

A SECOND OCCURRENCE OF THE BIZARRE SHRIMP *MIROPANDALUS HARDINGI* (CRUSTACEA:DECAPODA:PANDALIDAE).

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ABSTRACT

The second occurrence of the pandalid shrimp *Miopandalus hardingi* Bruce, 1983, in the Ryukyu Islands at 59 m, on an antipatharian host, *Antipathes* sp., is recorded. Previously known only from the holotype specimen from 23 m on Eniwetak Atoll, Marshall Islands, the specimen has the unusual morphology in even more extreme form than the type specimen.

KEYWORDS: Crustacea, Decapoda, Pandalidae, *Miopandalus hardingi*, second occurrence, Ryukyu Islands.

The pandalid genus *Miopandalus* contains only a single species, *M. hardingi*, previously known with certainty only from the holotype specimen (Bruce 1983). Recently, further information on this species has become available and is outlined below. I am most grateful to Dr. R. Lemaitre, Smithsonian Oceanographic Sorting Centre, for making this material available to me. The new data represents a marked increase in the known geographic and bathymetric range of the species.

Miopandalus hardingi Bruce (Fig. 1)

Miopandalus hardingi Bruce, 1983:483-489, figs 1-5.

Unnamed shrimp - Masuda, Hayashi, Nakamura and Kobayashi 1986: 115, col. fig.

Material examined. 1 female, stn. RFB 1236, Okinawa, Ryukyu Islands, 26° 30.0' N., 127° 50.9' E., 57.9 m, 4 August 1984, coll. R.F. Bolland, USNM 252406.

Host. *Antipathes* sp. (Coelenterata: Antipatharia). The shrimp was noted by the collector as associated with an antipatharian host, which was also collected. However, two antipatharians were collected from Stn. 1236. These have been identified as *Antipathes lentipinna* Brook, 1889, and *A. ternatensis* Schultze, 1896.

Remarks. The single specimen is unfortunately badly macerated and damaged, with the abdomen broken and the caudal fan lacking. It generally closely agrees with the original description, as far as can be ascertained due to its damaged state, but the two dorsal processes are considerably more strongly developed than in the holotype. The anterolateral margin of the carapace is provided with a minute marginal antennal spine, on the left side only, which was not reported in the holotype but may have been overlooked due to its minute size. The rostrum is completely absent, exactly as in the holotype, thereby confirming that this feature is not due to accidental injury in the original specimen. The eyestalk appears more cylindrical and less swollen than in the holotype.

A photograph of an unidentified shrimp, taken in Izu Marine Park, SE Honshu, Japan, at 20 m, on what appears to be a *Cirripathes* sp. (Masuda *et al.* 1986), can be readily identified as *Miopandalus hardingi*. The colour pattern closely resembles that of some other shrimp associates of *Cirripathes*, the pontonine shrimps *Dasycaris zanzibarica* Bruce and *Pontonides* sp., both of which have semitransparent bodies heavily barred with pale yellow bands (Davis and Cohen 1968; Bruce 1975; Nomura *et al.* 1988). In *M. hardingi*, the eye and antennae, ambulatory pereopods and caudal fan are yellow, the dorsal processes of the

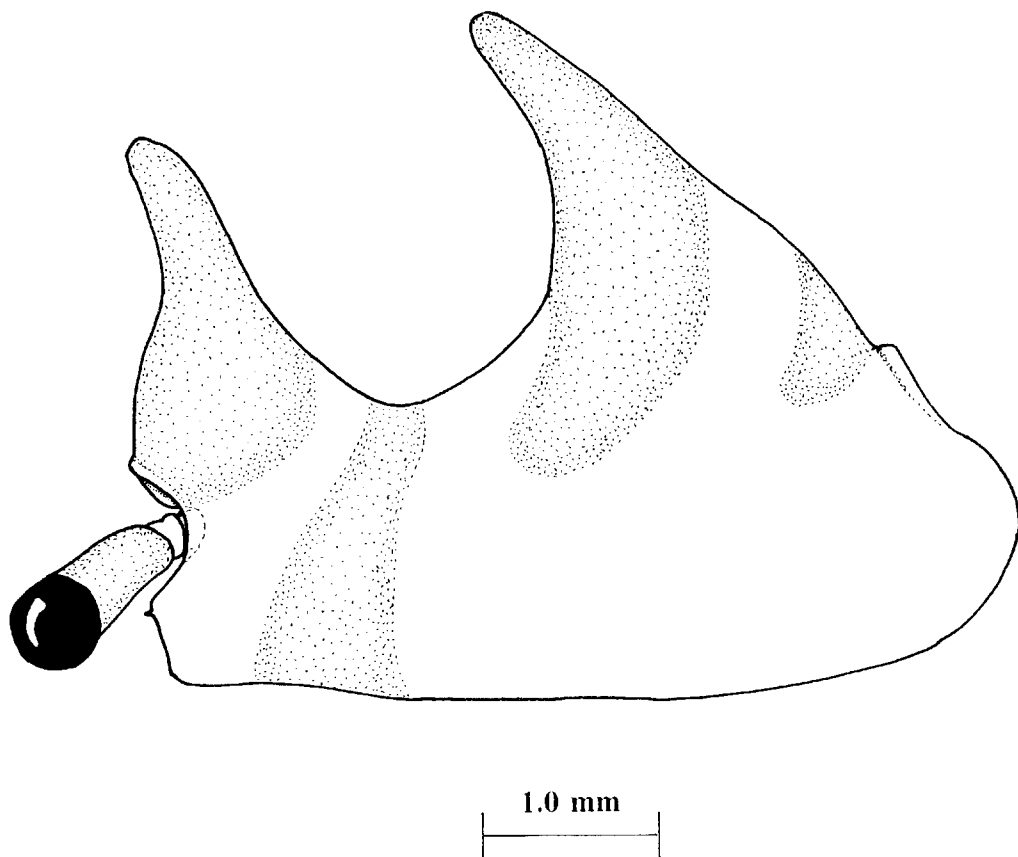


Fig. 1. *Miropandalus hardingi* Bruce, female, Ryukyu Islands, carapace (with colour pattern indicated, after Masuda *et al.* 1986).

carapace and third abdominal segment, with an anterior lateral band and small posterdorsal patch on the carapace, anterior dorsal margin of first abdominal segment all deep yellow, with broad anterior and posterior lateral bands on the third pleuron, the latter extending across the tergum, with less strongly marked dorsal-lateral bands on fourth and fifth abdominal segments. The yellow colour exactly matches the tint of the host's polyps.

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Mr Yasumasa Kobayashi kindly provided the colour transparency included in this report, and Dr Dennis Opresko, the identifications of the host antipatharians mentioned.

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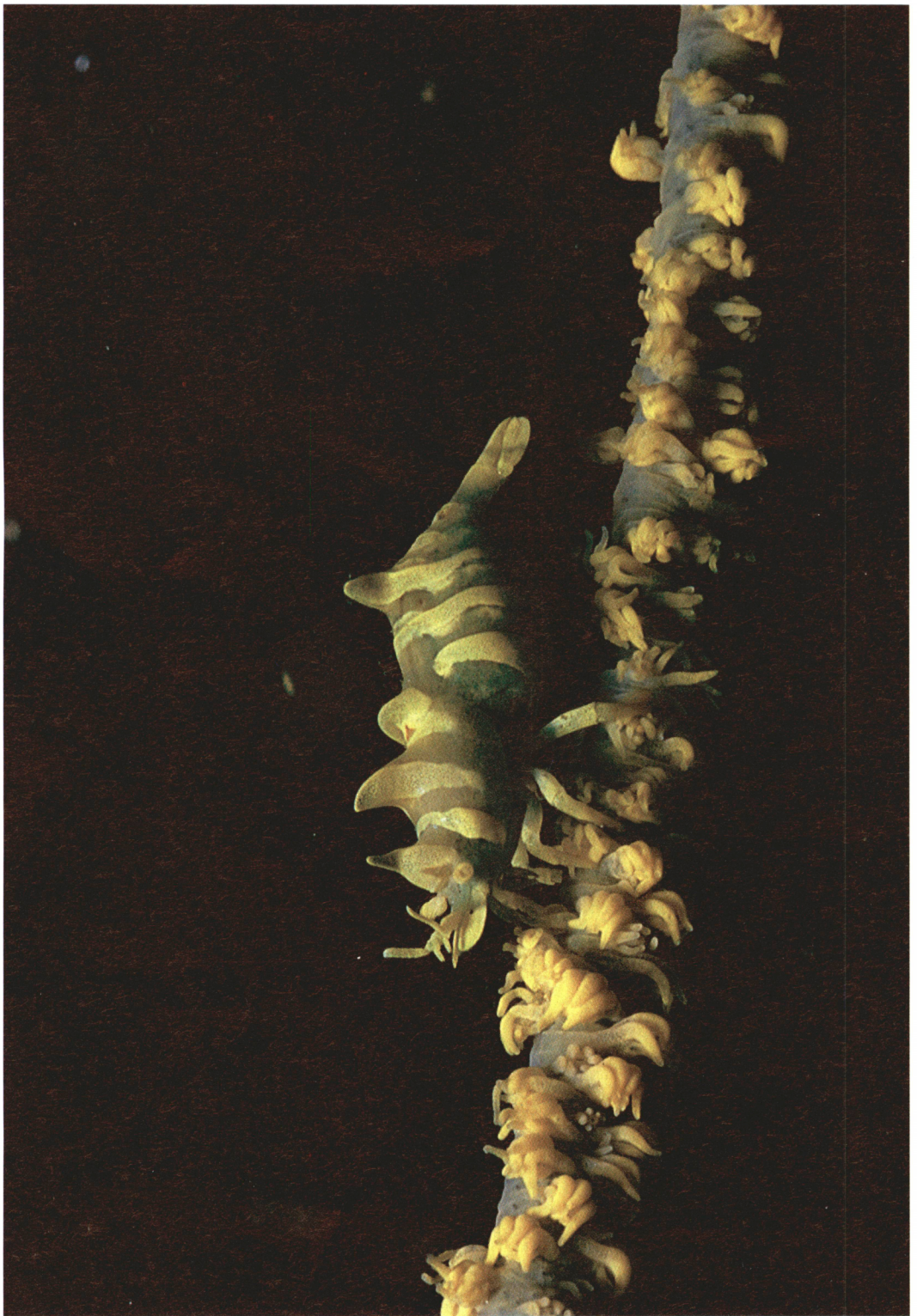


Plate 1. *Miropandalus hardingi* Bruce, ovigerous female, Izu Marine Park, Honshu, Japan, 20m, on *Ciripathes* sp. (phot. Y. Kobayashi).