

A New Species of *Calocarcinus* (Crustacea, Brachyura) from the Submarine Bank off the Izu Islands, Central Japan

By

Masatsune TAKEDA

Department of Zoology, National Science Museum, Tokyo

and

Bella S. GALIL

Department of Zoology, Tel-Aviv University, Israel

Some years ago Dr. Takashi OKUTANI of Tokai Regional Fisheries Research Laboratory kindly provided the National Science Museum, Tokyo, with a large collection of crabs from the submarine banks along the Izu Islands in Central Japan. The collection is composed of many interesting species, some of which are considered to be new to science or newly recorded from Japanese waters. In due time the records of all the species will be published by the senior author, but in this short paper the description of a new species of *Calocarcinus* is preliminarily presented as a part of the authors' extensive discussion on trapeziid crabs. The new species is the third in the genus which is represented by *C. africanus* CALMAN, 1909 and *C. habeii* TAKEDA, 1980. The type-specimen of the new species, the holotype female, is preserved in the National Science Museum, Tokyo (NSMT).

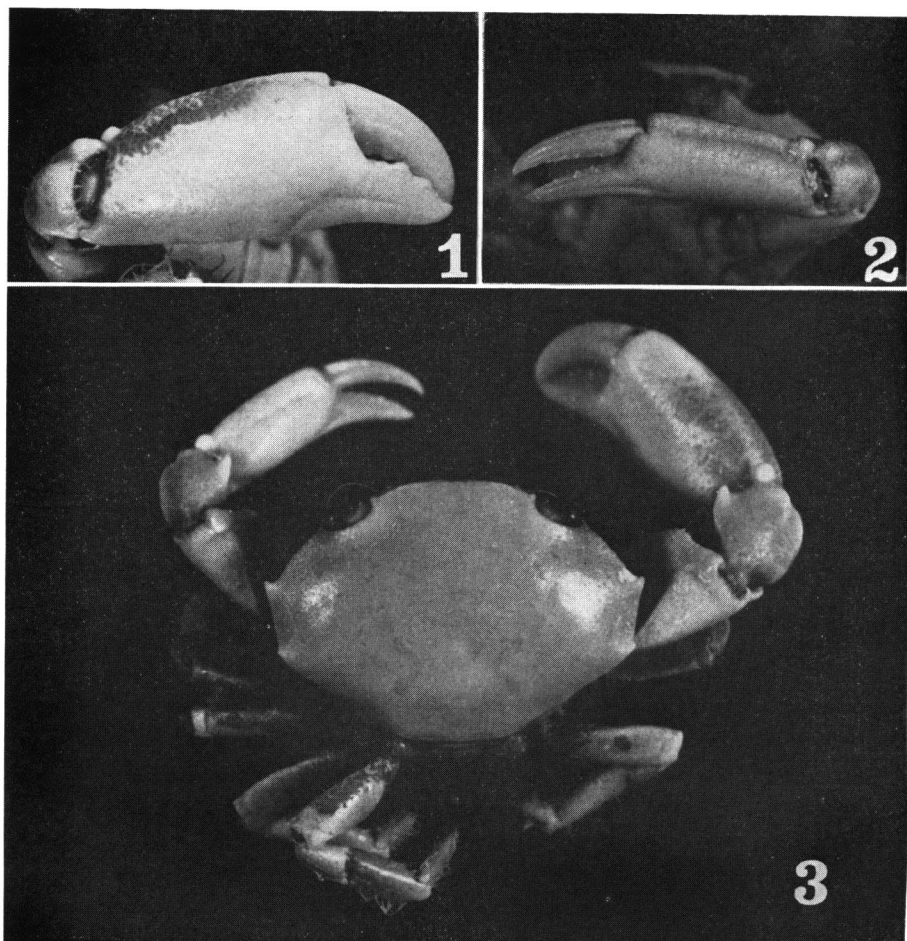
The senior author wishes to thank Dr. T. OKUTANI who is now the leading staff of the Department of Zoology in the National Science Museum, Tokyo, for his kindness of placing the valuable specimens in the senior author's hand for study. The junior author's cordial thanks are due to Prof. Ch. LEWINSOHN of Tel-Aviv University for his continuous guidance and encouragement, to whom the new species is dedicated.

Calocarcinus lewinsohni sp. nov.

[New Jap. name: Hon-sangogani]

(Figs. 1-6)

Description of holotype. Carapace convex, smooth and octagonal. Frontal margin slightly produced beyond orbits, indistinctly emarginated and bearing no median sinus, it measures $\frac{3}{7}$ of greatest width of carapace. Eyes large, not entirely contained in orbits, slightly protruding beyond the general contour of the carapace. Inner suborbital angle meeting the front and excluding antenna. Second segment of antenna barely reaching front. Suborbital margin finely granulated throughout its length.



Figs. 1-3. *Calocarcinus lewinsohni* sp. nov., holotype. 1, 2. Chelae; 3. Entire animal.

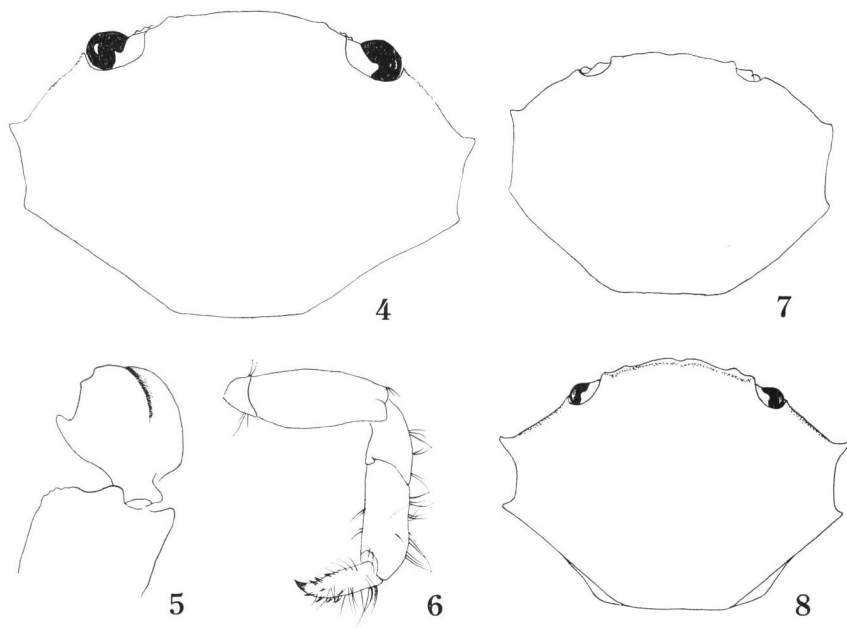
Antero-lateral margin of carapace slightly convex and minutely granulated to the first tooth, the distance being a little more than between the first and second teeth, both of which are conical with rounded tips. Lateral margins between the pairs of antero-lateral teeth straight and slightly converging posteriorly. Postero-lateral margins strongly convergent.

Chelipeds long, stout and unequal, the right being the larger. Right cheliped longer than maximum width of carapace by third; chela smooth, upper margin forming a ridge delineated by two furrows; fingers are toothed throughout the length of cutting edges, the teeth on the immovable one are more conical and regular in shape; inner angle of carpus forming a prominent tooth; merus minutely tuberculated.

Dactyli and propodi of ambulatory legs fringed with long hairs; dactyli armed with numerous short spines.

Holotype. Female, NSMT-Cr 6424; R/V *Soyo-Maru* St. D6~10 (34°25.7' N, 139°10.9' E~34°28.6' N, 139°12.8' E) on Takase, west of Nii-jima I., Izu Is., 70–220 m deep, by dredging; July 9, 1968. The map of stations, the topography and the gears used are referred to OKUTANI (1972).

Measurements. Breadth and length of carapace, 9 and 5.5 mm, respectively; frontal width, 4 mm; front-orbital width, 6.3 mm; length and height of larger chela, 8.5 and 4 mm, respectively.



Figs. 4–6. *Calocarcinus lewinsohni* sp. nov., holotype. 4. Carapace; 5. Carpus and distal part of merus of right (larger) cheliped in dorsal view; 6. Right third ambulatory leg.

Fig. 7. *Calocarcinus africanus* CALMAN. Carapace redrawn from the figure in CALMAN (1909).

Fig. 8. *Calocarcinus habei* TAKEDA. Carapace (after TAKEDA, 1980).

Remarks. The genus *Calocarcinus* CALMAN has long been known by the monotypical representative *C. africanus* CALMAN, 1909 found on the deep-sea cable off East Africa between Aden and Zanzibar, but very recently the second species *C. habei* TAKEDA, 1980 associated with precious coral was described from off Midway Island in the Central Pacific.

At a first glance the new species is readily distinguished from the two known species by the different contour of the carapace, as readily understood from the figures for comparison (Figs. 4, 7, 8). In general the new species may be closer to *C. africanus* than to *C. habei*, differing from the former in the presence of long hairs on the ambulatory legs, prominent tooth at inner angle of carpus of the cheliped and larger,

protruding eyes, and from the latter in its almost straight front and less pronounced tuberculation on chelipeds.

Literature

- CALMAN, W. T., 1909. On a new crab taken from a deep-sea telegraph-cable in the Indian Ocean. *Ann. Mag. nat. Hist.*, (8), **3**: 30–33.
- OKUTANI, T., 1972. Molluscan fauna on the submarine banks Zenisu, Hyotanse, and Takase, near the Izu-Shichito Islands. *Bull. Tokai Reg. Fish. Res. Lab.*, (72): 63–142, pls. 1–2.
- TAKEDA, M., 1980. Two new crabs associated with precious coral from the Central Pacific. *Bull. Natn. Sci. Mus., Tokyo*, (A), **6**: 71–76.