

A NEW DEEP-SEA GALATHEID (CRUSTACEA, ANOMURA)  
FROM NORTHERN SOUTH CHINA SEA

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南支那海北部から採集された深海性ガラテアの1新種

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Some years ago a specimen of an unusual form of deep-sea *Munidopsis* was forwarded to me through Dr. Fenner A. CHACE, Jr. of the Smithsonian Institution for study. It was collected from south of Hong Kong in 520–560 fathoms by Dr. A. J. BRUCE, then on the staff of the Fisheries Research Station, Hong Kong. This specimen was immediately recognized as a new species of *Galathodes* group, but the description has been delayed for some time. And therefore the opportunity is here taken to describe it as *Munidopsis gibbosa*. The holotype is deposited in the National Science Museum, Tokyo (NSMT).

***Munidopsis gibbosa*, new species**

(Figs. 1, 2)

*Material.* Holotype, male, NSMT-Cr. 5655; 19°20.0' N, 114°13.2' E to 19°20.0' N, 114°16.0' E; trawled; 520–560 fathoms; bottom temp., 4.65°C; 7 Jan. 1964; coll. A. J. BRUCE.

*Diagnosis.* Body tuberculate and covered with fine plumose setae. Carapace and abdomen with prominent protuberances. Rostrum with paired processes midventrally. Eyes movable, without eye-spine. Epipods present on chelipeds and first 2 pairs of walking legs. Belonging to *Galathodes* group.

*Description of holotype.* Carapace medially broadest, nearly as long as broad excluding rostrum, measuring between posterior margin of orbit and median point of posterior margin of carapace. Dorsal surface moderately convex, areolations protuberant; pronounced protuberances with tops of tubercular granules and similar granules scattered over carapace. Cervical groove more or less distinct. Posterior ridge raised, with closely placed tubercles. Lateral margins weakly convex medially, tuberculate, with distinct notch at end of cervical groove and between anterior and posterior branchial regions. Ante-

rolateral angle produced laterally. Anterior margin almost transverse outside of insertion of antenna, produced just behind it, and oblique toward eye.

Rostrum almost horizontal, fully half as long as remaining carapace, moderately depressed at base, dorso-mesially granulate, dorso-laterally with distinct granular tubercles in proximal half. Ventral surface with paired spines near midlength, flat and almost naked in proximal half, finely setose in distal half.

Abdomen, like carapace, protuberant and tuberculate; each of 2nd and 3rd segments with protuberant 2 transverse elevations and 1 deep furrow; median lump stronger than 2 lateral ones on anterior elevation; 4th segment similar to preceding, but median furrow very poorly developed; transverse furrow completely absent from 5th segment, median and lateral lumps smaller than those of anterior segments; no distinct processes, but granular tubercles scattered on 6th segment. All pleura with rounded margins, that of 2nd segment broader than others.

Eyes small, movable, devoid of eye-spine, reaching end of 3rd segment of antennal peduncle; eyestalk with several tubercles.

Basal segment of antennule relatively broad, finely setose, minutely tuberculate on distal portion of ventral surface; 2 outer terminal spines strong, inner distal margin slightly produced. Antennal peduncle comparatively large, each segment broader than long; 1st segment roundly produced internally and externally; following 2 segments subequal in length, with distinct terminal tubercular processes.

Left 3rd maxilliped detached and missing. Right one finely setose on entire surface; ischium triangular in cross section, inner toothed ridge with 14 well-developed denticles, no distinct process but few tubercles at distal end of outer surface; merus 1.8 times as long as ischium, comparatively broad; anterior margin with 5 tubercular processes; posterior margin with 2 processes, proximal one stocky, distal one slightly anterior to midlength smaller than proximal one but more or less pronounced; outer surface with 2 distinct tubercles near anterior margin; anterior margin of carpus with 3 tubercular processes proximally and paired ones distally.

Anterior part of sternal segments as illustrated (Fig. 2e); 3rd thoracic sternum mesially depressed, anterior margin medially concave, lateral margins subparallel, with few tubercles slightly ventrally; following sternum without transverse ridges setose, almost flat, 3.7 times as broad as preceding one.

Chelipeds slightly longer than carapace including rostrum, tuberculate dorsoventrally and marginally. Palm moderately massive and depressed, fully 1.5 times as long as broad. Fingers distinctly longer than palm, not gaping, ventrally bearing deep concavity along opposable margins when closed; tips not sharply pointed but touching each other with several intermeshing teeth. Opposable margins straight and dentate.

Walking legs similar, but 3rd one shorter; subcylindrical, tuberculate 1st leg reaching end of palm of cheliped. Propodus lacking posterior marginal mobile spinelet. Dactylus

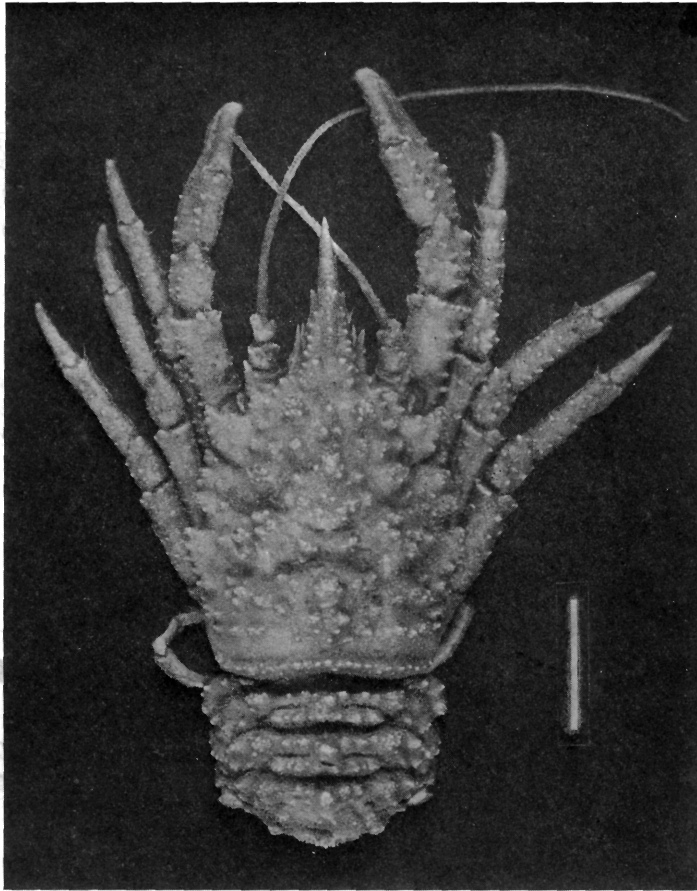


Fig. 1. *Munidopsis gibbosa*, new species, holotype, male, dorsal view; scale  $\bar{x}$  equal to 1 cm.

about 0.7 as long as propodus, gently curving inward, ending in sharp point, posterior margin with 9 to 13 denticles.

First and 2nd pleopods as illustrated (Fig. 2 f, g, h).

Cheliped and anterior 2 walking legs with epipods.

*Measurements of holotype.* Carapace length including rostrum, 35.2 mm; breadth of carapace, 21.5 mm; length of cheliped (right), 41.5 mm; of wrist, 6.0 mm; of palm, 7.8 mm; of finger, 8.7 mm.

*Remarks.* Although subdivision of the large *Munidopsis* into several groups or subgenera is of no systematic importance, as suggested by CHACE (1942), the arrangement of six groups proposed by MILNE EDWARDS & BOUVIER (1894) and ALCOCK (1901) may not be unuseful for the sake of convenient reference. Seven species belonging to the *Galathodes* group have been known from the Indo-westpacific, but, I am at a complete loss to find closely related species, also in all the known species from the eastern Pacific as well as the Atlantic. Among the Pacific *Galathodes* group only one species, *Munidopsis camerus*

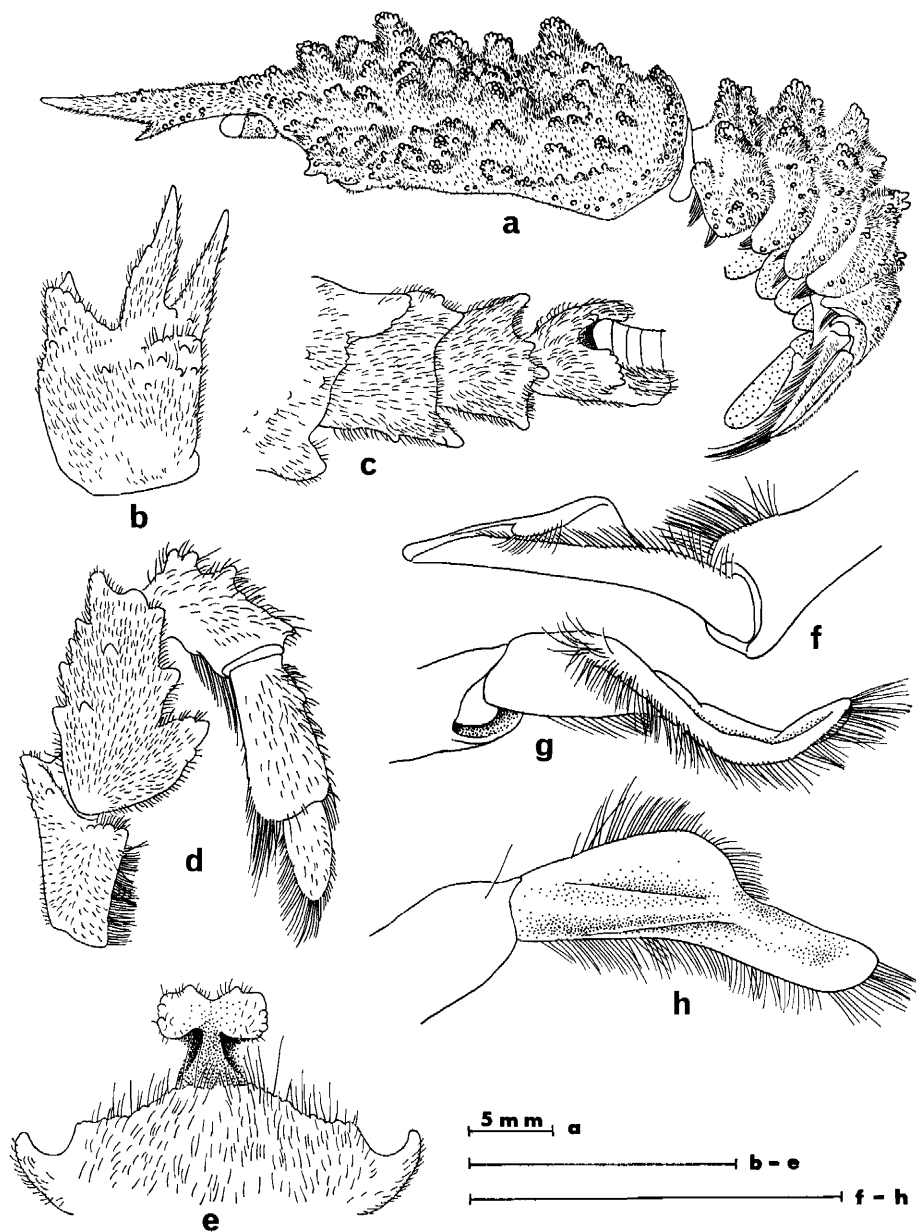


Fig. 2. *Munidopsis gibbosa*, new species, holotype, male. a, carapace and abdomen, lateral view; b, basal segment of left antennule; c, left antennal peduncle; d, endopod of right 3rd maxilliped; e, anterior part of sternal segments; f, right 1st pleopod, dorsal view; g, right 2nd pleopod, ventral view; h, left 2nd pleopod, dorsal view.

ORTMANN known from Sagami Bay, Japan, has epipods on first three pairs of pereopods; it is, however, neither protuberant nor tuberculate on the carapace and abdomen as well as chelipeds and walking legs, bearing distinct spines instead on gastric and cardiac regions, posterior transverse ridge, and second and third abdominal segments.

### Acknowledgements

I thank Dr. Fenner A. CHACE, Jr. and Dr. A. J. BRUCE of the Heron Island Research Station for making this interesting specimen available to me.

### 摘 要

香港の南方, 520-560 尋の深さから採集された深海性のガラテアの 1 新種 *Munidopsis gibbosa* を記載した。本種は *Galathodes* group に属し, epipod

が鉗脚と 2 対の歩脚にあることで相模湾の *Munidopsis camerus* ORTMANN に若干似るが, 甲と腹部に多数の突出と顆粒状突起をもっている。

### References

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