

ON THE OCCURRENCE OF *FENNERA CHACEI* HOLTHUIS  
(CRUSTACEA, DECAPODA NATANTIA, PONTONINAE) IN THE  
INDIAN OCEAN.<sup>1</sup>

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IN the course of its programme in the U.S. Programme in Biology, International Indian Ocean Expedition, a number of coral stations were made by the R.V. *TE VEGA*, of Stanford University, in the Maldiv Islands. The pontoninid shrimps obtained from these stations were forwarded to the author for examination by Professor J. S. Garth. One of the stations provided specimens of *Fennera chacei* Holthuis, which has not been previously reported from the Indian Ocean.

*Fennera chacei* Holthuis (Fig. 1)

*Fennera chacei* Holthuis. 1951. Occ. Pap. Allan Hancock Found., 11 : 171-174, pl. 54, fig. a.p.

*Material Examined*: Walu Island. South Nilandu Atoll, Maldiv Islands, 02° 42' 40" N., 75° 53' 40" E. 'Te Vega', coral station GB B-4 64, 23 March 1964, Coll. G. Beardsley. 1♂, 3 ♀.

The four specimens are unfortunately rather damaged and most of the pereopods are detached and missing. They agree well with the description given by Holthuis (1951).

The body is markedly depressed, especially in the females which are ovigerous. There may be from three to five dorsal teeth on the rostrum, the most posterior being behind the orbital margin. The male has three teeth and closely resembles Holthuis' illustration. In the females, two of which have five dorsal teeth and one four, the rostrum is longer with a less styliform tip. The most extreme form is shown in fig. 1. A small antennal spine is distinct on the inferior orbital angle of the carapace and a well developed series of robust post-antennal spines is present along the lateral margin of the orbit. In the male and two females, there are three post-antennal spines on each side but in the largest female there are four on each side (fig. 1).

Some detached limbs were examined and these appeared to agree with the figures given by Holthuis. It may be noted that in the ovigerous females the pleura are expanded to enclose a distinct marsupium. The pleuron of the first abdominal segment is expanded anteriorly and reaches the level of the coxae of the third perio-

<sup>1</sup> Contribution from the Fisheries Research Station, Hong Kong.

pods when viewed ventrally. The ova are few and large. A full marsupium of one female contained only nine ova, each with a diameter of approximately 0.36 mms. (preserved).

The largest female had a total length of approximately 5.5 mms. and a post-orbital carapace length of 1.1 mms.

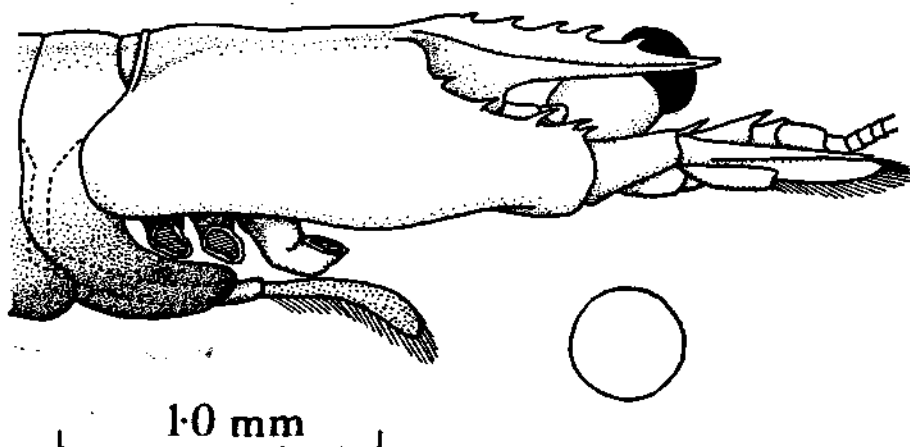


FIG. 1. *Fennera chacei* Holthuis. Female, Maldives Islands. Lateral view of anterior part of body and ovum. Right eye removed.

The specimens were obtained from the coral *Pocillopora eydouxi* Milne Edwards and Haime (det. J. W. Wells).

#### DISCUSSION

This small pontoninid shrimp has been reported only from American shores. Holthuis examined 55 specimens from Mexico, Costa Rica, Panama and Columbia. There have been no further published reports of this species subsequently either in American waters or elsewhere. The discovery of this species in the Indian Ocean therefore represents a great increase in the distribution recorded for this species.

Although several genera of the *Pontoninae* occur both in the Indo-West-Pacific and in Pacific or Atlantic American coastal regions, they are invariably represented by different species. The only exception is *Harpiliopsis depressus* (Stimpson), a common and widespread coral commensal found throughout the Indo-Pacific region and along the tropical western American seaboard. The collection of *Fennera chacei* in the Maldives therefore establishes the presence of a second species of pontoninid occurring in common in the two regions.

*Fennera chacei* has now been found on the coral genus *Pocillopora* both in the Indian Ocean and in American waters. American records also indicate that it occurs on *Porites*. It is probable that further examination of these corals in the Indo-Pacific region would show that the species is widespread but that it has escaped the attentions of earlier collectors on account of its diminutive size.

## SUMMARY

The small pontoniinid shrimp, *Fennera chacei* Holthuis, is recorded from the Indian Ocean for the first time. Four specimens were obtained on the coral *Pocillopora eydouxi* Milne Edwards and Haime, collected from Nilandu Atoll in the Maldives Islands.

## REFERENCES

- HOLTHUIS, L. B. 1951. The Subfamilies Euryrhynchinae and Pontoniinae. A general revision of the Palaemonidae (Crustacea Decapoda Natantia) of the Americas. I. *Occ. Pap. Allan Hancock Found. Publ.*, 11 : 1-332.