

## Four new records of caridean shrimp (Crustacea: Decapoda: Caridea) from the East China Sea and South China Sea

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### Abstract

Four species of caridean shrimps collected from the East China Sea and South China Sea represent new records for the Chinese waters: *Lysmata kemp* Chace, 1997; *Lysmata lipkei* Okuno and Fiedler, 2010; *Chlorocurtis jactans* (Nobili, 1904) and *Rhynchocinetes conspiciocellus* Okuno and Takeda, 1992. The diagnostic characters and illustrations of these four species are presented, with remarks on their taxonomy. The identification keys of these species from Chinese waters are provided.

**Key words:** new record, *Lysmata kemp*, *Lysmata lipkei*, *Chlorocurtis jactans*, *Rhynchocinetes conspiciocellus*, China seas

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### 1 Introduction

Caridea is an infraorder of shrimp within the order Decapoda. It is a species-rich group widely distributed in fresh and marine waters. De Grave and Fransen (2011) recognized 3 438 species of caridean shrimp worldwide. Since then dozens of new caridean species have been discovered from worldwide each year (WoRMS, <http://www.marinespecies.org>). In Chinese waters, Liu (2008) recognized only 585 caridean species. In recent years, a few new species and new records have been found from Chinese waters (Li, 2015; Gan and Li, 2016, 2017a, b; Wang et al., 2017a, b).

During on-going studies on caridean shrimp from the collection of the Marine Biological Museum, Chinese Academy of Sciences (MBMCAS) in the Institute of Oceanology, Chinese Academy of Sciences (IOCAS), we found four species of caridean shrimp that had not been recorded from the Chinese waters. Two species, *Lysmata kemp* Chace, 1997 and *L. lipkei* Okuno and Fiedler, 2010, belonging to the family Lysmatidae Dana, 1852 were collected from the East China Sea and the South China Sea respectively. *Chlorocurtis jactans* (Nobili, 1904), belonging to the family Pandalidae Haworth, 1825, was collected from the subtidal zone of Xisha Islands. *Rhynchocinetes conspiciocellus* Okuno and Takeda, 1992, belonging to the family Rhynchocinetidae Ortmann, 1890, was collected from the subtidal zone of the Hainan Island. In the present study, the diagnostic characters and illustrations of these four species are presented, their taxonomic status is remarked, and keys to distinguish them from their congeners from Chinese waters are provided.

### 2 Materials and methods

The materials examined in this study, preserved in 75% ethanol, are deposited in MBMCAS. Dissection and illustrations were made under a stereomicroscope (Nikon SMZ 1500, Kanagawa, Japan). The following abbreviations are used: CL, carapace length, the length from the posterior orbital margin to the posterior margin of carapace; ovig., ovigerous; coll., collector (s); MBM, the Marine Biological Museum; No., specimen catalog number.

### 3 Results

#### Family Lysmatidae Dana, 1852

#### Genus *Lysmata* Risso, 1816

#### *Lysmata kemp* Chace, 1997

#### (Fig. 1)

*Hippolysmata dentata* Kemp, 1914: 117, Fig. 5, Pl. 6.

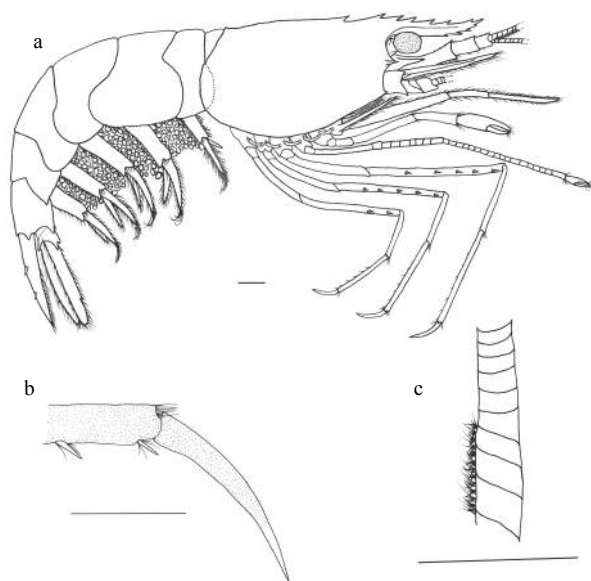
*Lysmata kemp* Chace, 1997: 71—Frogliola and Deval, 2013: 168–171, Figs 1, 2.

**Material examined.** MBM042573, 1 ovig. hermaphrodite (CL 8.8 mm), the East China Sea, 29.5°N, 124°E, No. F15B-9, Sta. 4054, 65 m, coll. Cui Yuxing, 1959-10-24. MBM048625, 1 ovig. hermaphrodite (CL 9.2 mm), the South China Sea, 20.5°N, 114°E, No. 13-31, Sta. 6054, coll. Zhang Weiquan, 1959-3-17.

**Diagnosis.** Carapace smooth and glabrous, with robust antennal spine, well-developed epigastric spine and feeble pterygostomial spine. Rostrum slightly curved upward, reaching or slightly exceeding end of distal segment of antennular peduncle, with lateral carina; dorsal margin armed with 4 or 6 teeth;

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**Fig. 1.** *Lysmata kempī* Chace, 1997. a. Ovigerous female, lateral view; b. dactylus of right third pereopod, lateral view; and c. dorsolateral flagellum of right antennule, ventral view. Scales: 1.0 mm.

ventral margin armed with four teeth.

Abdomen smooth and glabrous. Pleura of first four abdominal somites with rounded margins, that of the fifth somite with sharp posterolateral tooth. The sixth somite 1.2 times as long as the fifth somite. Telson 1.4 times as long as the sixth abdominal somite; dorsal surface with two pairs of spines; posterior margin medially acute, armed with two pairs of spines laterally and two long plumose setae medially.

Antennular peduncle nearly reaching tend of scaphocerite. Proximal segment equal to length of distal two segments combined, with well-developed stylocerite nearly reaching middle length of proximal segment; distal margin of proximal segment and intermediate segment armed with two dorsal spinules; distal segment armed with single disto-dorsal spinule. Antennular flagella vimineous; dorsolateral flagellum without accessory branch. Scaphocerite 3.2–3.6 times as long as wide, distolateral tooth well-developed, overreaching distal margin of blade.

The third maxilliped with slender exopod, slightly exceeding mid-length of proximal segment; ultimate segment 1.8 times as long as penultimate segment, proximal segment subequal to length of two distal segments combined; coxa with terminal hooked epipod.

The first four anterior pereopods with terminal hooked epipods. The first pereopod robust; fingers about 0.4 times as long as palm; chela subequal to length of carpus; merus 1.6 times as long as carpus. The second pereopod slender and equal in length bilaterally; chela small, slightly longer than terminal subsegment of carpus; carpus elongate, 2.0 times as long as merus, composed of 16–19 subsegments, distal subsegment longest; merus subequal to ischium, composed of 6–8 subsegments; ischium with one feeble joint distally. The third pereopod longest; dactylus elongate, slender, about 0.35 times the length of propodus, flexor margin unarmed; propodus 1.4 times as long as carpus, armed with 6–8 pairs of spines on postero-ventral; carpus unarmed; merus 1.8 times as long as carpus, armed with 5–6 robust spines on lateral surface; ischium 0.6 times as long as merus, unarmed. The fourth and fifth pereopods similar to the third pereopod, each segment slightly shorter than that of the third pereopod.

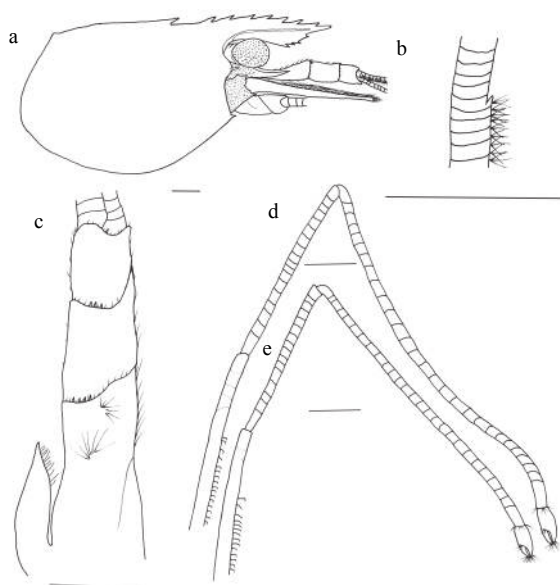
opod. Merus of the fourth pereopod armed with 5–6 spines on lateral surface or unarmed; merus of the fifth pereopod armed with 2–3 robust spines on disto-lateral surface or unarmed.

**Habitat.** *Lysmata kempī* Chace, 1997 is commonly found in the soft sediments (mainly mud) at water depths of 30–80 m.

**Colouration.** According to Kemp (1914), carapace and abdomen striped pink, antennae and antennules pink, thoracic appendages light pink. According to Froglija and Deval (2013), carapace and abdomen dark-red, cornea brownish, eggs emerald green.

**Distribution.** Off the mouth of River Irrawaddy (Myanmar) and off False Point Harbour (India); off the mouth of Qiantang River (the East China Sea) and off the mouth of Zhujiang River (Pearl River) (the South China Sea); as exotic species recorded from eastern Mediterranean Sea (Froglija and Deval, 2013).

**Remarks.** The present specimens agree well with the original description by Kemp (1914) and the recent description by Froglija and Deval (2013). However, intraspecific differences are also present. The Kemp's and Froglija and Deval's specimens have more longer rostrum than the present specimens, but they all reach or exceed the end of third segment of the antennular peduncle. This feature differs from all the other species in the genus. In Kemp's specimens the merus of the second pereopod has 20–22 subsegments, more than that of Froglija and Deval's specimens (14–17 subsegments) and present specimens (16–19 subsegments). The dactyli of last three pereopods of Kemp's specimens has or has no spines in flexor margin, while that of Froglija and Deval's specimens has spines and that of present specimens does not have spines. Furthermore, the long falcate dactyli of last three pereopods is a rare and unusual feature within the genus *Lysmata*. Another species with such dactyli in last three pereopods is *L. leptodactylus* Gan and Li, 2016, known from the South China Sea as well (Gan and Li, 2016). But the two species are different in the features of rostrum, antennular flagella and the second pereopod.



**Fig. 2.** *Lysmata lipkei* Okuno and Fiedler, 2010. a. Carapace and cephalic appendages, lateral view; b. accessory branch of dorsolateral flagellum of antennule, ventral view; c. right antennular peduncle, dorsal view; d. major second pereopod, lateral; and e. minor second pereopod, lateral view. Scales: 1.0 mm.

***Lysmata lipkei* Okuno and Fiedler, 2010**

(Fig. 2)

*Lysmata lipkei* Okuno and Fiedler, 2010: 597–610, Figs 1–4—  
De Grave et al., 2012: 97, Fig. 2C.

**Material examined.** MBM129589, 1 male. (CL 3.8 mm), the South China Sea, 19.165°N, 110.592°E, Nos 92C-1081, 1992-4-4. MBM129672-1, 1 male (CL 4.2 mm), the South China Sea, 18.515°N, 108.7°E, No. 57K-264, coll. Fan Zhengang, Xu Jieshan, 1957-6-27. MBM129626, 1 ovig. hermaphrodite (CL 6.9 mm), the South China Sea, No. 54-128, 1954-11-5. MBM048570, 1 male (CL 5.6 mm), the South China Sea, No. 3-(2)-12, Sta. 0003, 9 m, coll. Wu Shaozong, 1958-12-3.

**Diagnosis.** Carapace smooth and glabrous, with robust antennal spine, well-developed epigastric spine and pterygostomial spine. Rostrum short, reaching or slightly exceeding end of intermediate segment of antennular peduncle, with lateral carina, dorsal margin armed with 5–8 teeth, ventral margin armed with 3–5 teeth.

Abdomen smooth and glabrous. Pleura of the first three abdominal somites with rounded margins, posteroventral margin of the fourth somite angular, that of the fifth somite with sharp posterolateral tooth. The sixth somite 1.8 times as long as the fifth somite. Telson 1.6 times as long as the sixth abdominal somite, dorsal surface with two pairs of spines, posterior margin medially angular, armed with two pairs of spines laterally and two or three long plumose setae medially.

Antennular peduncle not reaching end of scaphocerite. Proximal segment equal to length of two distal segments combined, with well-developed stylocerite reaching to three fourths length of proximal segment; distal margin of proximal segment armed with four dorsal spinules; distal margin of intermediate segment armed with three dorsal spinules; distal segment armed with single disto-dorsal spinule. Antennular flagella vimineous; dorsolateral flagellum with one segment of vestigial accessory branch. Scaphocerite 3.0–3.3 times as long as wide, distolateral tooth well-developed, overreaching distal margin of blade.

The third maxilliped with exopod slender, exceeding the midlength of proximal segment; ultimate segment 1.7 times as long as penultimate segment, proximal segment subequal to the length of distal two segments combined; coxa with terminal hooked epipod.

The first four anterior pereopods with terminal hooked epipods. The first pereopod robust; fingers shorter than 0.4 length of palm; chela slightly longer than the length of carpus; merus 1.3 times as long as carpus. The second pereopod distinctly unequal in length bilaterally; chela of major second pereopod small, longer than terminal sub-segment of carpus, dactylus about half length of propodus, carpus about two times as long as merus, composed of 27–30 subsegments, distal subsegment longest, merus composed of 17–20 subsegments, ischium with distally subdivided into 4–5 invisible segments; minor second pereopod similar to the major one, carpus composed of 27–29 subsegments, merus composed of 16–20 subsegments, ischium subdivided into 2–3 invisible subsegments distally. The third pereopod robust; dactylus biunguiculate, about 0.16 times length of propodus, flexor margin armed with 4 spines; propodus 1.3 times as long as carpus, armed with 5–7 pairs of spines on postero-ventral; carpus unarmed; merus 1.6 times as long as carpus, armed with 5–6 robust spines on lateral surface; ischium 0.4 times as long as merus, unarmed. The fourth and fifth pereopods similar to the third pereopod, each segment slightly shorter than that of the third pereopod. Merus of the fourth pereopod armed with 4–5 disto-lateral spines; merus of the fifth pereopod

armed with 2–3 spines on disto-lateral surface.

**Habitat.** *Lysmata lipkei* Okuno and Fiedler, 2010 is found in the rubble sediments or coral reef at water depths of 0–15 m.

**Colouration.** According to Okuno and Fiedler (2010), body and appendages generally transparent, carapace and abdomen with red longitudinal bands.

**Distribution.** The Boso Peninsula, Ryukyu Islands and Hainan Island.

**Remarks.** The present specimens agree well with the original descriptions of Okuno and Fiedler (2010), especially in having a short accessory branch on the dorsolateral antennular flagellum and distinctly unequal second pereopod.

**Key to species of *Lysmata* Risso, 1816 from China seas**

1. Dorsal antennular flagellum with accessory branch lacking or vestigial, no more than two articles.....2
  - Dorsal antennular flagellum with distinct accessory branch and more than three articles.....*L. ternatensis* de Man, 1902
2. Dactyli of ambulatory pereopods elongate, non biunguiculate.....3
  - Dactyli of ambulatory pereopods compressed, biunguiculate.....4
3. The second pereopod distinctly unequal in length bilaterally, carpus more than 20 subsegments.....
  - .....*L. leptodactylus* Gan and Li, 2016
  - The second pereopods subequal in length bilaterally, carpus composed of 16–19 subsegments.....
    - .....*L. kempi* Chance, 1997
4. The second pereopod subequal in length bilaterally.....5
  - The second pereopod distinctly unequal in length bilaterally, carpus composed of 27–33 subsegments.....
    - .....*L. lipkei* Okuno and Fiedler, 2010
5. Antennular peduncle with stylocerite not or barely reaching midlength of basal segment.....6
  - Antennular peduncle with stylocerite exceeding midlength of basal segment.....7
6. Body semitransparent with numerous fine red longitudinal lines, antennular peduncle with stylocerite reaching the midlength of basal segment.....*L. vittata* (Stimpson, 1860)
  - Body opaque with paired, broad, continuous, dorsolateral, longitudinal red bands, antennular peduncle with stylocerite far from reaching the midlength of basal segment.....
    - .....*L. amboinensis* (de Man, 1888)
7. Antennular peduncle with stylocerite nearly reaching the end of basal segment, merus of the second pereopod composed of 16–18 subsegments.....*L. kuekenthali* (de Man, 1902)
  - Antennular peduncle with stylocerite far from reaching the end of basal segment, merus of the second pereopod composed of 2 subsegments.....*L. debelius* Bruce, 1983

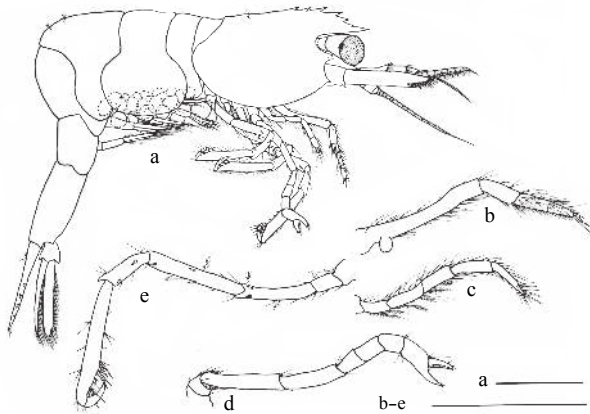
**Family Pandalidae Haworth, 1825****Genus *Chlorocurtis* Kemp, 1925*****Chlorocurtis jactans* (Nobili, 1904)**

(Figs 3 and 4)

*Virbius* (?) *jactans* Nobili, 1904: 230.*Chlorocurtis miser* Kemp, 1925: 280.

*Chlorocurtis jactans* Holthuis, 1955: 127, Fig. 91—Ledoyer, 1968: 67, Pl. 1A, 14B—Bruce, 1976: 61—Ledoyer, 1984: 33, Fig. 15—Poupin, 1998: 26.

**Material examined.** MBM136596, 2 ovig. (CL 1.6–1.8 mm), the South China Sea, Sanya, 1958-03-24. MBM285042, 11 ovig. (CL 1.4–1.9 mm), 3 male (CL 1.2–1.4 mm), the South China Sea, Xisha Islands, Bei Island, 1–3 m, coll. Gan Zhibin, 2015-5-16.



**Fig. 3.** *Chlorocurtis jactans* (Nobili, 1904). a. Ovigerous female, lateral view; b. right third maxilliped, lateral view; c. right first pereopod, lateral view; d. right second pereopod, lateral view; and e. left third pereopod, lateral view. Scales: 1.0 mm.



**Fig. 4.** The shrimp body of *Chlorocurtis jactans* (Nobili, 1904).

MBM285043, 8 ovig. (CL 1.4–1.8 mm), 4 male (CL 1.2–1.4 mm), the South China Sea, Xisha Islands, Bei Island, Yinyu Island, Quanbao Island, 1–3 m, coll. Gan Zhibin, 2015-5-13.

**Diagnosis.** Carapace smooth with sparse plumose setae, with antennal spine and pterygostomial spine. Rostrum short, not reaching end of basal antennular segment, very deep in base, and with sharply pointed apex, dorsal margin strongly convex, armed with 5–8 teeth, ventral margin straight, unarmed.

Abdomen smooth with sparse plumose setae. Pleura of the first five abdominal somites with rounded margins. The sixth somite 2.0 times as long as the fifth somite. Telson subequal to length of sixth abdominal somite, dorsal surface with 4–5 pairs of spines, posterior margin round, armed with three pairs of spines.

Antennular peduncle not reaching end of scaphocerite. Proximal segment 2.0 times as long as two distal segments combined, stylocerite broad in base, with acutely pointed apex, reaching middle length of proximal segment. Scaphocerite 2.8–3.2 times as long as wide, distolateral tooth well-developed, far from reaching distal margin of blade.

The third maxilliped without exopod, with round lobate epipod; ultimate segment 1.6 times as long as penultimate segment, with three long apical spines, proximal segment 1.1 times as long as distal two segments combined.

Pereopods without epipod. The first pereopod feebly developed, without chela; dactylus fused with propodus, apex with tufts of long spinulose setae; carpus, merus and ischium subequal, surface with long simple and plumose setae. The second pereopod well-developed, with normal chela; chela 0.8 times as long as carpus, fingers slightly shorter than half length of propodus; carpus 1.2 times as long as merus, composed of three subsegments, the first and second subsegments subequal, distal subsegment shorter; merus 0.8 times as long as ischium. The third pereopod robust; dactylus strongly curved, falcate, unarmed, about 0.23 length of propodus; propodus 2.7 times as long as carpus, distal third swollen and armed with three pairs of spines on ventral margin; dactylus and distal third of propodus forming a sub-chela organ; carpus about half length of merus, armed with two lateral spines; merus 1.4 times as long as ischium, armed with one spine on disto-lateral margin, one spine on mid-ventral margin and 0–1 spine on mid-lateral margin; distal margin of ischium armed with 1–2 spines. The fourth and fifth pereopods similar to third pereopod, but slightly shorter than the third pereopod. Carpus of the fourth and fifth pereopods armed with two lateral spines. Merus of the fourth pereopod armed with one disto-lateral spines, one mid-ventral spine, and 0–1 mid-ventral spine; merus of the fifth pereopod armed with one spine on disto-lateral surface. Ischium of the fourth and fifth unarmed.

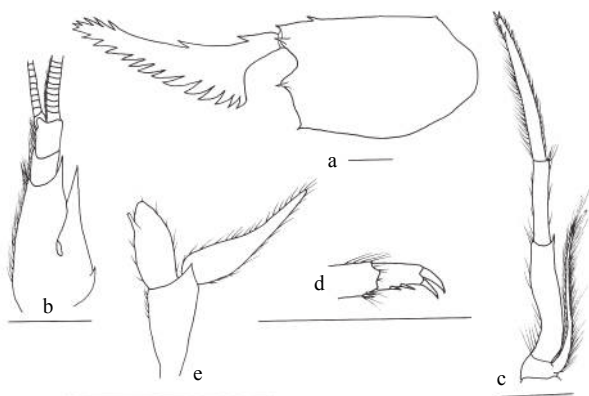
**Habitat.** Seaweed bed or coral reef of tropical and subtropical oceans.

**Colouration.** Cryptical and various in colouration. The body and appendages of present specimens are generally transparent with white or pink stains.

**Distribution.** Red Sea, Madagascar, Andaman Islands, Kenyan, Tanzanian, Xisha Islands, New Caledonia, French Polynesia.

**Remarks.** In the present specimens, the first pereopod has no chelae, and the second pereopod has subdivided carpus. These features easily assign the present specimens to the family Pandalidae. Furthermore, in the present specimens the carpus of the second pereopod has three subsegments, the third maxillipeds have no exopods, and the carapace have no supraorbital spine. All these features indicate that the present specimens belong to the genus *Chlorocurtis*. At present, *Chlorocurtis* is a monotypic genus, which only contains the species *C. jactans* (Nobili, 1904). However, the type species of *Chlorocurtis* is *C. miser* Kemp, 1925, which was considered as junior subjective synonym of *Virbius* (?) *jactans* Nobili, 1904. The original description of *Virbius* (?) *jactans* Nobili, 1904 is very brief without giving information of the carpus of the third to fifth pereopods, but the author did clearly point out that the merus of the third to fifth pereopods have one spine (Nobili, 1904). However, in the original description of *C. miser* Kemp, 1925, the author stated that the merus and carpus of the third to fifth pereopods have no spine (Kemp, 1925); the same statement was made by a subsequent author (see Fig. 91 of Holthuis, 1955). In the present specimens, all the merus and carpus of the third to fifth pereopods are armed with spines, although these spines are difficult to be seen. If the description of *C. miser* by Kemp (1925) is according to the true situation (merus and carpus of the third to fifth pereopods without spine), *Chlorocurtis miser* Kemp, 1925 should be considered as a valid species; however, this should be confirmed by the examination of the type specimen.

Family Rhynchocinetidae Ortmann, 1890  
 Genus *Rhynchocinetes* H. Milne Edwards, 1837  
*Rhynchocinetes conspiciocellus* Okuno and Takeda, 1992  
 (Fig. 5)



**Fig. 5.** *Rhynchocinetes conspiciocellus* Okuno and Takeda, 1992. a. Carapace, lateral view; a. right antennular peduncle, dorsal view; c. right third maxilliped, lateral view; d. dactylus of left third pereiopod, lateral view; and e. endopod of the first pleopod of male, dorsal view. Scales: 1.0 mm.

*Rhynchocinetes conspiciocellus* Okuno and Takeda, 1992: 63–72, Figs 1–3, 4A, B, C—Okuno, 1997: 37, Fig. 2B.

**Material examined.** MBM156151, 1 male (CL 4.1 mm), the South China Sea, subtidal zone of Sanya, 18.238°N, 109.65°E, Nos 92C-193-9, 1992-3-27. MBM156154, 1 female (CL 5.6 mm), subtidal zone of Xiaodonghai, 18.214°N, 109.508°E, 2–3 m, Nos CJ97C-223, coll. Li Xinzhen, 1997-3-5. MBM156146, 1 male (CL 3.0–3.9 mm), 3 female (CL 3.0–3.4 mm), subtidal zone of Sanya, 18.238°N, 109.65°E, Nos 92C-053, 1997-3-18. MBM156148, 3 female (CL 3.2–3.8 mm), 1 male (CL 3.5 mm), subtidal zone of Sanya, 18.238°N, 109.65°E, Nos 92C-053, 1997-3-19. MBM156149, 3 female (CL 3.0–3.5 mm), subtidal zone of the Hainan Island, Nos 92C-97, 1997-3-21. MBM156153, 2 female (CL 4.1–4.5 mm), 1 male (CL 2.6 mm), subtidal zone of Sanya, 18.238°N, 109.65°E, No. 92C-198B, coll. Li Xinzhen, 1992-3-27.

**Diagnosis.** Body subcylindrical. Carapace smooth, with robust supraorbital spine and antennal spine, pterygostomial spine small. Rostrum articulated with carapace, movable, curved upward along its distal half, exceeding end of scaphocerite; dorsal margin armed with two large teeth on proximal half and 4–6 smaller teeth at distal extremity; ventral margin with distinct proximal blade, armed with 12–14 teeth. Two acute teeth on dorsal carina behind rostral articulation.

Abdomen smooth. Pleura of the first three abdominal somites with rounded margins, that of the fourth and fifth somites acutely produced posterolaterally. The sixth somite 1.7–1.9 times as long as the fifth somite. Telson 1.1–1.2 times as long as the sixth abdominal somite, dorsal surface with three pairs of spines, posterior margin medially acute, armed with three pairs of spines.

Antennular peduncle reaching half length of scaphocerite. Proximal segment 2.0 times as long as two distal segments combined, with well-developed stylocerite nearly reaching end of intermediate segment, lateral base of stylocerite with one small spine; disto-lateral margin of proximal segment acutely produced. Scaphocerite 4.1–4.3 times as long as wide, distolateral tooth well-developed, overreaching distal margin of blade.

The third maxilliped with arthrobranch, with exopod exceeding end of proximal segment; ultimate segment 1.7–1.9 times as long as penultimate segment, distal one fifth armed with 6–8 spines; proximal segment 1.3–1.5 times as long as penultimate segment; coxa with epipod.

The first four pereiopods with epipods, the first two pereiopods with arthrobranches. The first pereiopod robust; fingers about 0.3 times as long as palm; chela more than twice of carpus; merus slightly shorter than chela. The second pereiopod slender than the first pereiopod; fingers about 0.2 times as long as palm. The third pereiopod robust; dactylus biunguiculate, compressed, flexor margin armed two spines; propodus 1.6 times as long as carpus, armed with 9–11 pairs of spines on ventral; carpus armed with two lateral spines; merus 1.9 times as long as carpus, armed with 3–4 robust spines on lateral surface; ischium 0.25 times as long as merus, armed with one disto-lateral spine. The fourth and fifth pereiopods similar to the third pereiopod.

Endopod of male first pleopod with entire outer margin.

**Habitat.** Intertidal zone or coral reef of tropical and subtropical oceans with water depths of 1–10 m.

**Colouration.** According to Okuno and Takeda (1992), the body ground color rather hyaline and pale, with labyrinth of red lines, being interspaced by white lines and ocelli.

**Distribution.** Subtidal zone of Boso Peninsula, Kii Peninsula, Ogasawara Islands, Hainan Island.

**Remarks.** The present specimens correspond closely to the original description. *Rhynchocinetes conspiciocellus* Okuno and Takeda, 1992 is closely related to *R. uritai* Kubo, 1942. Apart from their distinctly difference in color pattern, *R. conspiciocellus* distinguish from *R. uritai* by its entire outer margin of endopod of male first pleopod, as well as the proportion of rostrum.

#### Key to species of *Rhynchocinetes* H. Milne Edwards, 1837 from China seas

1. Antennular peduncle with stylocerite not reaching the end of intermediate segment.....2
- Antennular peduncle with stylocerite exceeding the end of intermediate segment.....*R. serratus* (H. Milne Edwards, 1837)
2. The first two pereiopods with arthrobranches.....3
- The first three pereiopods with arthrobranches.....*R. brucei* Okuno, 1994
3. Scaphocerite 0.7–0.8 times as long as rostrum, endopod of male first pleopod whit entire outer margin.....*R. conspiciocellus* Okuno and Takeda, 1992
- Scaphocerite 0.6–0.7 times as long as rostrum, endopod of male first pleopod whit subdistal lobe on outer margin.....*R. uritai* Kubo, 1942

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