorter than the 1st; the flagellum is of 15-16 distinct segments.

2nd antenna: Thinner and a little shorter than the peduncle of the 1st, the 1st and 2nd segments short, the 3rd segment is as long as the two preceding combined, with a few spinules near the distal end; the 4th segment is subequal in length to the 1st to 3rd combined; the two-segmented flagellum is as long as the 3rd segment of the peduncle.

Mandible: The cutting plate is divided into 5 unequal teeth, the secondary

plate has 4 teeth; the spine-row on the left mandible consists of 3 large pectinate spines; the molar tubercle is prominent, with circular strongly denticulate crown; the palp is longer than the trunk of the mandible, the 1st segment short, the 2nd segment subequal in length to the 3rd segment, the 3rd segment on the inner margin of this part has a row of about 14 short spines, and at the apex a long spine; the 3rd segment also has three spines on the outer surface at the other end of the row, two of which are long and pectinate, and a shorter one, its setal formula is 1-14-3.

1st maxilla: The inner plate has seven spines at the apex; the 1st segment of the palp is a little longer than broad, the outer plate on a strongly dentate apex has four spine-teeth.

2nd maxilla: The inner plate is broader and shorter than the outer, with some 8-9 setiform spines on the inner side; the outer plate with the like number of spines along its apical border.

Maxilliped: The inner plates are very small, scarcely reaching beyond the base of the 1st segment of the palp, the apical has a spine-tooth and setiform spines; the outer plates are longer than the inner, and reach a little beyond the 2nd segment of the palp, with 2 marginal spines; the 1st segment of the palp is short, the 2nd segment is the longest, with several setae; the 3rd segment is rather longer than the 1st, with numerous setae, the finger as long as the 3rd, and curved.

1st gnathopod: The 1st segment is longer than the propodus, the 2nd segment a little longer than its width, the 3rd rhomboidal, the wrist longer than the 3rd, widening distally from a narrow base; the propodus irregularly oval, the palm is bordered with setules, having at their base 2 stout palmar spines, between which a long curved finger closes down.

2nd gnathopod: Attached rather at the middle of the 2nd pereonite. The 1st segment long and narrow, the 2nd segment longer than its breadth, the 3rd segment large in form, the wrist a narrow triangle, the propodus large and long, more than twice as long as the breadth; near its base of the palm there is a palmar spine.

Gill: Oval, large and long.

3rd and 4th pereopods: Very much smaller than the gill, the 3rd segment is smaller than the 4th; the 2nd segment is narrowed at the apex, with a few small hairs. The 4th pereopods is similar to the 3rd.

7th pereopods: The 1st segment is the longest, a little widened distally, with small groups of spines at three points on the front margin; the 2nd segment extremely small; the 3rd segment longer than the 4th, with spinules along the front and at the apex behind; the 4th segment similarly armed; the 5th segment longer than the 3rd, with a strong tooth projecting from the front margin close to the base and armed with small spines, the rest of the front border fringed with very small spinules, the convex rear edge has setules at 3 points, the finger is broad except at the curved apex.

Uropoda: The longer 1st pair is two-segmented, the 1st segment short, the 2nd segment long, slender, somewhat curved to the concave inner margin; and a pair of lobes.

Distribution: Off Greenland Harbour, Kerguelen Island (T. R. R. STEBBING, 1874; depth, 30 fathoms, 2 males)

Localities: Near Heard Island: 52°55.7'S, 73°20.2'W, 52°54.4'S, 73°19.5'W, dredging number Nos. 41 and 42, February 3, 1967, depth 177 m and 187 m, male 1, female 1, and male 3, female 2.

Remarks: Two males of this species were recorded by STEBBING in 1888, but no female has been recorded. I am now able to complete the records with the description given above.

2. *Caprellinoides mayerii* PFEFFER (Fig. 2)

Caprellinoides mayerii: P. MAYER, 1890, p. 88.

Male: Length of the specimen, in the position figured is 14 mm. The body is slender with a rather skull-like head. The head and 1st pereonite together are shorter than the 2nd. The 2nd is much shorter than the 3rd; the 3rd shorter than the 4th, the 4th about half the length of the narrow and elongated 5th; the 6th not quite so long as the 3rd; the 7th not longer than its breadth. The 2nd pereonite is dilated anteriorly and is narrowed posteriorly the 3rd pereonite is with a dorsal spine at

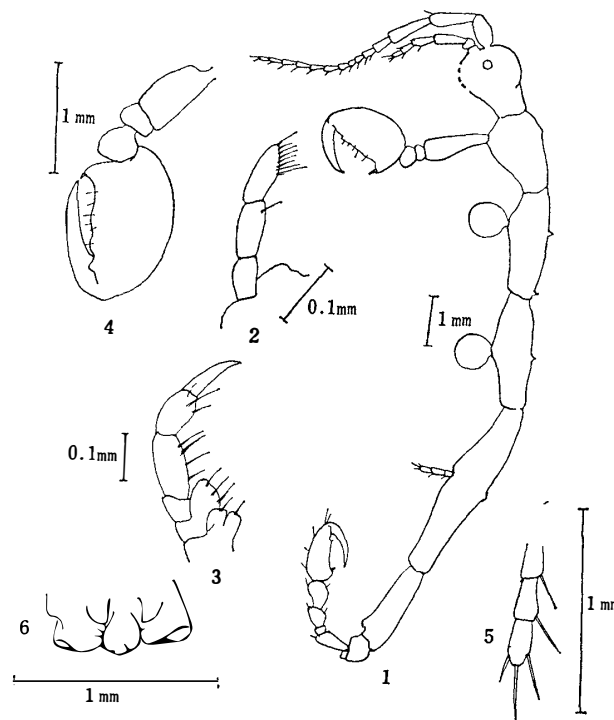


Fig. 2. *Caprellinoides mayerii* PFEFFER.

1. male, 2. palp of mandible, 3. maxilliped, 4. 2nd ganthopod, 5. 5th pereopod, 6. abdomen.

about the center, and a single one at the posterior end, the 4th pereonite with a dorsal spine at about the center; the 5th has a spine on the dorsal center.

1st antenna: 1st segment is not so long, 2nd and 3rd segments are longer than the 1st, the 3rd a little widened; the flagellum as long as the peduncle of 1st antenna, with 10 segments.

2nd antenna: Not much longer than the peduncle of the 1st antenna, the 1st and 2nd segments very short, the 4th segment is a little longer than the 3rd, the 5th segment rather shorter than the 4th, only 2 segments remain on the flagellum.

Mandible: The cutting plate is divided into 5 teeth, the secondary plate divided into 5 teeth, the 1st segment of palp is short, the 2nd scarcely as long as the 3rd, the 3rd segment with 8 slender spines on the apical margin.

1st maxilla: The outer plates are not broad, apically carrying small spines, the 2nd segment of the palp having a few spinules or setules on the more or less denticulate apical margin.

2nd maxilla: The inner plates are very small, with a few setae on the rounded apex. The outer plates apically rather narrower than the inner, with a few spines or setae.

Maxilliped: The inner plates are very small, having a setule on the inner margin and 2 on the rounded apex, the outer plates narrow, with 3 spinules along the inner and apical margin; the 1st segment of the palp is the shortest, the 2nd longer than the 3rd, with a few small spines on the inner margin near its apex, the 3rd segment with a few spinules near the inner apex its setal formula is 1-x-1; the finger is as long as the 3rd segment of the palp.

1st gnathopod: The 1st segment is a little longer than the propodus, the 2nd segment rather longer than its breadth, the 3rd segment is longer than the 2nd; the wrist is small, the propodus is much larger than the wrist and wider, narrowing to the distal end, the front margin convex, with some apical setules, and a row of setiform spines on the surface near its distal half, palmar margin which has a row of 4 spinules and another of 4 setules adjacent to it, the long curved acute finger matches the palm.

2nd gnathopod: Attached close to the proximal end of the 2nd pereonite. The 1st segment is little longer than its propodus, the 2nd segment shorter than its breadth, the 3rd segment short; the wrist very small, the propodus is twice as long as wide, and oval; the palm margin having some spinules and setules at intervals, and a large palmar spine at the base and the long and robust finger at the sharp tip.

3rd pereopod: Wanting.

4th pereopod: Wanting (as the 3rd).

5th pereopod: 3-segmented, attached at the widened center of the elongated 5th pereonite; the 1st joint is not twice as long as broad, armed with one setule, the

2nd segment longer than the 1st, with one setule, the 3rd segment as long as the 2nd, slightly tapering, with 3 setules at the apex.

6th pereopod: Lost in my specimens.

7th pereopod: The 1st segment longer than the 7th perconite of the body, with a small number of setae at the front margin, the 2nd segment scarcely visible, the 3rd segment longer than the 1st, with spinules along the front, the 4th segment shorter than the 3rd, the 5th segment longer than the 3rd, with a two teeth projecting from the front margin close to the base and armed with spinules; the convex rear margin has setules at 3 points, the finger broad and acute distally; it is undefined.

Uropods: Apparently none whether they were naturally or accidentally wanting.

Distribution: Südgeorgien (MAYER, 1890, p. 88).

Locality: Station 24: 54°59.0'S, 34°59.0'W–54°58.9'S, 34°52.1'W, January 11, 1967; depth 110 m, by otter trawl, water temperature was 1.2°C at 110 m depth.

Reference

- MAYER, P. (1890): Caprelliden. Fauna und Flora Golf von Neapel, Mon. XVIII, p. 88 (*Caprellinoides mayerii*).
- STEBBING, T. R. R. (1888): Report on the Amphipoda collected by H. M. S. "Challenger". Sci. Rep. Voy. Challenger, Zool., **29**(67), 1237–1244 (*Protellopsis kergueleni*).

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