

**METAPENAEOPSIS BORRADAILI (DE MAN) A PENAEID PRAWN
(DECAPODA, PENAEIDAE) NEW TO THE INDIAN OCEAN**

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INTRODUCTION

METAPENAEOPSIS BORRADAILI (de Man) has been described from the type localities of Siboga Expedition, by de Man (1911) and later from Australia by obtaining a single male by Dall (1957). The present material from the Laccadive Archipelago was kindly passed on to me for study by Dr. S. Jones, former Director of Central Marine Fisheries Research Institute. The specimens were collected from the coral reef area and the lagoons of the Islands during the collection of fishes using fish poison. This is the first report of the species from the Indian Ocean, thus extending its distribution far west to the Arabian Sea.

***Metapenaeopsis borradaili* (de Man)**

(Figure 1, A-G)

Penaeopsis borradaili de Man, 1911, pp. 73-75, pl. VIII, fig. 24 a, b.

Metapenaeopsis borradaili Dall, 1957, pp. 174-76, fig. 13, A-E.

Metapenaeopsis borradaili Racek and Dall, 1965, p. 20 (in key).

Material: 30 specimens. Minicoy Island: 12 males, total length 23.5-39 mm.; 7 females, 24-47.6 mm. Coll. 21-7-1967. Chetlat Island: 4 males, 25.4-38.8 mm.; 2 females, 38-42.2 mm. Coll. 21-7-1967. Kalpeni Island: 1 male, 32.7 mm. Coll. 25-5-1965. Kavarathy Island: 1 male, 38 mm.; 3 females, 46-51 mm. Coll. 22-12-1968. All specimens were collected from shallow waters of 1-3 metres depth by Mr. M. Ali Manikfan.

Distribution: Karakelang Island, Sanana Bay and Nilahia Bay (Siboga localities); Murray Island (Torres Strait) and Laccadive Archipelago (Arabian Sea).

DESCRIPTION

Metapenaeopsis borradaili can be easily distinguished by the distinctive petasma, the possession of distal segment of appendix masculina, the presence of a single median pointed spine between the bases of the fourth pair of coxae and the paired subrectangular plates situated posterior to this spine. Besides, the nature of hepatic sulcus and the absence of dorsal carina on the abdomen anterior to the fifth somite are other characters of taxonomic importance. The present material agrees in general with the description given by Dall (1957) though there are some differences, which are also discussed here,

Rostrum : The specimens from the Laccadive Archipelago have straight, up-turned rostrum with 9 teeth and the epigastric tooth, reaching only to the middle of the first antennular segment, while in the Australian form it reaches the tip of the second segment of antennular peduncle.

Carapace : The antennal carina does not extend beyond the base of the antennal spine.

Antennule : The upper flagellum of the antennule is shorter than the lower, $1/3$ as long as the peduncle and only less than $1/4$ the carapace length unlike that of the Australian forms. The prosartema is $1/2$ the long axis of the cornea and is as long as the stylocerite.

Thoracic legs : The third pereopod reaches only to the base of the second segment of the antennular peduncle.

Abdomen : The fifth and sixth abdominal segments only have the dorsal carina which end posteriorly in a spinule. The sixth segment is 1.5 times as long as wide. The telson is 4 times as long as broad and bear four pairs of lateral spines. The proximal of these is small and placed at half the length of the telson. The second pair which is longer and slender is situated at half the distance from the tip of the telson and the next pair which is the longest is nearly 5 times the length of the most proximal one. The fourth pair of spines are $3/5$ the length of the penultimate pair of spines and situated at the base of the terminal spine (Fig. 1, G). Dall's specimen is reported to have only three movable spines on either side of the telson.

Gastric mill : The cardiac plate has 22 spinules. The zygo-cardiac ossicle is provided with five stout teeth, of which three are in the upper and two in the lower rows, followed by a series of slender spinules. The prepyloric ossicle has a large median tooth and a series of 5-6 small teeth on either side (Fig. 1, E, F).

Petasma : The structure of the petasma in the males differs from that described from Australia by Dall. The distolateral projections are large, much expanded and overhang dorsally over the apex of the petasma. The left distoventral projections are highly reduced. The distodorsal lobules are well developed. The distomedian lobules are bifid as in Dall's specimen, reaching the base of the third pereopods and bear minute setae at the distal end (Fig. 1, A, B).

Appendix masculina : The distal segment of the appendix masculina in *M. borradalli* from Laccadives is $1/4$ the basal segment while in the Australian specimen it is only $1/8$ in length (Fig. 1, C).

Thelycum : The structure of the thelycum agrees well with the Siboga specimens described and figured by de Man (1911). The median processes of the anterior thelycal plate is well developed. The paired posterior plates have a little wider groove in between. The paired processes situated between the bases of the second pair of pereopods are more slender, elongated and separate at the base (Fig. 1, D).

SUMMARY

Metapenaeopsis borradalli (de Man) is reported from the Indian Ocean for the first time. The differences between the present material from the Laccadive Archi-

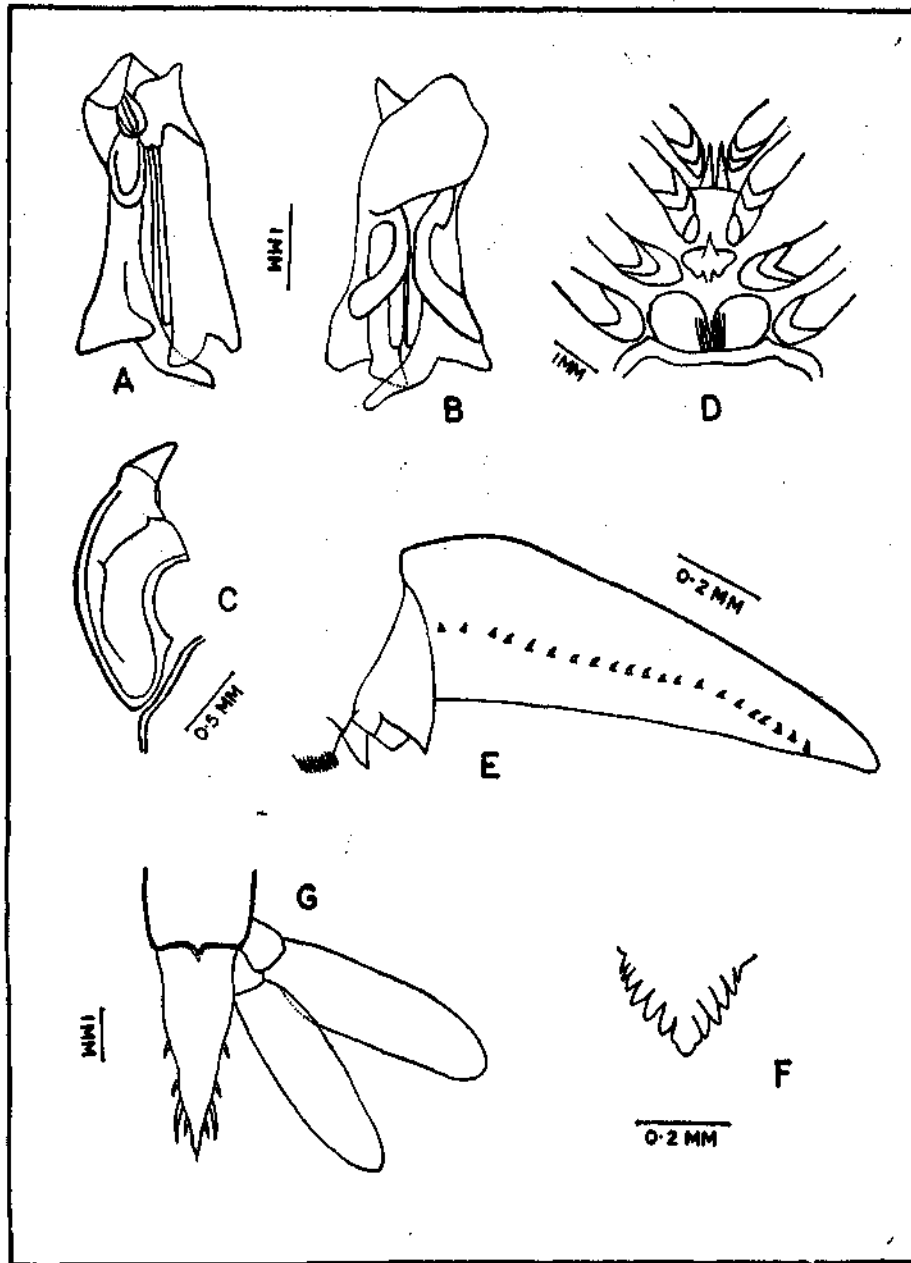


FIG. 1. A-G. *Metapenaeopsis borradalli* (de Man). A, Petasma, dorsal view; B, same, ventral view; C, appendix masculina, dorsal view; D, thelycum, female of 10 mm. carapace length; E, cardiac plate; F, prepyloric ossicle; G, telson and uropod (on right side only).

pelago and the specimens described earlier by de Man (1911) from Siboga Expedition localities and Dall from Murray Island, Torres Strait, are discussed.

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