# On a Deep-Sea Species of the Anomuran Crab, Lithodes turritus Ortmann (Lithodidae, Crustacea) from Sagami Bay

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相模湾で得られたイバラガニ (甲殻上綱, 異尾下目, タラバガニ科) について

十脚甲殻異尾類のタラバガニ科のイバラガニ Lithodes turritus Ortmann を相模湾の深海から1989年11月20日にカニ籠で得ることができた。採集海域は神奈川県小田原市の沖合い、水深500 mから である。 この付近はこれまでにも短尾類のタカアシガニなどとともに、異尾類のタラバガニ科のニホンイバラガニやクモエビ科 のホクロツノコシオリエビなどが カニ籠で得られている (Muraoka, 1989).

イバラガニについての最初の報告は1892年 Ortmann によってなされたが、この標本は甲殻のみで、現在の神奈川県藤沢市に位置する江の島に店を出していた骨董屋から 購入したものである。甲殻の大きさに関する測定値の記載はないが、甲殻(背面)の図、特に棘の形態から判断して、十分成長した個体と思われる。

第2番目の報告は,1913年に Balss によってなされている。調査個体は3個体で,いずれも雌で,しかも幼形であるが,このうちの1個体は相模湾の水深600mから得られている。この標本のうちの1個体は甲長23mm(額棘を含まない),甲幅の24mmの大きさである。これらの標本は額棘,背甲上の棘,鉗脚,歩脚が非常に長いが,これは幼形の特徴でもある(Sakai, 1971;安原他,1987)。

今回,小田原沖で得られた標本は、相模湾からは Balss (1913) 以来のことで、これが第3番目の報告となる。本標本は、甲長175㎜(額棘を含む)、甲幅135㎜の雄で、Ortmann (1892) やSakai (1971,1976) の記載や図と比較して、甲殻や棘の形態、棘の背甲上の位置などはよく一致する。また、鉗脚は右が大である。歩脚は左右で長さが相違し、左の各歩脚は右の同じ対の歩脚と比べてやや短い。特に第2歩脚はその相違が顕著である。これら左の各歩脚は何等かの原因で欠損し、その後に再生したためと思われる。

また、Baba (1986) は東シナ海で得た雌の標本について写真を添えて報告している。この標本写真 (写真は裏焼きで印刷されている: 馬場氏私信による) でみるかぎり、左の第1歩脚は他の歩脚と比較してやや短いが、これは、これまでの報告から推察して再生後間もないためと考える。(村岡健作)

I had an opportunity to examine a deep-sea anomuran crab which was obtained by the use of the crab-trap in Sagami Bay. The specimen is assigned to *Lithodes turritus* Ortmann (Lithodidae, Anomura). This species has been previously collected and described in some occasions from the Japanese waters. From Sagami Bay, it has been described only twice by Ortmann (1892; original description) and Balss (1913).

This short report deals with a brief account and illustrations on the third record of *L. turritus* from bathyal depth of Sagami Bay.

The following abbreviations are used in this paper: CL, carapace length including rostrum in millimeters; CW, carapace width in millimeters measured at the widest part of the carapace.

Family Lithodidae

Lithodes turritus Ortmann, 1892

Japanese name: Ibaragani

Pls. 1-3

Lithodes turritus Ortmann 1892: p. 321, pl. 12, fig. 26; Balss 1913, p. 73. pl. 1, fig. 11, figs. 42-45; Sakai, T. 1971, pp. 10-11, 32-33, pls. 4, 9, 11, fig. 2, map. 2; Sakai, T. 1976, pp. 693-694, pl. 240, 243, fig. 376; Baba, 1986, pp. 210-211, 306, fig. 156; Yasuhara et al. 1987, pp. 27-28, fig. 2.

Material: 1 male, CL, 175mm; CW, 135mm. Off Odawara, depth 500m, crab-trap; Nov. 20, 1989. Collected by Mr. S. Tanigawa, an expert fisherman.

Diagnosis: Carapace is sparsely covered with small tubercles with several spines. The spines are relatively short and conical in form. The gastric and cardiac regions have each four spines. The branchial region has two spines in the middle portion and two smaller ones on the lateral surface. The marginal spines of carapace inclubing postorbiral region are 20 in all, of which four are small and side by side along the posterior portion.

The rostrun is long and relatively slender, and provided with a pair of long accessory spines on the middle portion. The distal portion is bifurcated and their tips are sharply pointed.

The chelipeds are asymetrical; the right cheliped is much longer than the left one. The ambulatory legs are subcylindrical in the shape and considerably long. The first ambulatory leg is slightly shorter than the two succeeding pairs. In each pair, several spinules are found on the upper surface and along both anterior and posterior margins.

The abdomen is broad and triangular in the form. The first abdominal segment of the male specimen is concealed beneath the posterior margin of the carapace; the second abdominal segment is composed of three plates. The third to fifth abdominal segments are well distinguished; their median portion is replaced by a grained membrane. The sixth abdominal segment is oval in form, the distal margin of which bears four tiny spinules. The seventh abdominal segment is very short.

Remarks: This species was originally described and figured by Ortmann (1892) based on the specimen with carapace only. The specimen was purchased at the antique shop

in Enoshima, Kanagawa prefecture. The second description was made by Balss (1913) based upon the juvenile female specimens from Sagami Bay; their carapace and the thoracic appendages are armed especially with long spines. The present male specimen is the third record from Sagami Bay at the depth of 500 m. In the general features, it agrees well with the description and figures given by Sakai (1971), and also with the description of the female specimen from East China Sea, west of Yaku-shima, by Baba (1986), except for the minor differences, such as some additional small spines along the lateral portion of carapace and somewhat lower swellings of carapace. These differences probably due to the growth and the sexual variations.

This anomuran crab was carrying a small stalked barnacle on the basal portion of the second ambulatory leg.

Distribution: Japan, known only from the Pacific side of Honshu, Shikoku (Boso Peninsula to Tosa Bay) and East Chaina Sea. Depth, 200 to 800 meters.

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### **Explanation of Plates**

Plate 1-3, *Lithodes turritus* Ortmann, Male from the bathyal depth of Sagami Bay. Carapace length including rostrum, 175 mm, carapace width, 135mm.

Plate 1, A: entire animal, dorsal view.

B: ventral view.

Plate 2, C: carapace, dorsal view.

D: carapace in lateral view. d': a stalked barnacle attached to the basal portion of the first right ambulatory leg.

Plate 3, E: abdomen.









