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ITUO KUBO

Reprinted from Annotationes Zoologciæ Japonenses Vol. 17, No. 1, March 30, 1938

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ITUO KUBO (久保伊津男)

Zoological Laboratory, Imperial Fisheries Institute, Tokyo

TWO FIGURES

(Received November 13, 1937)

A male and an ovigerous female representing a new species of *Synalpheus* were obtained in August, 1937 near the shore of Ôsima Island, Wakayama Prefecture at depths of 3 to 7 m by Mr. Fujio Hiro, to whom the author is much obliged for kindly placing the material at his disposal. He is also greatly indebted to Dr. Arata Terao for the supervision of the present work.

Synalpheus striatus sp. nov.

Body small and smooth. Carapace about one-third the length of body (without rostrum), with frontal border well defined at pterygostomian angles, acuminated at rostrum and supraorbital spines respectively. Rostrum prominent, almost reaching to distal border of second segment of antennular peduncle, and provided with low median carina which is still distinct at level of eyes but soon obliterated posteriorly. Supraorbital spine less prominent than rostrum, not surpassing basal segment of antennular peduncle (Fig. 2, A). Pleuron of first abdominal segment rounded on lower margin but acute at posterior angle. Pleura of succeeding abdominal segments more or less acuminated on lower margin, sixth abdominal pleuron pointed posteriorly as well. Telson shorter than uropods, about one and a half times as long as wide, gradually reducing its width posteriorly by more than one-half, provided with two spinules on each lateral border, and outer smaller and inner larger pairs of spinules on posterior margin which bears long bristles (Fig. 2, N). Eyes entirely covered by carapace. Stylocerite stretches beyond basal segment of antennular peduncle by one-third the length of second segment. Outer spine of scaphocerite extends well beyond antennular peduncle. Mandibular palp consisting of one proximal

Annot. Zool. Japon., Vol. 17, No. 1, 1938

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Fig. 1. Synalpheus striatus sp. nov. male, first cheliped removed.



Fig. 2. *A*, dorsal aspect of fronal region, $\times 4$; *B*, mandible, $\times ca. 17$; *C*, third maxilliped of male, $\times 5$; *C'*, same of female *C*, $\times 5$; *D*, first cheliped (smaller hand), $\times 5$; *E*, same (larger hand), $\times 4$; *F*, second leg, $\times 7$; *K*, fifth leg, $\times 7$; *L*, endopodite of first abdominal appendage of male, $\times ca. 33$; *L'*, same of female, $\times ca. 17$; *M*, endopodite of second abdominal appendage of male, $\times ca. 13$; *M'*, same of female, $\times 10$; *N*, telson, $\times 5$.

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linear and one distal oval segments, articulated at right angles with each other (Fig. 2, B). Third maxilliped stouter in male than in female, ultimate segment about four times as long as penultimate one (Fig. 2, C and C). Chelipeds asymmetrical; merus of larger one about three times as long as wide, with upper border pointed at tip, carpus very small, chela stout, palm about 2.4 times as long as movable finger, which bears a prominent posteriorly directed tooth near the middle of inner edge, immovable finger shorter, toothless (Fig. 2, E). Smaller cheliped somewhat hairy, palm a little more than one and a half times as long as movable finger, which overlaps immovable one Second pair slender, merus about 1.5 times as long as (Fig. 2, D). ischium, carpus longer than merus and segmented into five joints, proximal one the longest, chela linear, palm slightly shorter than movable finger, immovable one hairy on lower margin (Fig. 2, F). In third pair, merus is the longest of all joints, about twice as long as carpus, and about 1.1 times as long as propodus; merus has a spiniform process at lower and distal corner, carpus furnished with a spine at lower angle, propodus armed along lower margin with 11 spines, distal two of which are closely set, dactylus small, carrying a small spine close to terminal claw (Fig. 2, G). Fourth and fifth pairs of legs similar in all respects except that merus of fourth leg bears no spine at tip and fifth leg is deprived of terminal spines in merus and carpus (Fig. 2, H and K). Endopodite of first abdominal appendage lamellar in male (Fig. 2, L), but cylindrical and more hairy in ovigerous female (Fig. 2, L'). Endopodite of the second abdominal appendage is smaller in male than in female by nearly one-half, without appendix masculina, stylumblys much longer in male than in female (Fig. 2, M and M').

Colour: According to Mr. Hiro's information, the whole body is uniformly dark violet just like comatulids, together with which the specimens were obtained, except that carapace is striated with five londitudinal white bands. Hence the specific name.

Holotype: δ , body length (without rostrum) 25.0 mm.

Allotype: \circ , ovigerous, 26.5 mm.

Type locality: Ôsima Island, Wakayama Prefecture.

The present species belongs to "comatularum" group³ of the genus Synalpheus and closely resembles S. odontophorus de Man⁵ but it is readily distinguished from the latter by having the immovable finger of the larger chela toothless on its cutting edge.

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Type specimens are deposited at the Seto Marine Biological Station of the Kyoto Imperial University.

LITERATURE CITED

- Balss, H. (1914). Ostasiatische Decapoden II, Die Natantia und Reptantia. Abhandl. math.-phys. Klasse, K. Bayer, Akad. Wiss. II, Suppl.-Bd. 10. Abhandl.
- 2. Bate, C. Spence (1888). Challenger Report, Macrura, 24.
- Coutière, Henri (1909). The American species of snapping shrimps of the genus Synalpheus. Proc. U. S. Nat. Mus., 36, pp. 1–93.
- --- (1910). The snapping shrimps (Alpheidae) of the Dry Tortugas, Florida. Proc. U. S. Nat. Mus., 37.
- De Man, J. G. (1911). The Decapoda of the Siboga expedition, Part II, Alpheidae. Monographie, 39a.
- Miers, E. J. (1884). Report on the zoological collections made in the Indo-Pacific Ocean during the voyage of H. M. S. Alert (1881–2). British Mus. Nat. Hist.
- Rathbun, M. J. (1902). The Brachyura and Macrura of Porto Rico. Bull. U. S. Fish Comm., 20 (Report for 1900), Washington.
- Schmitt, Waldo L (1933). Four new species of decapod crustaceans from Port Rico. Amer. Mus. Novitates, (662).
- Stimpson, W. (1860). Prodromus descriptions animalium evertebratorrum expeditionis ad Oceanum Pacificum septentrionalem, Pars VIII. Crustacea Macrura. Proc. Acad. Sci. Philadelphia.
- Kokoya, Yu (1936). Some rare and new species of decapod crustaceans found in the vicinity of the Misaki Marine Biological Station. Jap. Jour. Zool. 7, (1).