A rare mantis shrimp, *Eurigosquilla woodmasoni* (Kemp, 1911), collected from Osaka Bay, Japan (Crustacea: Stomatopoda)

Hiroyuki ARIYAMA*

大阪湾で採集されたナンキシャコ
（甲殻綱：口脚目）

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**Abstract:** Two specimens of the stomatopod, *Eurigosquilla woodmasoni*, were collected from Osaka Bay in 1989 and 1996. The finding of these specimens is the second record of this species from Japan, since the first record from Minoshima, Wakayama Prefecture in 1938. Descriptions of morphological characters and coloration are given based on these materials. This species can be clearly distinguished from the other stomatopods in Japan by the color of the uropod and the shape of the ophthalmic somite.

**Key Words:** Crustacea; Stomatopoda; *Eurigosquilla woodmasoni*; Osaka Bay; Japan.

The stomatopod, *Eurigosquilla woodmasoni*, was originally described by Kemp (1911) as *Squilla woodmasoni* based on specimens from Madras in India. Afterward, Manning and Serène (1968) transferred this species to the genus *Oratosquilla* and Manning (1995) transferred it to the genus *Eurigosquilla*. This species ranges over the warmer regions of Indo-West-Pacific (Manning, 1995). In Japan, only one individual from Minoshima, Wakayama Prefecture was recorded by Komai (1938). However, there was no description of morphological characters and coloration in his paper.

During surveys by Osaka Prefectural Fisheries Experimental Station, two specimens of *Eurigosquilla woodmasoni* were collected by otter trawlines. I will describe them here in detail. The total lengths (TL), carapace lengths (CL) and corneal indices are measured according to Manning (1978). The specimens are deposited in the Osaka Museum of Natural History (OMNH).

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* Osaka Prefectural Fisheries Experimental Station, Tanagawa, Misaki, Osaka 599-03 Japan
**Erugosquilla woodmasoni** (Kemp, 1911)

(Japanese name: Nanki-shako)

(Figs. 1-3)

*Squilla wood-masoni* Kemp, 1911: 99 [type locality, Madras, India]; Kemp, 1913: 74-76, pl. 5, figs. 63-65 [from Hongkong to Aden]; Komai, 1914: 463, pl. 6, figs. 5, 5a [Taiwan]; Komai, 1938: 267 [Japan].


*Oratosquilla tweediei* Manning, 1971: 12-14, fig. 4 [type locality, Singapore].

*Oratosquilla jakartensis* Moosa, 1975: 13-17, fig. 1 [type locality, Jakarta Bay, Indonesia].

*Erugosquilla woodmasoni*. Manning, 1995: 200-203, pl. 36, figs. 123b, 124-126, 136k-m [Vietnam].


**Material examined:** Specimen 1 (OMNH-Ar-3912, Fig. 2-A), male, TL 95 mm, CL 20 mm, Osaka Bay, ca. 5 km off Tanagawa, Misaki, Osaka Prefecture (Fig. 1-A), 21 Nov. 1989, collected by Y. Osada and K. Mutsutani; specimen 2 (OMNH-Ar-3913, Fig. 2-B), female, TL 75 mm, CL 13 mm, Osaka Bay (34°20′N, 135°05′E, Fig. 1-B), depth 35 m, muddy sand bottom (median diameter 0.2 mm), 19 Sep. 1996, collected by H. Ariyama.

**Description:** Size smaller than *Oratosquilla oratoria* (De Haan), which is the most dominant species in Japan. Surface of body smooth.

![Map of Osaka Bay](image)

**Fig. 1.** Collecting sites of *Erugosquilla woodmasoni* (Kemp). A, specimen 1; B, specimen 2.
Fig. 2. *Eurgosquilla woodmasoni* (Kemp).
A, specimen 1, male, TL 95 mm, scale: 10 mm. B, specimen 2, female, TL 75 mm, scale: 10 mm. C, right uropod of specimen 2, scale: 1 mm.

Fig. 3. *Eurgosquilla woodmasoni* (Kemp).
Specimen 2: A, carapace and anterior appendages; B, lateral processes of 5-8th thoracic somites. Specimen 1: C, posterior part of fourth abdominal somite.
Eye (Fig. 3-A) moderate, corneal indices 347 for specimen 1 and 312 for specimen 2. Anterior margin of ophthalmic somite broadly rounded and armed with a median spinule. Rostral plate trapezoidal, broader than long.

Carapace (Fig. 3-A) broad, nearly 2/3 as wide as median length anteriorly; anterior bifurcation of median carina indistinct (specimen 1) or faintly discernible (specimen 2). Dactylus of raptorial claw with 6 teeth, outer margin sinuous.

Exposed thoracic somites 5-7 with bilobed lateral process (Fig. 3-B). Anterior lobe larger than posterior one in fifth somite, smaller in sixth and seventh somites. Sixth and seventh somites with submedian carinae. Abdominal carinae spined as follows: submedian (4) 5-6, intermediate 3-6, lateral 2-6, marginal 1-5. Submedian carinae of the fourth abdominal somite minutely armed for specimen 1 (Fig. 3-C) and unarmed for specimen 2.

Telson slightly broader than long, with median carina and 6 marginal spines.

Uropod (Fig. 2-C) broad, proximal segment of exopod with 8 movable short spines on outer margin. Inner spine of basal prolongation with a triangle lobe on outer margin.

**Coloration:** Antennule bright red, flagellum of antenna white; eye greenish gold; carapace, thoracic and abdominal somites olive green, their carinae dark red; telson pale brown, median carina dark brown, posterior margin yellow, spines red; basal segment of uropod yellow, basal prolongation blue and red, exopod and endopod bright blue; in alcohol preserved material, blue pigments of uropod turned gray or black, the other pigments faded.

**Remarks:** The morphological characters of the present specimens well agree with the descriptions and figures of Manning (1978). He reviewed the previous records of this species, and noted that it varied geographically in (1) the submedian carinae of the fourth abdominal somite, (2) the lobe between the spines of the basal prolongation of uropod and (3) the lateral process of the sixth thoracic somite. In the present specimens the submedian carinae are unarmed for the smaller specimen and armed for the larger one. This may indicate that the shape of carinae changes in proportion to the growth.

The genus *Erogosquilla* contains 4 species. *Erogosquilla woodmasoni* differs from the other species in the number of dactylus teeth of the raptorial claw or the absence of the line of tubercles on the dorsal surface of the telson (Manning, 1995). In addition, this species can be clearly distinguished from the other stomatopods in Japan by the color of the uropod which is bright blue and the shape of the ophthalmic somite.

The discovery of the present specimens is the second record of this species from Japan, since Komai’s finding from Minoshima, ca. 30 km south from the present collecting sites. The closeness of localities and the fact he had examined a specimen of this species from Taiwan previously (Komai, 1914), indicate the certainty of his first record.

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Literature Cited


