A NEW CHIROSTYLID (CRUSTACEA, DECAPODA, ANOMURA) FROM DEEPER PARTS OF THE JAPANESE WATERS AND OFF THE EAST COAST OF AFRICA

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動 物 分 類 学 会 誌 17 号 別 刷

昭和54年 (1979) 12月10日発行

Reprinted from

Proceedings of the Japanese Society of Systematic Zoology

No. 17 (December, 1979)

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The chirostylid described below comes from two different sources and disjunt localities. In early 1974, while working with the *Albatross* galatheids, one of us (KB) found an unidentified specimen of Chirostylidae from another *Albatross* source taken in the deeper part of the Japanese waters and deposited in the National Museum of Natural History, Smithsonian Institution. This seemed new and was tentatively named *Uroptychus remotispinatus.* Recently NMT also came across two unusual forms of the same animal group taken from off the east coasts of Africa, in the collection of the Anomura made by the International Indian Ocean Expedition (IIOE), on which she has currently been working. The information communicated to each other led us to believe that these forms are identical.

The holotype from Japan is deposited in the Smithsonian Institution, Washington, D. C., under the catalog number of the United States National Museum (USNM), and the two paratypes will be also in the same institution.

Uroptychus remotispinatus, new species

(Figs. 1-2)

Material. Southeast of Mizunoko Shima Light, Bungo Suido (32°32′ N, 132°25′ E), 1,320 m (720 fm); greenish brown mud, fine grey sand, and Foraminifera; 23 Aug. 1906; *Albatross* Sta. 4956; 1 ovig. ♀ (holotype, USNM 150318). Off Durban (30°12′ S, 32°01′ E); 1,360 m; 7 Sept. 1964; IIOE *Anton Bruun* Sta. 389-C: 1 ♀. Off Mozambique (21°18′ S, 36°18′ E); 1,510-1,600 m; 2 Oct. 1964; IIOE *Anton Bruun* Sta. 399-C: 1 ♀.

Diagnosis. Carapace dorsally smooth and glabrous with anterolateral spine distinct. Rostrum wide at base. Eyes well developed. Antennal peduncle unarmed on distal 2 segments, with basis produced and antennal scale as long as or extending beyond penultimate segment. Third thoracic sternum shallowly depressed with 2 median spines on concave anterior margin and ventral process near lateral extremity; anterolateral margin of 4th thoracic sternum relatively short with few processes anteriorly. Cheliped unarmed, fingers setose, not crossing distally, with basal process on opposable margin of movable finger. Walking legs slender, carpus comparatively long, dactylus with 2 terminal spines of subequal size and 4 or 5 low posterior marginal spinelets distantly separated from terminals.

Description of holotype. Carapace slightly longer than broad, dorsally glabrous, spineless and moderately convex, posterolaterally distinctly ridged; cardiac region circumscribed by more or less deep concavity; lateral margins slightly diverging posteriorly, feebly convex with indistinct crenulations. Anterolateral spine small but distinct.

Rostrum broad at base, distally narrowing, curving dorsad, barely half as long as remaining carapace. Outer orbital angle indistinctly produced.

Eyes well developed, eyestalk relatively wider, cornea much dilated, extending beyond midlength of rostrum.

Abdomen also smooth and glabrous dorsally.

Antennal peduncle comparatively slender; distal 2 segments unarmed; ultimate segment twice as long as penultimate when measured on inner margin; antennal scale ending rather roundly, slightly falling short of midlength of ultimate peduncular segment; basis proximal to scale distinctly produced.

Endopod of 3rd maxilliped spineless; merus more than twice as long as ischium; inner toothed ridge of ischium with 23 denticles.

Anterior part of sternal segments as illustrated; 3rd thoracic sternum shallowly depressed; anterior margin setose, concave with 2 small median spines; small ventral process near each anterolateral extremity; anterolateral margin of 4th thoracic sternum relatively short, with few pronounced but low processes anteriorly.

Cheliped comparatively slender, 3.6 times as long as carapace, spineless, almost glabrous excepting fingers; ischium with small dorsal process; arm relatively long; palm shorter than wrist, but much wider; about 4 times as long as wide, moderately depressed; lateral margins subparallel; fingers setose, relatively wide, more than half as long as palm, not gaping, ending roundly without crossing; immovable finger proximally narrowing; opposable margins minutely dentate; that of movable finger with prominent but low basal process.

Walking legs similar, but merus of 3rd leg much shorter; slender, depressed, furnished with long coarse setae especially on carpus and propodus; merus unarmed; carpus elongate, 0.67 as long as propodus; propodus about 6 times as long as broad, with 4 or 5 long spinelets on posterior margin, but unarmed in distal 1/3 of length; dactylus relatively slender, curving inward, about half as long as propodus, with 2 more or less pronounced

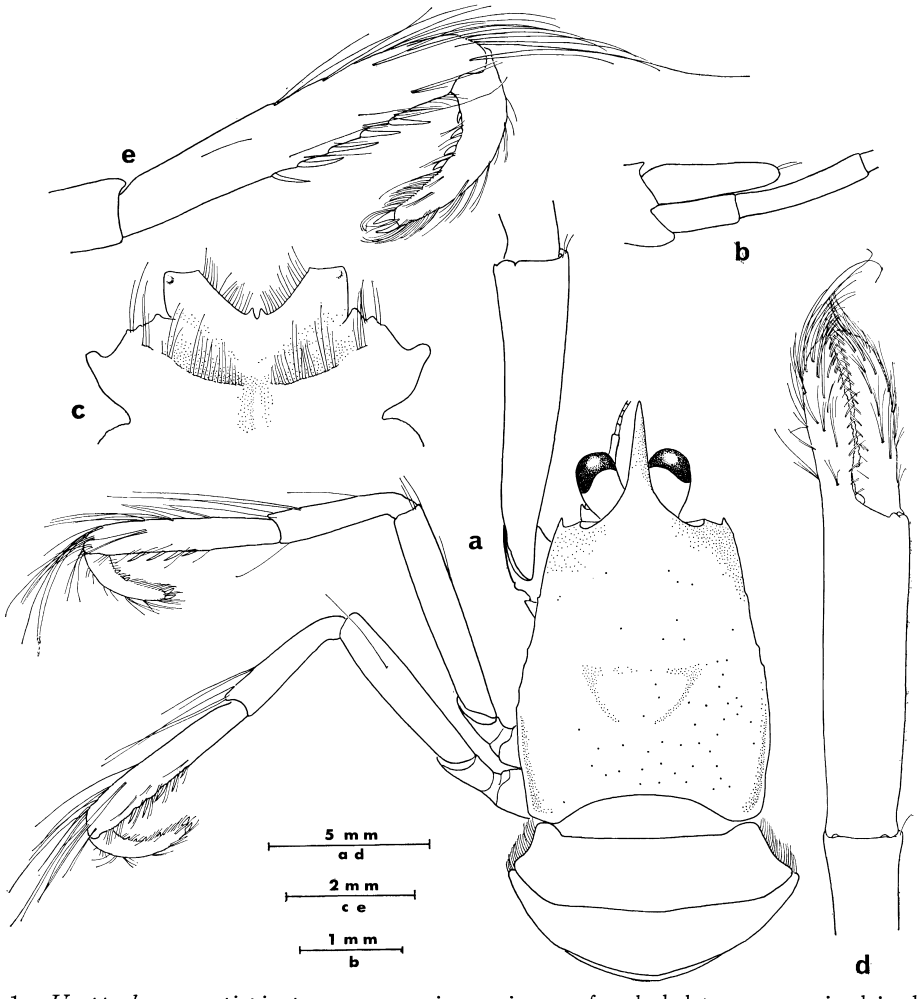

Fig. 1. *Uroptychus remotispinatus*, new species; ovigerous female holotype; a, amimal in dorsal view; b, right antennal peduncle; c, anterior part of sternal segments; d, left chela; e, distal segments of right 2nd walking leg.

terminal spines of subequal size and 4 posterior marginal spinelets distantly separated from terminals.

Variation. Two male paratypes in the IIOE collection differ from the holotype in the following respects, which, however, are thought to be less than a specific importance: The carapace is not so distinctly widening posteriorly as in the holotype; the rostrum is much shorter, 0.30 or 0.36 as long as the carapace, and almost horizontal; the antennal scale is as long as the penultimate segment of the peduncle; the anterior margin of the third thoracic sternum is much roundly sinuous, without angle at lateral extremity. The cheliped of the male from IIOE Sta. 399-C is much like that of the holotype but the basal process of the movable finger is relatively smaller; that of another paratype has the fingers moder-

ately gaping, the opposable margins fitting each other in the distal half when closed and the basal process of the movable finger being subdivided; the dactylus of the walking leg is much more slender in the last mentioned specimen.

The carpus-propodus ratios of the walking legs in the type-series vary from 0.61 to 0.68 (average, 0.64).

Male pleopods as a copulatory organ are present on first two segments of the abdomen.

Measurements of holotype. Length of carapace including rostrum, 12.1 mm; width of carapace, 7.7 mm; length of cheliped (left), 43.8 mm; of wrist, 14.1 mm; of palm, 10.3 mm; of movable finger, 6.4 mm; diameter of ovum, 1.3×1.4 mm.

Measurements of paratypes. Carapace lengths of males, 8.6–9.6 mm.

Remarks. Our material seems very near *Uroptychus australis indicus* ALCOCK reported upon the *Siboga* collection from the Indonesian waters (VAN DAM, 1933), which material, however, is said to disagree in detail with ALCOCK's description. The differences in the *Siboga* specimens enumerated and supposed to be intraspecific seemed to us to pause a

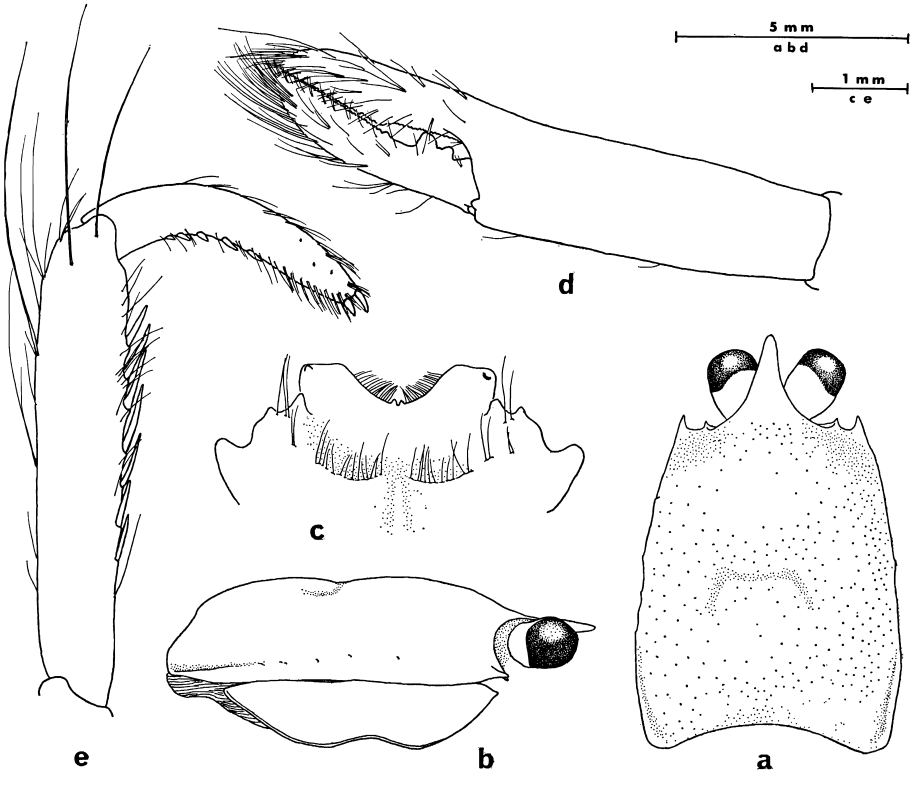

Fig. 2. *Uroptychus remotispinatus*, new species; a–d, male paratype from IIOE Sta. 389–C; e, male paratype from IIOE Sta. 399–C; a, carapace in dorsal view; b, same in lateral view; c, anterior part of sternal segments; d, right chela; e, distal 2 segments of 1st walking leg.

question about their identity with the same one species. Examination of the *Siboga* material made by KB during his visit to Amsterdam in 1974, disclosed that the female from the *Siboga* Sta. 266 is undoubtedly different from the remaining in a specific level; it bears strongly depressed third thoracic sternum with much deeply concave anterior margin; the fourth thoracic sternum bears longer anterolateral margins, as clearly illustrated by VAN DAM (1933: fig. 26); the dactylus of the walking leg is most noticeably different in having the posterior margin with 10 much pronounced spines without any interruption by their absence, the ultimate (terminal) being the largest. The distal two segments of the walking leg, especially the armament of the posterior margin of the dactylus, in the remaining material, are much like those of the present new species; however, the details are different; the ultimate spine is larger in the *Siboga* specimens, subequal to the penultimate in the new species; the carpus is most noticeably longer in the new species.

In order to elucidate the specific status of this *Siboga* material, one ovigerous female of *U. indicus* ALCOCK from the *Investigator* source, 9328/9, now deposited in the Zoological Survey of India, Calcutta, was examined on loan by the courtesy of Dr. K. K. TIWARI. In addition to the morphological characters of *U. indicus* previously enumerated on examination of this specimen (BABA, 1977), it is noted that the third thoracic sternum is greatly depressed and the fourth sternum bears serrate, more or less longer anterolateral margins; and notably the dactylus of the walking leg bears much stouter posterior marginal spines, the terminal (ultimate) being less pronounced. These facts indicate that the *Siboga* material assigned to *U. australis indicus* belongs to two different species, both undescribed. Further details of these will be reported elsewhere.

Etymology. The name is derived from the Latin, *remotus*, distant + *spinatus*, spined, alluding to the armament of the dactylus of the walking leg.

Type-locality. Southeast of Mizunoko Shima Light, Bungo Suido, Japan (32°32′ N, 132°25′ E); 1,320 m.

Acknowledgements

We thank Dr. Fenner A. CHACE, Jr. of the Smithsonian Institution, for allowing KB to examine an unidentified chirostylid deposited in the National Museum of Natural History of that Institution; and the authorities of the International Indian Ocean Expedition for entrusting NMT with the work of its galatheid collection. KB thanks Dr. J. H. STOCK of the Zoological Museum, Amsterdam, for the permission to examine the *Siboga* material deposited there, and Dr. K. K. TIWARI of the Zoological Survey of India, for the loan of the *Investigator* specimen. Miss Badrunnisa KHAN of the University of Karachi, who assisted in drawing and measurement, is also acknowledged.

摘　　要

米国アルバトロス号探険によって豊後水道，水深1320m より採集されたワラエビの1種は，国際インド洋調査（1964）によって東アフリカのダーバン沖水深1360m とモザンビーク沖水深 1510～1600m より採集された標本と同種であり，ここに新種 *Uroptychus remotispinatus* として記載した。本種は VAN DAM（1933）がシボガ探険採集品にもとづいて報告した *Uroptychus australis indicus* ALCOCK に近似するが，同標本を調査したところ，これとは明瞭に区別され，しかもシボガの標本は *U. indicus* とは別の2種（未記載）に属することがわかった。

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