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THE OCCURRENCE OF THE SHRIMP *METAPONTONIA FUNGIACOLA* BRUCE (CRUSTACEA, DECAPODA, PONTONINAE) IN KENYAN WATERS.

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The monospecific pontoninid genus *Metapontonia* was first described on the basis of a single damaged specimen, probably male, obtained from washings of a coral of the genus *Fungia* spp., collected in the Comoro Islands during the course of the International Indian Ocean Expedition in 1964 (Bruce, 1967). There have been no subsequent reports of the occurrence of this highly specialized coral commensal.

This report records the presence of further specimens in shallow water on the reefs of southern Kenya and also indicates that the species is not restricted to corals of the family Fungiidae in its associations.

Specimens have been deposited in the collections of the National Museum, Nairobi, and the Rijksmuseum Van Natuurlyke Historie, Leiden.

METAPONTONIA FUNGIACOLA Bruce.

Metapontonia fungiacola Bruce, 1967, *Zool. Verh.*, Leiden, 87: 23-32, figs. 10-12.

Material examined:

1 ovig. ♀ 2 ♂ Stn. 138, 1650, Jadini, Kenya, 4° 21.5'S., 39° 34.5'E, Coll. A.J.B., 3 November, 1971.

Description: The present specimens agree closely with the original description. The female is distinctly larger and more robust than the males.

All three specimens possess both second pereopods, which are small, robust, similar and distinctly unequal in size.

The male first and second pleopods were missing from the holotype specimen and have not been described. The endopod of the first pleopod is about 2.5 times longer than broad, with the greatest width situated at half the length. The medial border is feebly concave and bears two coarsely setulose setae proximally and two short curved spines at one third of its length. The distal margin is rounded. The lateral border is gently convex with six finely plumose setae along the distal two-thirds of the margin. The endopod of the second pleopod bears a slender appendix interna, with four terminal concinni, which distinctly exceeds the appendix masculina. The body of the appendix masculina is short and stout, about twice as long as broad, with three terminal setae.

Two setae are stout, long and straight 0.20 and 0.14 mm in length. The longer seta are finely setulose. The third seta is short and curved, about 0.06 mm in length and devoid of setules.

Measurements:- (mm)

	♂	♀	♀
Total carapace length	2.10	1.70	1.60
Post-orbital carapace length	1.55	1.15	1.15
Major second pereiopod chela	1.40	1.05	1.40
Minor second pereiopod chela	1.05	0.75	0.90
Number of ova	11	—	—
Greater diameter of ova	0.56	—	—

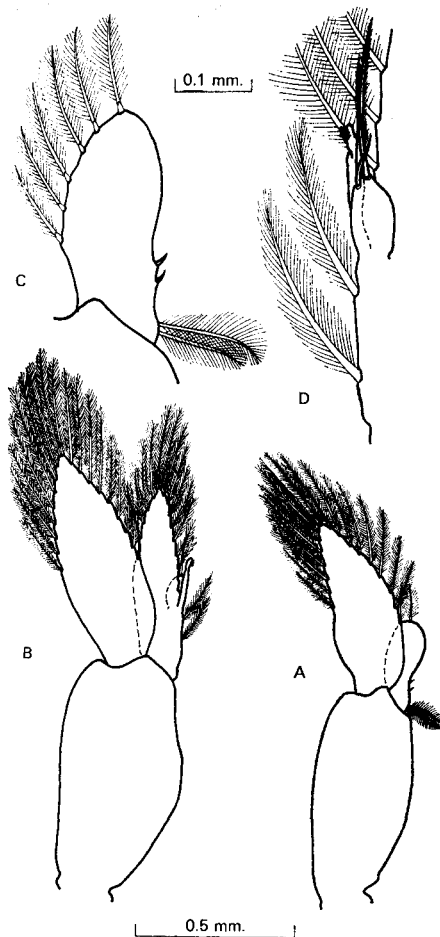


Fig. 1.—*Metapontonia fungiacola* Bruce.
C) endopod of male first pleopod.

A) male first pleopod. B) male second pleopod.
D) appendix interna and appendix masculina of male second pleopod.

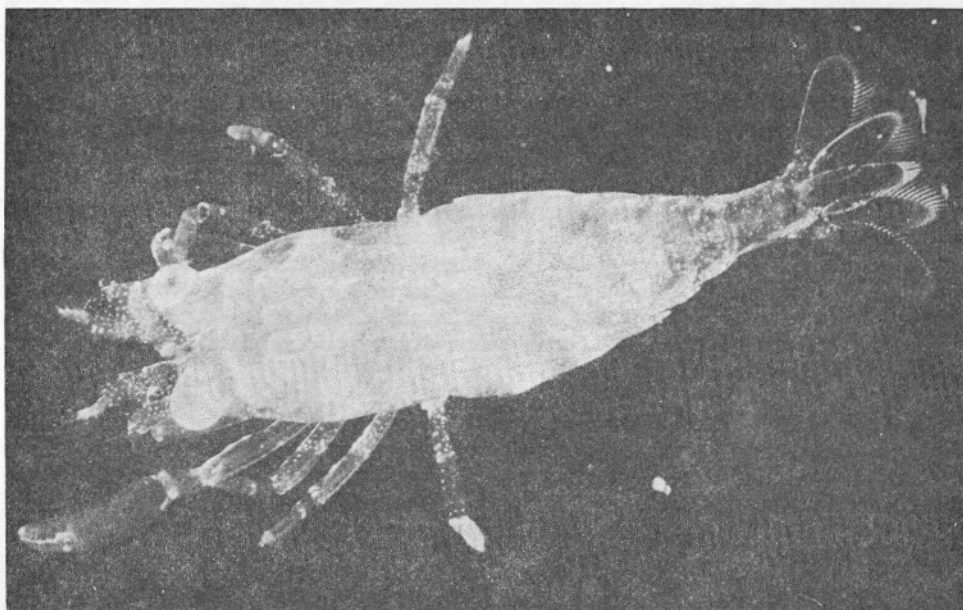


Plate 1—*Metapontonia fungiacola* Bruce. Ovigerous female, dorsal view.

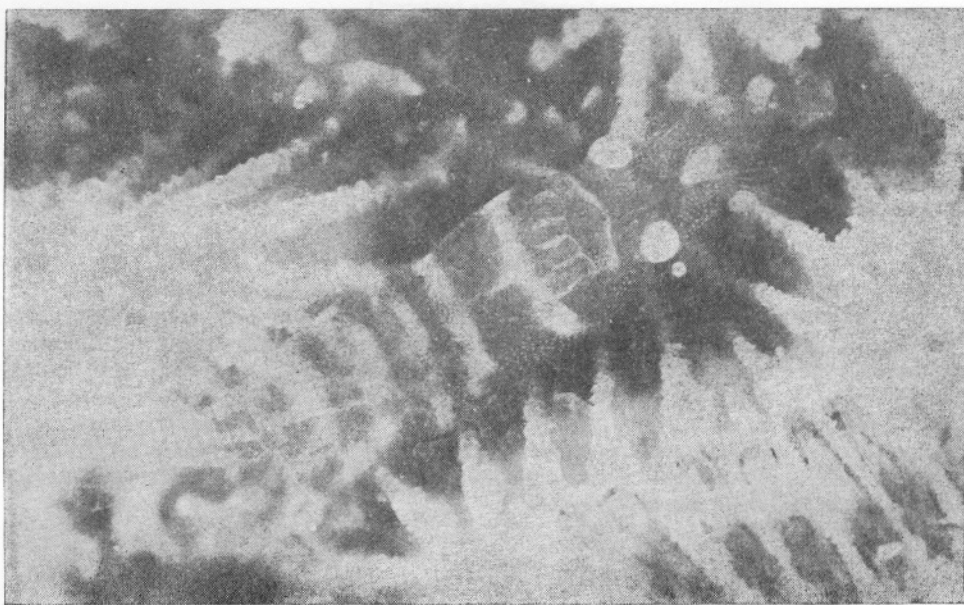


Plate 2—*Metapontonia fungiacola* Bruce. Ovigerous female *in situ* and host *Hydnophora microconos* Lam.

Colouration:- The general appearance of the female was yellow-green, the males being more highly transparent. In more detail, the female is generally feebly speckled with pale yellowish chromatopheres, which are only feebly visible. It shows a patch of small white chromatopheres in each post-orbital region with a larger transverse patch of white across the gastric region. The rostrum is colourless and the branchiostegite is sparsely speckled with small white dots. The abdomen shows a transverse dorsal band of white across the first segment, extending laterally to the posterior angle of the branchiostegite. The pleura are generally finely speckled with white, with three larger patches of white on the second and third pleura laterally, which also extend across the ventral aspect of the abdomen. The sixth abdominal segment and caudal fan are almost completely transparent, except for a few yellow-green dots ventrally on the terminal abdominal segment. The antennal peduncles and scaphocerite are heavily speckled with yellow-white. The pereopods are colourless except for the ischium and proximal two-thirds of the merus of the ambulatory pereopods. The clearly visible ovary is olive green and the undeveloped ovary are of a similar colour.

Behaviour:- The shrimps show few signs of activity in daylight. They take up position between the raised projections of the host, with the body held close to the base of the depression and the third to fifth pereopods held upwards beside the carapace, with the dactyls holding on to the more elevated parts of the corallites. The abdomen was noted to be frequently held in an elevated position, away from the substrate and with the caudal fan flexed.

Habitat:- The specimens were obtained from the seaward side of a fringing lagoon, in water about 2m in depth, with a temperature of 28.5°C.

Host:- *Hydnophora microconos* Lam. (Faviidae)

Distribution: Previously known only from Pamanzi reef, Mayotte Island, Comoro Archipelago.

DISCUSSION

The holotype of *Metapontonia fungiicola* was found in the washings from a number of specimens of *Fungia* which included several species. The occurrence of the present specimens in association with *Hydnophora microconos* shows that it is not restricted in its association to corals of the family Fungiidae but can also be associated with the Faviidae. In general commensal pontoniinid shrimps associated with corals show considerable specificity in their associations and are usually restricted to family or generic categories.

The holotype specimen was damaged and lacked the anterior pleopods. Its sex and maturity could not be adequately determined. The Jadini specimens show that the specimens are normally mature at a very small size and indeed, *Metapontonia fungiicola* appears to be one of the smallest pontoniinid shrimps. The ova are of typical size for a pontoniinid shrimp but, correlated with the small size of the female, only a very small number are carried.

Metapontonia fungiicola may well be widespread in its distribution as its small size would result in its being easily overlooked. Mortensen (1923) has reported the presence of a small shrimp in association with *Fungia* corals in the Kei Islands, which could possibly belong to the present species,

ACKNOWLEDGEMENT

I am most grateful to Professor J. W. Wells for the identification of the coral host.

RESUME

Nous reportons ici la présence de *Metapontonia fungiacola* Bruce, a Jadini, près de la frontière sud du Kenya. Cette crevette pontoniinide n'est connue que par son occurrence originale dans l'île Mayotte qui fait parti de l'archipel des Comores. Le motif de couleurs, et la première et la deuxième pléopode du male, sont décrits pour la première fois. Les spécimens de Jadini, ont été trouvés dans la lagon marginal, en association avec une corail faviide, *Hydnophora microconos* Lam. qui constituent un nouveau genre d'hôte.

LITERATURE CITED

- BRUCE, A. J. 1967. Notes on some Indo-Pacific Pontoniinae III-IX. Descriptions of some new genera and species from the western Indian Ocean and the South China Sea. *Zool. Verh.*, Leiden, No. 87: 1-73, figs. 1-29.
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