Bull. Inst. Zool., Academia Sinica **26**(4): 331-335 (1987)

SHORT NOTE

MUNIDA ALBIAPICULA, A NEW SPECIES OF ANOMURAN CRUSTACEAN (DECAPODA: GALATHEIDAE) FROM TAIWAN[1]

KEIJI BABA

Faculty of Education, Kumamoto University, Kumamoto 860 Japan

and

HSIANG-PING YU

Graduate School of Fisheries, National Taiwan College of Marine Science and Technology, Keelung 200 ROC

(Received April 9, 1987)
(Revision received May 25, 1987)
(Accepted June 5, 1987)

Keiji Baba and Hsiang-Ping Yu (1987). *Munida albiapicula*, a new species of anomuran crustacean (Decapoda: Galatheidae) from Taiwan. *Bull. Inst. Zool., Academia Sinica* **26**(4): 00-00. A new species of the galatheid crustacean, *Munida albiapicula*, is described from a specimen taken off the northeastern Taiwan. It is closely related to *M. rufiantennulata*, but differs in the supraocular spines being widely separated from the rostrum, the distomesial spine of the antennular basal segment being as large as the distolateral one, and the propodi of the second through fourth pereopods having more numerous ventral spinelets.

Among a collection of decapod crustaceans recently obtained at fish harbors and fish markets in Taiwan, an unusual specimen of the genus *Munida* was found. It was taken off the northeast coast Taiwan in 50–450 m by a offshore shrimp-trawler. On examination it proved to represent a new species and is here described as *Munida albiapicula*.

The type specimen will be deposited in the collection of the National Museum of Natural History, Smithsonian Institution.

Munida albiapicula, new species

Textfigs. 1 and 2

Type Material: 1 ♂, holotype (carapace length, 20.7 mm), northeast coast of Taiwan, 50–450 m deep (obtained at Ta-chi fish market, 16 June 1985).

Diagnosis: Body rather robust, lateral margin of carapace behind cervical groove with 4 spines, epigastric region with row of 10 spines, lateral protogastric, postcervical and dorsobranchial spines distinct on each side. Abdomen with 2 pairs of gonopods, second abdominal segment bearing line of 8 dorsal spines. Eyes dilated, eyelashes short. Two terminal spines of antennular basal segment subequal in size. Merus of third maxilliped with 2 mesial marginal spines, lacking distodorsal spine. Meri of second and third pereopods bearing well developed distoventral spine distinctly larger than distodorsal, propodi with about 10 ventral marginal spinelets, distoventral angle produced into slender spine, dactyli bearing row of ventral spinelets.

1 Contribution No. 76-0209-B019-01, from the National Science Council, Republic of China.

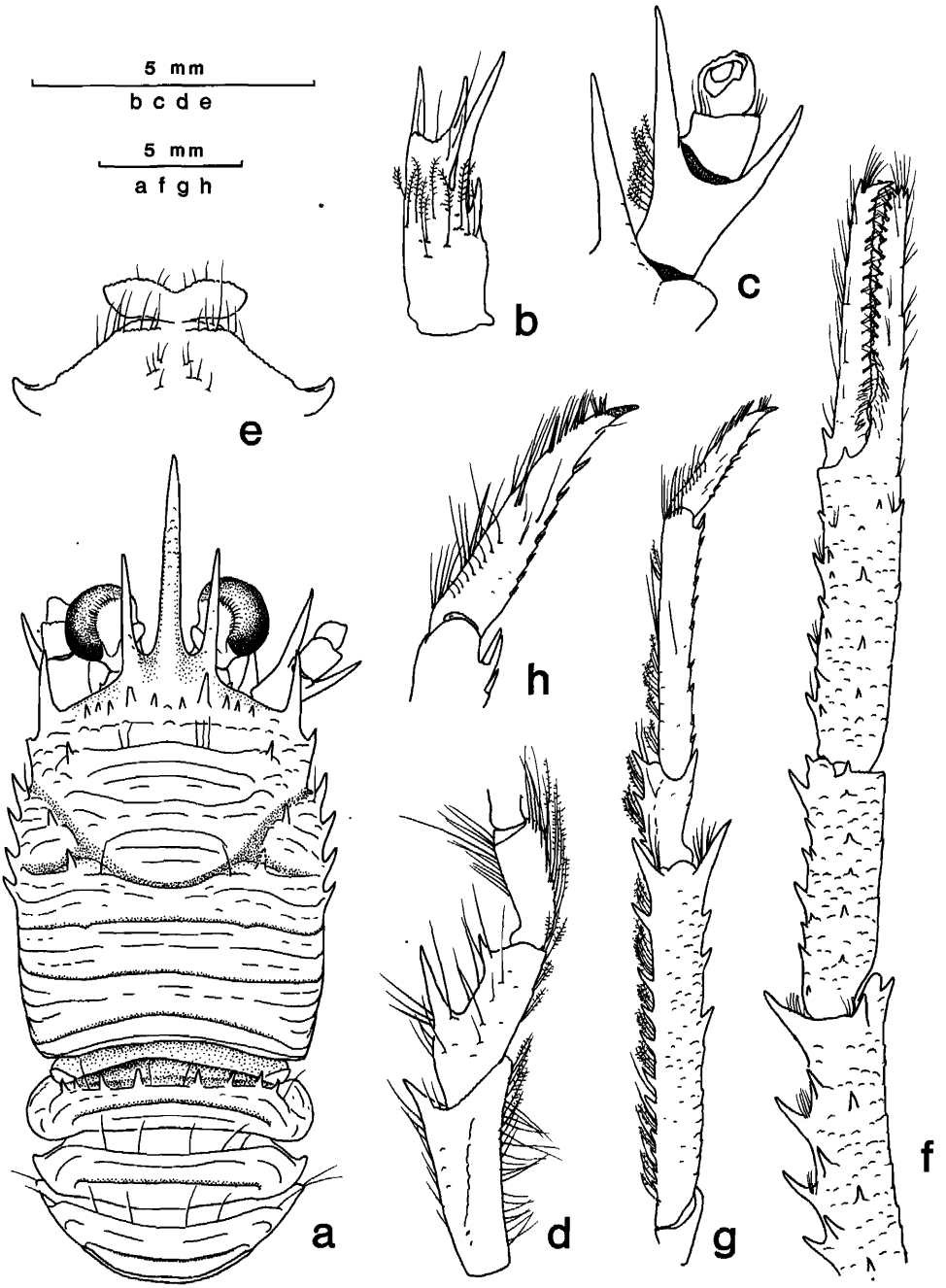
Description of holotype: Carapace excluding rostrum somewhat longer than wide. Dorsal surface with distinct rugae of mostly interrupted, and provided very sparsely with iridescent, coarse setae. Line of 5 pairs of epigastric spines, innermost and outer 3 pairs small, inner second directly behind supraoculars prominent. Lateral protogastric spine [="parahepatic spine" of Zariquiey Alvarez (1952: 151)] on each side. Cervical groove distinct. Anterior branchial region with well-developed spine at midway along cervical groove. Postcervical spine pronounced. Cardiac elevation indistinct. No spine on posterior transverse ridge. Lateral margins subparallel, armed with 6 spines: 2 in front of cervical groove, first anterolateral, prominent, directed straight forward, second small; and 4 spines behind cervical groove well developed, subequal in size, and restricted to anterior branchial region. Front margin oblique.

Rostrum straight and horizontal, fully more than half of remaining carapace length. Supraocular spines subparallel, moderately remote from rostrum, terminating (left) or overreaching (right) midlength of rostrum.

Abdomen with 2 pairs of gonopods, second tergum with line of 8 spines on anterior ridge.

Cornea inflated and depressed, eyelashes short.

Textfig. 1. *Munida albiapicula*, male holotype, dorsal view.



Textfig. 2. *Munida albiapicula*, male holotype: a. carapace and abdomen, dorsal view; b. basal segment of left antennule; c. left antennal peduncle; d. proximal three segments of endopod of left third maxilliped; e. anterior part of sternal segments; f. right cheliped, proximal portion omitted; g. right second pereopod; h. distal part of right second pereopod.

Basal segment of antennule elongate; 2 terminal spines subequal in size, distolateral spine overreaching terminals. First (basal) segment of antennal peduncle with prominent distomesial spine overreaching end of third segment, second segment also with distomesial and distolaterla spines, both well developed.

Ischium of third maxilliped with well developed distomesial process, mesial ridge with 30 denticles; merus with 2 mesial marginal spines, proximal one prominent, distal rather reduced, distodorsal margin unarmed.

Anterior part of sternal segments as illustrated (Textfig. 2e); third thoracic sternum medially sinuous and denticulate on anterior margin, following sternum roughly triangular, anterior margin contiguous with 1/3 of width of preceding sternum.

Chelipeds dissimilar, left one smaller, possibly by regeneration, spinations nearly alike. Right cheliped 2.8 times as long as carapace including rostrum, subcylindrical, but palm somewhat depressed; provided with fine scaly ridges and very scarcely setose except for fingers, merus with spines in 4 rows: 8 middorsal, 3 dorsomesial, 4 mesial and 7 ventromesial; mesial ones prominent; distolateral margin also with moderate-sized spine. Spinations of carpus and palm as illustrated, mesial spines not exactly on line. Palm 4 times as long as wide, slightly longer than fingers. Fingers feebly gaping proximally, distally strongly curving and crossing, movable finger mesially with 1 basal and 1 terminal spines, immovable finger laterally with spine at 2/3 from distal end, and 2 terminals. Left cheliped sharter and slenderer than right one, scaly condition less pronounced; carpus and palm distinctly narrower than merus, markedly palm; palm about 5 times as long as wide, nearly as long as fingers.

Second, third and fourth pereopods depressed, dorsally provided with fine plumose setae except for distal half of propodus and whole dactylus. Second pereopod overreaching end of carpus of right cheliped but falling short of midlength of palm; merus distally widened, provided with fine scaly ridges dorsally, bearing 10–11 dorsal and 4 ventral spines, distoventral larger than distodorsal; carpus with 4 dorsal and 1 distoventral spines; propodus 8.7 times as long as wide, bearing 10 movable spinelets on ventral margin, distoventral angle produced into slender spine, parallel to distoventral spinelet; dactylus 0.54 as long as propodus, gently curving, distally corneous, ventrally with 7–8 spinelets. Third pereopod similar to second pereopod, merus with 9 dorsals, proximal 3 slightly dorsal. Merus of fourth pereopod shorter than those of second and third pereopods, dorsally with 9 spines, proximal 5 much reduced in size, ventral spines reduced to 2, distal one less pronounced, as large as distodorsal; propodus also shorter; dactylus 0.64 as long as propodus.

Epipods absent from all pereopods.

Color: Totally orange red, tips of supraocular spines whitish, tailfan and distal portions of second to fourth pereopods (whole dactyli and distal parts of propodi) pale, according to color photographs taken in fresh state.

Remarks: This new species is based on a single specimen with unique characters that warrant description. The carapace bearing less than 5 marginal spines (four in this case) behind the cervical groove and the fourth abdominal segment lacking spines, combination of which is characteristic of *M. albiapicula*, are also shared by four Indo-Pacific species: *M. brucei* from East Africa (Baba, 1974: 55), *M. tuberculata* from the Fiji and Tonga Islands (Henderson, 1885: 413; 1888: 145), *M. rufiantennulata* from Japan (Baba, 1969: 23), and *M. sentai* from the Andaman Sea (Baba, 1986: 628). Of these relatives, *M. rufiantennulata* is most closely related to the new species, in having eight spines on the second abdominal segment, strong spination of the antennal peduncle, and two mesial marginal spines on the merus of the third

maxilliped; however, they differ in the following particulars: In *M. rufiantennulata*, the supraocular spines are rather close to the rostrum, the distomesial spine of the antennular basal segment is much reduced in size, and the propodi of the second through fourth pereopods bear fewer ventral spinelets. The unusually oblique front margin supposed to be characteristic of *M. rufiantennulata* (see Baba, 1969: 23) is not constant in specimens of that species from the Philippines in the Danish "Galathea" Expedition (unpublished); it is less oblique, as describe here for *M. albiapicula*.

Etymology: The Latin *albus* (white) plus *apiculus* (tip) refers to the white tips of supraocular spines.

Acknowledgements: We thank Mr. Tinyam Chan of National Taiwan College of Marine Science and Technology, Keelung, for making the interesting specimen available for study.

REFERENCES

BABA, K. (1969) Four new genera with their representatives and six new species of the Galatheidae in the collection of the Zoological Laboratory, Kyushu University, with redefinition of the genus *Galathea*. *OHMU, Occ. Pap. Zool. Lab., Fac. Agr. Kyushu Univ., Fukuoka* **2**: 1-32.

BABA, K. (1974) *Munida brucei* sp., nov., a new galatheid (Decapoda, Anomura) from the east coast of Africa. *Annot. Zool. Japon.* **47**: 55-60.

BABA, K. (1986) Two new species of anomuran crustaceans (Decapoda: Chirostylidae and Galatheidae) from the Andaman Sea. *J. Crust. Biol.* **6**: 625-632.

HENDERSON, J. R. (1885) Diagnoses of the new species of Galatheidea collected during the "Challenger" Expedition. *Ann. Mag. Nat. Hist.* (5)**16**: 407-421.

HENDERSON, J. R. (1888) Report on the Anomura collected by H. M. S. Challenger during the years 1873-76. *Rept. Sci Res. Voy. H. M. S. Challenger, Zool.* **27**: i-vi, 1-221, pls. 1-21.

ZARIQUIEY ALVAREZ, R. (1952) Estudio de las especies Europeas del gen. *Munida* Leach 1818. —*Eos, Rev. Espan. Entomol.* **28**: 143-231.

記臺灣北部近海產鎧甲蝦之一新種

馬場啟次　游祥平

本報告報導臺灣北部近海產鎧甲蝦之一新種，命名爲 *Munida albiapicula* sp. nov. 除敍述外部形態特徵和體色外，並測定部位長度，同時討論與其近似種之不同特徵點。