

A New *Actumnus* (Crustacea; Decapoda;
Brachyura) from Jeju Island, Korea¹⁾

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韓國 濟州島産 *Actumnus* 屬의 一新種 (甲殼綱 十脚目 短尾類)

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摘 要

Kim and Park(1972)이 1969年 8月 15日 濟州島 西歸浦에서 採集된 雌 1우를 *Actumnus asper* (Rüppell)로 同定하고 韓國명을 콩알부채게라하여 記載하였고, Kim(1973)이 그의 著書에서 이것을 다시 記載하였던 것을 精密히 再檢한 결과 新種임을 確認하고 이것을 完模式으로 하여 *Actumnus marissinicus*라 命名하여 記載한다. 이것은 甲殼의 앞 半部가 현저하게 불룩하고 얇고 넓은 홈들로써 나뉘어져 있다. 옆통구역은 거의 完全하며 중앙에 뚜렷하지 않는 세로홈이 있다. 뒷옆 가장자리 근처는 오목하게 들어갔다. 집게 다리와 甲殼은 곧게 선 선 강모로 덮혀 있다.

A close examination revealed that a female specimen from Jeju Island reported as *Actumnus asper* (Rüppell) by Kim and Park (1972) really represents an undescribed species which is here designated as *A. marissinicus*. The following is a result of study on the female specimen which is now deposited in the Zoological Laboratory, College of Natural Sciences, Seoul National University.

Actumnus marissinicus sp. nov.

Korean name: Kongal-buchaegae

Pl. 1, Fig. 1. B,C

Actumnus asper (Rüppell): Kim and Park, 1972, p. 61, fig. 5, pl. 1 fig. 4;

1) Pilumnid crabs of the family Xanthidae from the West Pacific, VI.

Kim, 1973, p. 398, fig. 157, pl. 84 fig. 119.

Material examined. Seogwipo, Jeju I., 1 ♀ (holotype), Aug. 15, 1969, H. S. Kim leg. Breadth and length of carapace, 13.4 and 9.5mm, respectively.

Diagnosis. Anterior half of carapace markedly convex with depressed granulated areolae divided by shallow and wide furrows; protogastric region large with a short incision at its anterior outer one-third, and metagastric region bears a longitudinal incision from behind; cardiac region nearly entire only with a faint trace of a longitudinal median furrow. Anterolateral border of carapace with three lobes tipped each with a spiniform granule and bordered with some conical granules, and posterolateral border concave dorsally. Carapace and chelipeds covered with short, erect stiff setae, not felt.

Description. Carapace extremely convex fore and aft for its anterior half, very sunken posteriorly and concave posterolaterally. Its dorsum well divided into granulated, depressed areolae by wide but shallow furrows, being everywhere covered with short, erect stiff setae. Frontal areola not convex at all. An areola behind frontal areola more or less longitudinally ovoid; a small protuberance near its posterolateral end. Protogastric areola prominently large, regularly convex fore and aft, bearing a longitudinal short incision at anterior outer one-third. Metagastric areola with a median longitudinal furrow from behind. Hepatic areola oblique and similar to, but smaller than, outer branchial areola. Inner branchial areola separated from outer transverse one by an oblique shallow furrow, and from metagastric areola by a deeper furrow. Cardiac areola large, indistinctly subdivided into two; antero-external angles so truncated that cardiac areola is of appearance convex forward as a whole; median longitudinal furrow really shallow and only indicated by interruption of granules. Posterolateral part of dorsum nearly devoid of granules and markedly concave near inner branchial and cardiac areolae.

Front strongly declivous anteriorly, being cut into two lobes by a median small notch; each lobe not round; lateral lobule conical. Supraorbital border weakly raised, bordered with several conical granules, bearing two notches; median part only with two granules on its margin, and smooth dorsally. External orbital angle rather similar to following three anterolateral teeth, each of which is armed with a spiniform granule at its anterior end and associated with some minute granules on its posterior slope.

Chelipeds heavy and quite unequal. Merus short, stout and not exerted beyond carapace; its upper border armed with distal and subdistal spine-tipped teeth, though in holotype subdistal one is rather worn out without a spine. Carpus large and palm high as usual; outer surface of palm densely covered with conical or rather tuberculated granules. Ambulatory legs comparatively slender, especially

so in first two pairs. Anterior border of merus rather thin. Upper surface of carpus ornamented with a longitudinal shallow furrow, but bears no granules.

Remarks. This holotype specimen was previously reported by Kim and Park (1972) as *Actumnus asper* (Rüppell), to which it is really close. *A. asper*, which was originally reported from the Red Sea as *Xantho*, is chiefly known from the Indian Ocean, and some records of occurrence in the Pacific were doubted by Takeda and Miyake (1969). In addition to the original figure, some fine photographs were given by Nobili (1906) as *A. bonnieri* Nobili which is a synonym, Klunzinger (1913) and Guinot (1964). The present specimen from Jeju Island was carefully compared with the available descriptions and photographs, and with a male from the Iranian Gulf in the collections of the National Science Museum, Tokyo.

The figures of the carapace, right cheliped and left [*sic*, right!] first ambulatory leg given by Kim and Park (*op. cit.*) and reproduced by Kim (1973) are more or less diagrammatic, but in general fairly accurate and may serve for discrimination of the new species. Details of the areolae are to be referred to the present description and the photograph produced in this paper.

The new species is distinguished from *A. asper* by the following characters. At a first glance, the carapace is so more strongly convex or vaulted that it is seemingly wider. Kim and Park (*loc. cit.*) thus mentioned that the carapace represents the shape of soy bean. The areolae of the dorsal surface are very low and larger with smaller granules. The protogastric areola is especially prominent, bearing a small incision at its anterior outer one-third. The metagastric areola bears a median, shallow longitudinal furrow from behind, differing from the case seen in the examined male of *A. asper*, but agreeing with the published photographs. The cardiac region is only faintly demarcated with its anterior border slightly convex forward, being very indistinctly and imperfectly divided into two. A linear furrow along the posterior border of the carapace is fairly distinct throughout the length, while in *A. asper* it is almost indistinguishable except for the part on the epimeron. The frontal lobes are weakly convex or rather truncated for their outer borders and nearly contact with each other, thus differing from the rounded and strongly convex lobes in *A. asper*. The anterolateral lobes are bordered with only minute granules except for a spiniform granule at each anterior tip. In *A. asper*, even if the armature may be variable, each lobe usually bears two or three subequal granules. Furthermore, it must be mentioned that in *A. asper* the carapace and chelipeds are everywhere thickly and microscopically covered with a felt-like velvet. In the new species, unfortunately, the carapace is denuded for its most part, but it is apparent that the carapace and chelipeds are much sparsely covered with short, erect stiff setae different

from the so-called velvet. The ambulatory legs are comparatively slender, especially so in the meri. In *A. asper*, each carpus of the first two pairs are armed with conical granules of good size on its anterior half of the upper surface and the propodus with some, while in the new species the ambulatory legs are unarmed at all.

The new species is differentiated from another close congener, *A. obesus* Dana, to which the dorsal areolae are rather similar, in having the smaller granules on the areolae and in that the convexity of the carapace is inclined anteriorly and thus makes the seemingly wider appearance.

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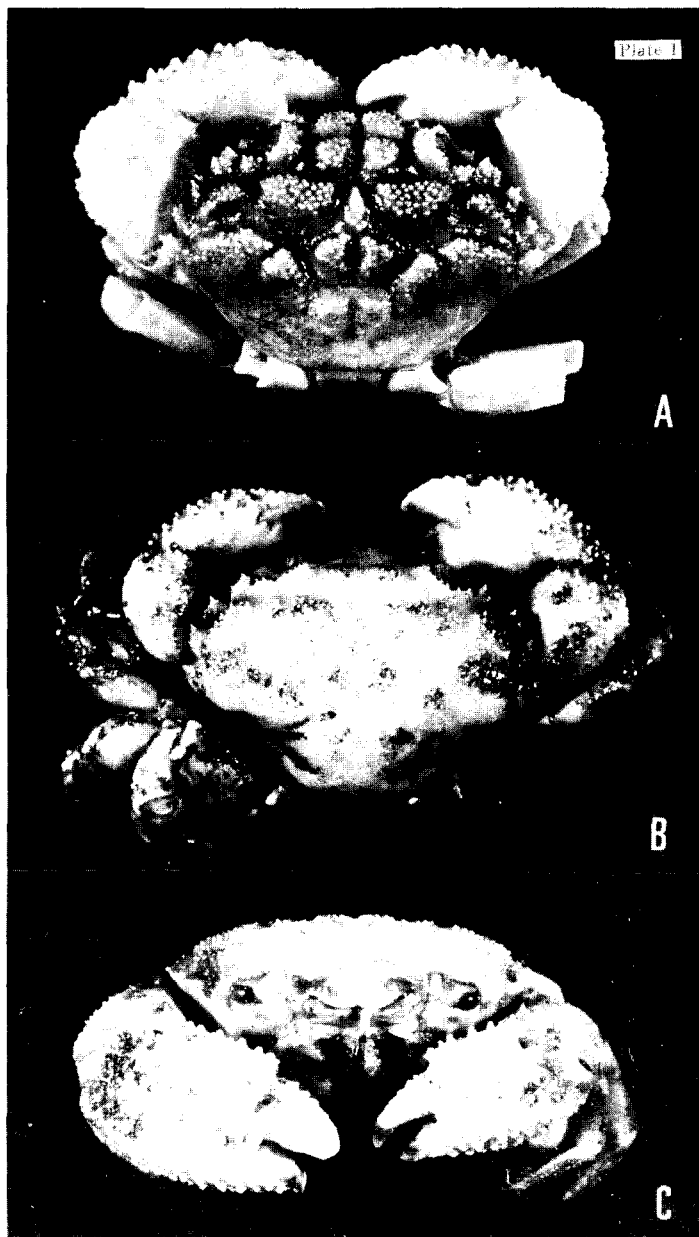


Fig.1. A: *Actumnus asper* (Rüppell), ♂ from the Iranian Gulf (NSMT-Cr. 4525).
B,C: *Actumnus marissinicus* sp. nov., holotype ♀ from Jeju Island.