

## New Record of Majoid Crab *Xenocarcinus conicus* (Crustacea: Decapoda: Epialtidae) from Korea

Sang-kyu Lee<sup>1</sup>, Sa Heung Kim<sup>2</sup> and Won Kim<sup>1,\*</sup>

<sup>1</sup>School of Biological Sciences, Seoul National University, Seoul 151-747, Korea

<sup>2</sup>Laboratory of Marine Biodiversity, IN THE SEA KOREA Co. Ltd., Seogwipo 697-110, Korea

### ABSTRACT

A female crab of *Xenocarcinus conicus* (A. Milne Edwards, 1865) was collected from Munseum, Jeju Island. The genus *Xenocarcinus* is recorded newly in Korean brachyuran fauna. The present specimen has broader and shorter rostrum and eleven sharp teeth on the inner border of dactylus of the first ambulatory leg. Korean epialtid fauna now consists of eight species of four genera.

**Key words:** New record, *Xenocarcinus conicus*, Epialtidae, Decapoda, Korean fauna

### INTRODUCTION

The majoid crabs of the family Epialtidae including twelve genera (Davie, 2002) are characterized by a sunken orbit and short and often immobile eyestalks and many species have a prominent beaked rostrum (Griffin and Tranter, 1986).

Five species, *X. truncatifrons* Balss, 1938, *X. monoceros* Sakai, 1938, *X. depressus* Miers, 1874, *X. tuberculatus* White, 1874, *X. conicus* (A. Milne Edwards, 1865), of the genus *Xenocarcinus* White, 1847 are distributed in the Indo-West Pacific. Of these, *X. conicus* and *X. tuberculatus* are widespread in the Indo-West Pacific (Griffin and Tranter, 1986).

Four species of the genus *Xenocarcinus* have been recorded in Japan: *X. conicus*, *X. depressus*, *X. monoceros*, *X. tuberculatus* (Sakai, 2004). Only *X. depressus* is recorded in China (Dai and Yang, 1991). *X. conicus* is the species of the genus from Korean water by the present study.

The specimen was preserved in 70% ethyl alcohol and deposited in the Laboratory of Systematic and Molecular Evolution, Seoul National University (SNU). The abbreviation "cl" refers to carapace length from the tip of rostrum of the posterior dorsal margin of the carapace. Drawings were made with the aid of camera lucida. Terminology mostly follows that of Griffin (1966).

### SYSTEMATIC ACCOUNTS

Superfamily Majoidea Samouelle, 1819

\*To whom correspondence should be addressed

Tel: 82-2-880-6695, Fax: 82-2-872-1993

E-mail: wonkim@plaza.snu.ac.kr

Family Epialtidae Macleay, 1838

Genus <sup>1</sup>*Xenocarcinus* White, 1847

<sup>2</sup>*Xenocarcinus conicus* (A. Milne Edwards, 1865)

(Fig. 1)

*Hueniodes conica* A. Milne Edwards, 1865, p. 145.

*Xenocarcinus tuberculatus* (not White, 1847): Alcock, 1895, p. 192; Stephensen, 1945, p. 109.

*Xenocarcinus tuberculatus* var. *alcocki* Laurie, 1906, p. 371.

*Xenocarcinus depressus*: Gordon, 1934, p. 70.

*Xenocarcinus nakazawai* Sakai, 1938, p. 325; Sakai, 1976, p. 213; Miyake, 1983, p. 38.

*Xenocarcinus alcocki*: Sakai, 1965, p. 92.

*Xenocarcinus conicus*: Griffin and Tranter, 1986, p. 100.

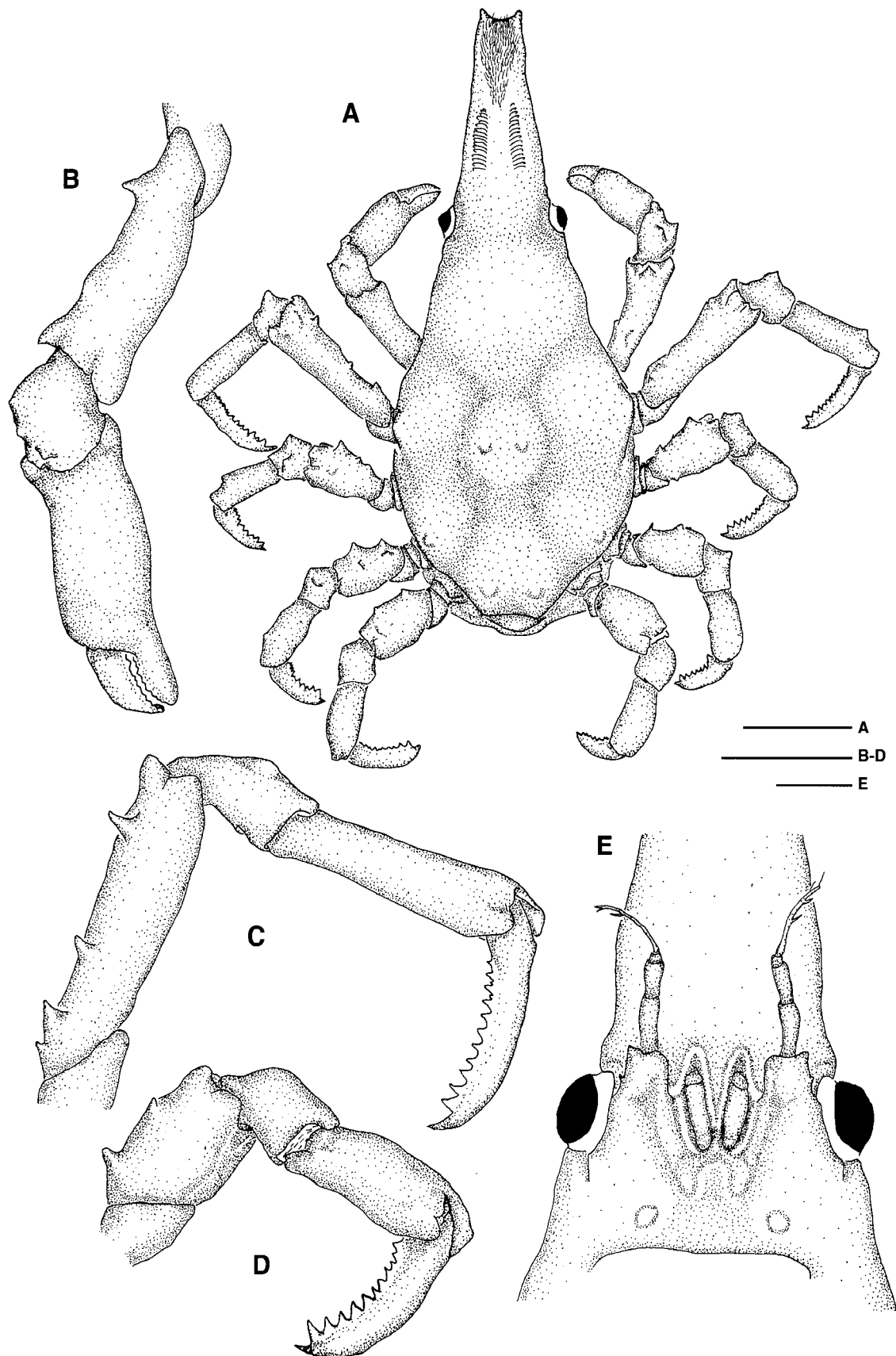
**Material examined.** 1 ♀ (cl 10.52 mm), Munseum, Jeju Island, 19 Apr. 2002 (S.H. Kim).

**Description.** Carapace (Fig. 1A). Elongated oval, dorsal surface somewhat depressed; regions indefinite, median gastric and branchial regions faintly inflated, former with curled hairs on either side, without any tubercles contrary to *X. tuberculatus*, latter with indistinct tubercle at junction of anterior-lateral and posterior-lateral borders; cardiac region flat, two tubercles side by side. Posterior border subtruncate, with indistinct tubercle on either lateral angle.

**Rostrum** (Fig. 1A). Very long, beak-shaped, somewhat depressed, thickly covered with fine tomentum, its tip being bifurcated. Orbits rounded, not very deep, eyes large; intercalated lobe distinct. Basal segment of antenna narrowed at tip, its anterior-external angle armed with indistinct tooth; flagellum very slender, short. Ridge of pterygostomial region with three tubercles.

**Merus** of external maxilliped at anterior-external angle with narrowed at tip.

<sup>1</sup>\*물방울물맞이게속 (신칭), <sup>2</sup>\*물방울물맞이게 (신칭)



**Fig. 1.** *Xenocarcinus conicus* (A. Milne Edwards, 1865), female. A, whole animal, dorsal view; B, outer view of left cheliped; C, first ambulatory leg; D, fourth ambulatory leg; E, front of carapace and orbit, ventral view. Scales bars=4 mm (A-E).

Chelipeds (Fig. 1A, B). Not stouter, longer than any ambulatory legs; merus with three spines on anterior border, with spine on posterior border near distal end; carpus and propodus unarmed, not much depressed; fingers not gaping, prehensile edges indistinctly denticulated.

Ambulatory legs (Fig. 1A, C, D). First pair longer than total length of carapace and rostrum; merus with four acuminate teeth along superior border; carpus obtuse tooth in middle of superior border; dactylus slightly curved, eleven sharp teeth on its inner border, larger three or four distal ones. Other three pairs of legs (Fig. 1A); each merus with three more or less distinct teeth. Teeth of dactylus eight in number; distal three or four prominent.

Abdomen of female. First and last segments freely movable; second to sixth fused, sometimes suture line between second and third segments distinct.

*Distribution.* Korea, West-Indian Ocean, Red Sea, Sri Lanka, Malaya, Banda Islands, Kai Islands, and Japan.

*Remarks.* Korean *X. conicus* is agreed quite well with *X. conicus*. The rostrum of Korean female crab is about half the postrostral carapace length as *X. conicus*, a broader rostrum and an indistinct tooth on the anterolateral angle of the basal antennal article. But the Korean *X. conicus* has small tubercles side by side on the cardiac region and eleven sharp teeth on the inner border of the first pair of ambulatory legs.

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