

Fig. 5. - Dorsal view of two species of *Rhynchocinetes*. Left, *R. uritai* (specimen was lost); right, *R. durbanensis* (8.7 mm cl, NSMT-Cr 11120).
 Vue dorsale de deux espèces de *Rhynchocinetes*. A gauche, *R. uritai* (spécimen perdu) ; à droite, *R. durbanensis* (8,7 mm cl, NSMT-Cr 11120).

J. Okuno

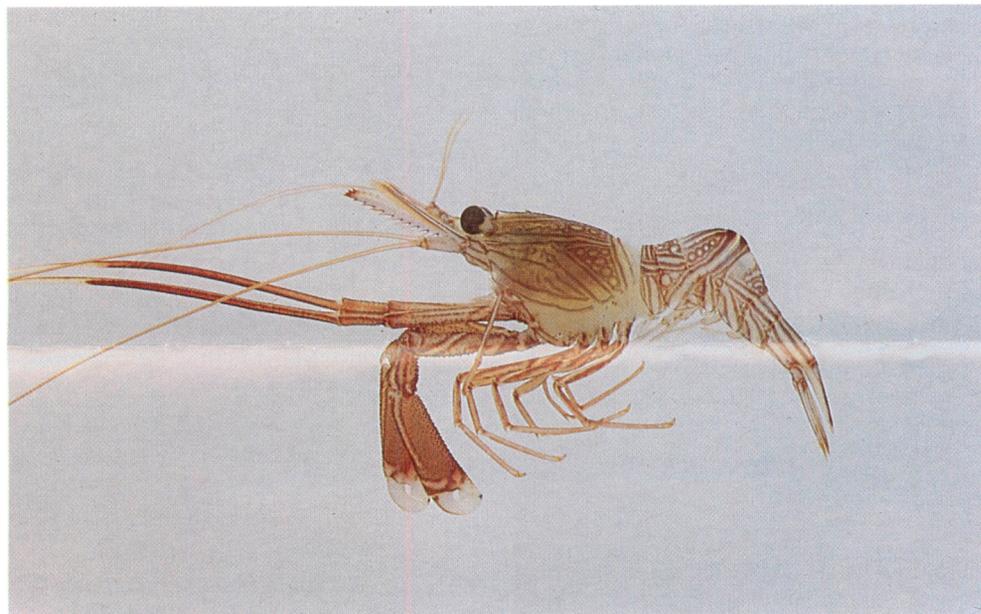


Fig. 6. - *Rhynchocinetes durbanensis* Gordon. Large male (12.7 mm cl, NSMT-Cr 11108). J. Okuno
Rhynchocinetes durbanensis Gordon. Grand mâle (12,7 mm cl, NSMT-Cr 11108).

Discussion

According to **Yaldwyn** (1960), the genus *Rhynchocinetes* is one of three genera of the family Rhynchocinetidae, being readily distinguished from the other genera of the family by having the movable rostrum which is jointed with the carapace by an articulation. The present genus is divided into two species groups (**Kemp** 1925; **Gordon** 1936) : one having two teeth on median carina and a strong supraorbital spine, and another being characterized by the presence of three spines and the absence of the supraorbital spine. *Rhynchocinetes durbanensis* is referred to the former group.

Rhynchocinetes durbanensis was originally recorded by **Stebbing** (1917) as *R. typus* H. Milne Edwards, 1837 on the basis of two specimens from Durban. **Gordon** (1936) had, however, pointed out that one of the two specimens figured by **Stebbing** (op. cit.) and deposited in the British Museum differs from *R. typus*, and described it as a new species under the name of *R. durbanensis*.

Rhynchocinetes durbanensis is readily separated from the other species of the same group by having three equidistant teeth on proximal to median parts of the rostral upper margin. There is no problem in the identification of the species from the type locality of *R. durbanensis* (**Stebbing** 1917; **Gordon** 1936; **Barnard** 1950; **Kensley** 1972), but the other records from several area in the Indo-West Pacific are to be really referred to the different species (**George & George** 1979; **Debelius** 1983; **Debelius** 1984; **Takeda** 1986). These records are accompanied with the beautiful color photographs in life, so that it is possible to identify them with *R. durbanensis*. The color of the type specimen (Fig. 7) has been shown by **Stebbing** (1917), with which they agree well in detail.

Gordon (1936) mentioned that the first pereopods of both sides in *R. durbanensis* are asymmetric in their length, and considered the asymmetric pereopods as one of the specific characters. At present, it is noted, without doubt, that they are on the way to regeneration. Although **Gordon** (1936) also mentioned that there is no hair on the chela of first pereopod, that of female is sparsely covered with the short setae on its lower margin (Fig. 4J).

The third maxilliped is distinctly elongated in large male as in some related species (Fig. 6).

Color pattern of *Rhynchocinetes durbanensis* is the most similar to that of *R. uritai* Kubo, 1942 (Fig. 2). Ground color in both species is more or less hyaline, pale pink; vivid red irregular lines cover whole body; white spots or lines in interspaces of each red line.

The presence of rows of white spots or lines are common in both species, but the detailed pattern is constant and useful for identification of the two species.

Apart from the color in life, some morphological characters of *R. durbanensis* clearly differ from those of *R. uritai*. The differences of the color pattern and morphological characters are summarised in the following key.

A. Rostrum with 9 or 10 teeth on upper margin, 16-18 teeth on lower margin. A short process absent from outer margin of endopod of first male pleopod (Fig. 3C). Arthrobranch present on third pereopod (XII). Outer margin of antennular peduncle strongly rounded (Fig. 3B). In life, there are white ocelli and white lines in interspace between each red line (Fig. 1); a Y-shaped white mark with white bars at each side on dorsal surface of carapace (Fig. 5, right); posterior margin of carapace white; white bar running obliquely from summit of third segment to undermost posterior margin of 1st abdominal segment (Fig. 1)
..... *Rhynchocinetes durbanensis* Gordon, 1936

A. Rostrum with 7 or 8 teeth on upper margin, 13-15 teeth on lower margin. A short process present on outer margin of endopod of first male pleopod (Fig. 3F). Arthrobranch absent from third pereopod (XII). Outer margin of antennular peduncle not strongly rounded (Fig. 3E). In life, there are only white ocelli in interspace between each red line (Fig. 2); neither Y-shaped white mark nor white bars, only white spots scattered in interspace between each red line on dorsal surface of carapace (Fig. 5, left); posterior margin of carapace not white; no white bar running obliquely forward on abdominal segments (Fig. 2)
..... *Rhynchocinetes uritai* Kubo, 1942

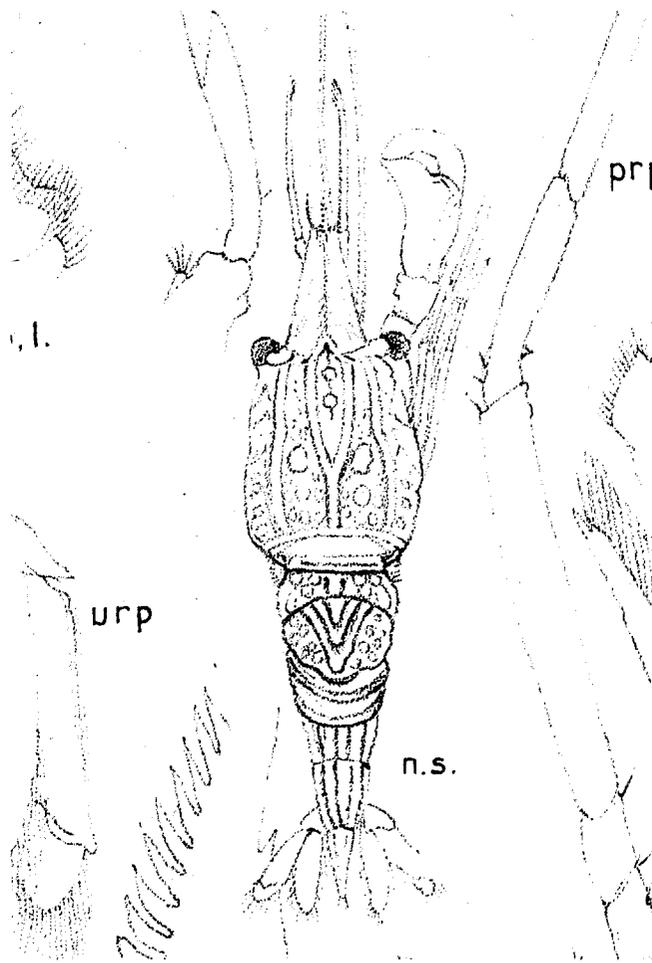
Rhynchocinetes durbanensis is widely distributed in the tropical Indo-West Pacific, whereas *R. uritai* is the antitropical species with restricted distribution in Japan and also in southern Korea (Kim 1977). The both species occur in the Ryukyu Islands (Takeda 1986; Kamesaki et al. 1988).

Aknowledgments

We thank Ms. E.J. Hoenson of the South African Museum who kindly sent us the comparative materials on loan and gave us the valuable service for the research. We are also grateful to Mr. Y. Maihara of the Marine Science Museum, Tokai University who kindly gave us a number of the specimens of *Rhynchocinetes uritai* which were collected from Suruga Bay by him.

REFERENCES

Barnard (K.H.), 1950. - Descriptive catalogue of South African decapod Crustacea. *Ann. S. Afr. Mus.* **38**:1-864, 154 figs.
Debelius (H.), 1983. - *Gepanzerte Meerestrücker*. 120 p., 86 unnumbered figs.; Essen (Kemen-Verlag).
Debelius (H.), 1984. - *Armoured knights of the sea*. 120 p., 93 unnumbered figs.; Essen (Kemen-Verlag).



J. Okuno

Fig. 7. - *Rhynchocinetes durbanensis* Gordon. Male, holotype from Durban, South Africa. (After Stebbing, 1917).
Rhynchocinetes durbanensis Gordon. Mâle, holotype de Durban, Afrique du Sud. (D'après Stebbing, 1917).

George (J.D.) & J.J. George, 1979. - *Marine Life. An Illustrated Encyclopedia of Invertebrates in the Sea*. 288 p., pls. 1-128; Lionel Leventhal Ltd., London.
Gordon (I.), 1936. - On the macruran genus *Rhynchocinetes* with the description of a new species. *Proc. zool. Soc. Lond.* 1936: 75-88, 7 figs.
Kamesaki (N.), K. Nomura, T. Hamano & H. Misaki, 1988. - Crustacea. In: Marine Park Center (ed.). *Illustrated Marine Organisms in Okinawa Islands*, 8: 232 p.; Southern Press, Okinawa (in Japanese).
Kemp (S.), 1925. - Notes on Crustacea Decapoda in the Indian Museum XVII. On various Caridea. *Rec. Indian Mus.* **27** (4): 249-343, 24 figs.
Kensley (B.), 1972. - *Shrimps & Prawns of Southern Africa*. 65 p., 30 figs; South African Museum, Cape Town.
Kim (H.S.), 1977. - *Macrura. Illustrated Flora & Fauna of Korea*, **19**: 1-414. pls. 1-56.
Kubo (I.), 1942. - On two new species of Decapoda Macrura. *Ann. zool. Jap.* **21** (1): 30-38, 5 figs.
McCulloch (A.R.), 1909. - Studies in Australian Crustacea. N° 2. *Rec. Austr. Mus.* **7**: 305-314, pls. 88-89.
Spies (G.U.), 1983. - Tanzgarnelen-Ballett im Aquarium. *Das Aquarium*, **17** (164): 88/688.
Stebbing (T.R.R.), 1917. - The malacostraca of Natal. *Ann. Durban Mus.* **2**: 1-33, pls. 1-6.
Steene (R.), 1990. - *Coral reefs. Nature's richest realm*. 336 p.; Crawford House Presse, NSW.
Takeda (M.), 1986. - *Arthropoda*. In: Masuda (H.), M. Hayashi, K. Nakamura & Y. Kobayashi. *Marine Invertebrates*. 225 p.; Tokai Univ. Press, Tokyo (in Japanese).
Yaldwyn (J.C.), 1960. - Crustacea Decapoda Natantia from the Chatham Rise: A deep water bottom fauna from New Zealand. *N.Z. Dept. Sci. Indust. Res. Bull.* **139**: 13-53, 10 figs.