

**ON A NEW SPECIES OF PENAEID PRAWN OF THE GENUS
METAPENAEUS WOOD MASON AND ALCOCK, FROM THE
ANDAMANS**

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ABSTRACT

A new species of *Metapenaeus* Wood Mason and Alcock closely related to *M. suluensis* Racek and Dall, from which it differs in having distinctly different thelycum and petasma, is described from Port Blair, Andamans. The diagnostic characters are : distomedian lobes of petasma broadly triangular with apices barely projecting beyond anterior margin of distolateral projections ; anterior plate of thelycum tongue-like with raised parallel lateral margins, lateral plates of thelycum flat, bounded posteriorly by two transverse protuberances bearing tufts of setae.

INTRODUCTION

WHILE examining a collection of penaeid prawns made by one of us (E. G. S.) from Corbyn's Cove near Port Blair, Andamans, four specimens, of what appeared at first sight to be *Metapenaeus suluensis* Racek & Dall, were noticed. On closer study they were found to differ markedly from *M. suluensis* in a number of characters including the thelycum and petasma and are hence described here as types of a new species of *Metapenaeus*, Wood Mason and Alcock.

We are very grateful to Shri P. M. Gokulapala Menon, Director of Fisheries, Andaman and Nicobar Administration for the facilities extended during the visit of one of us (E.G.S.) to the Andamans and to Shri K. Vijayakumar, Fisheries Development Officer and his staff for the help rendered in the field.

***Metapenaeus krishnatryi* sp. nov.* (Plate I)**

Material :

Corbyn's Cove, Port Blair, Andamans, 17-2-76. Holotype: Male 98 mm (22 mm C.L.) Reg. No. CMFRI-T 115/1 ; Allotype : Female 96 mm (21 mm C.L.) Reg. No. CMFRI-T 115/2 ; Paratypes : Males 98 mm (21.5 mm C.L.) and 76 mm (17 mm C.L.) Reg. No. CMFRI-T 115/3 a-b.

The type specimens are deposited in the reference collections of the Central Marine Fisheries Research Institute.

* We have great pleasure in naming the new species after Shri S. M. Krishnatry, Chief Commissioner, Andamans and Nicobar Administration, as a token of appreciation for his keen interest in the development of fisheries of the Andamans and Nicobar Islands.

Diagnosis :

A medium sized species of *Metapenaeus* in which distomedian lobes of petasma are broadly triangular with apices barely projecting beyond anterior margin of distolateral projections ; anterior plate of thelycum tongue-like with raised parallel lateral margins, and lateral plates of thelycum flat, bounded posteriorly by two transverse protuberances bearing tufts of setae.

Description :

Carapace of adult male glabrous except for patches of setae in postocular sulcus and hepatic fossa, abdomen with patches of setae in 4th, 5th and 6th segments. Dorsum of entire length of carapace with setae in female and juvenile male and abdomen more pubescent than in adult male. Rostrum in both male and female low and almost straight, armed with 6-7 teeth + epigastric, extending to tip of antennular peduncle in female and falling short of distal end of 2nd segment of peduncle in males.

Adrostral carina ending between epigastric and penultimate tooth, adrostral sulcus extending well behind epigastric tooth ; postrostral carina low, widening posteriorly and reaching 9/10 carapace ; orbito-antennal sulcus wide but distinct ; postocular sulcus oblique and short ; cervical carina straight ascending obliquely behind hepatic spine ; hepatic carina descending vertically below hepatic spine in posterior half and turning towards blunt pterygostomial angle anteriorly, falling short of margin ; branchiocardiac sulcus distinct, not quite reaching posterior margin of carapace ; antennal and hepatic spines prominent, a minute orbital tooth present.

Antennules with subequal flagella which are $\frac{1}{2}$ length of peduncle in female and $\frac{2}{3}$ peduncle in male ; prosartema extending to distal end of basal segment of peduncle, stylocerite reaching $\frac{1}{2}$ basal segment ; scaphocerite attaining distal end of antennular peduncle ; carpocerite reaching end of eye.

Third maxilliped and 1st pereopod almost reaching end of carpocerite in male and $\frac{2}{3}$ carpocerite in female, 2nd pereopod reaching beyond carpocerite by dactyl in male and female, 3rd pereopod almost reaching end of scaphocerite in male and end of 2nd segment of antennular peduncle in female, 4th pereopod exceeding basicerite in female, 5th pereopod exceeding carpocerite by dactyl in male and female, a sharp ischial spine on 1st pereopod about $\frac{1}{2}$ size of basal spine ; basal spines on 1 to 3 pereopods ; in adult male, notch on merus bounded by curved hook pointing ventrally and medially.

Abdominal segments 1 to 3 without dorsal carina, but two parallel rows of minute pits slightly diverging anteriorly are present in place of carina on 2nd and 3rd segments, 4th segment with carina in posterior $\frac{2}{3}$, 5th and 6th segments strongly carinated. Telson somewhat shorter than inner uropods, with two rows of minute spinules on lateral margins.

Petasma reaching base of 3rd pereopods. Distomedian lobes broadly triangular, overlying distolateral projections with openings facing dorsally, apices bluntly triangular with medial margins parallel to each other, projecting only slightly beyond anterior border of distolateral projections (Fig. 1b, c) ; posterior margin of distomedian lobes horizontal and at right angles to axis of petasma, outer angles

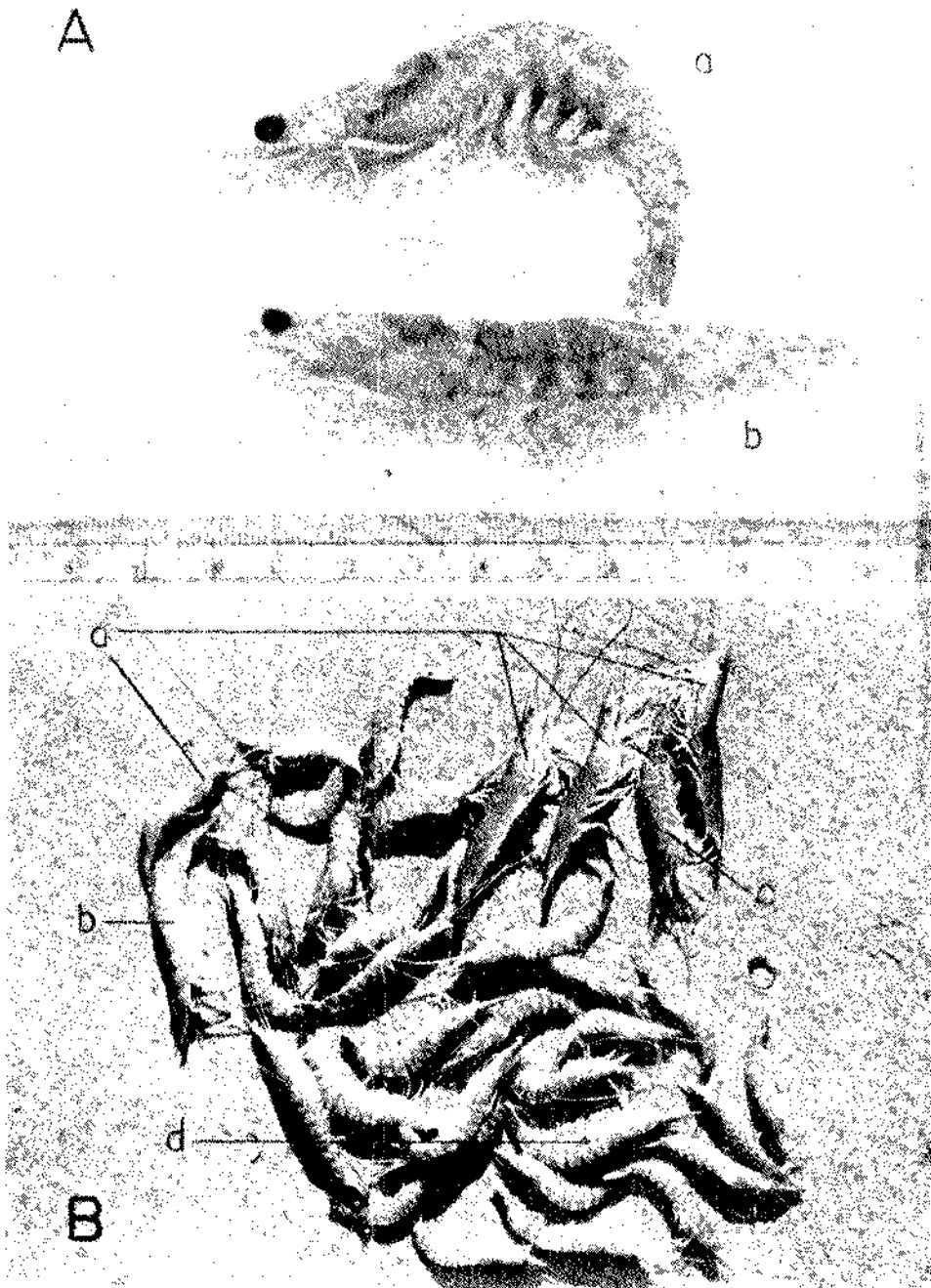


Plate I A. Type specimens of *Metapenaeus krishnatrii* sp. nov.—(a) Holotype and (b) Allotype.

B. A collection of penaeid prawns from Corbyn's Cove consisting of (a) *Metapenaeus krishnatrii* sp. nov. (b) *M. affinis*, (c) *M. euis* and (d) *Parapenaeopsis cornuta cornuta*.

projecting well beyond posterior border of distolateral projections, seen very clearly in dorsal view.

In thelycum (Fig. a), anterior plate tongue-like with a deep median depression in its anterior $\frac{1}{2}$, bounded laterally by high lateral ridges which are parallel to each other, posterior $\frac{1}{2}$ narrower and without lateral ridges, lying well below level of anterior broader part; lateral plates flat and kidney-shaped without salient lateral ridges and bounded posteriorly by a pair of anteromedially curved transverse protuberances whose smoothly rounded median ends rise well above level of lateral plates and partly overhang them; protuberances have prominent tufts of brushlike setae on lateral and posterior surfaces, between posterior $\frac{1}{2}$ of anterior plate and lateral plates two small, oval plates are present.

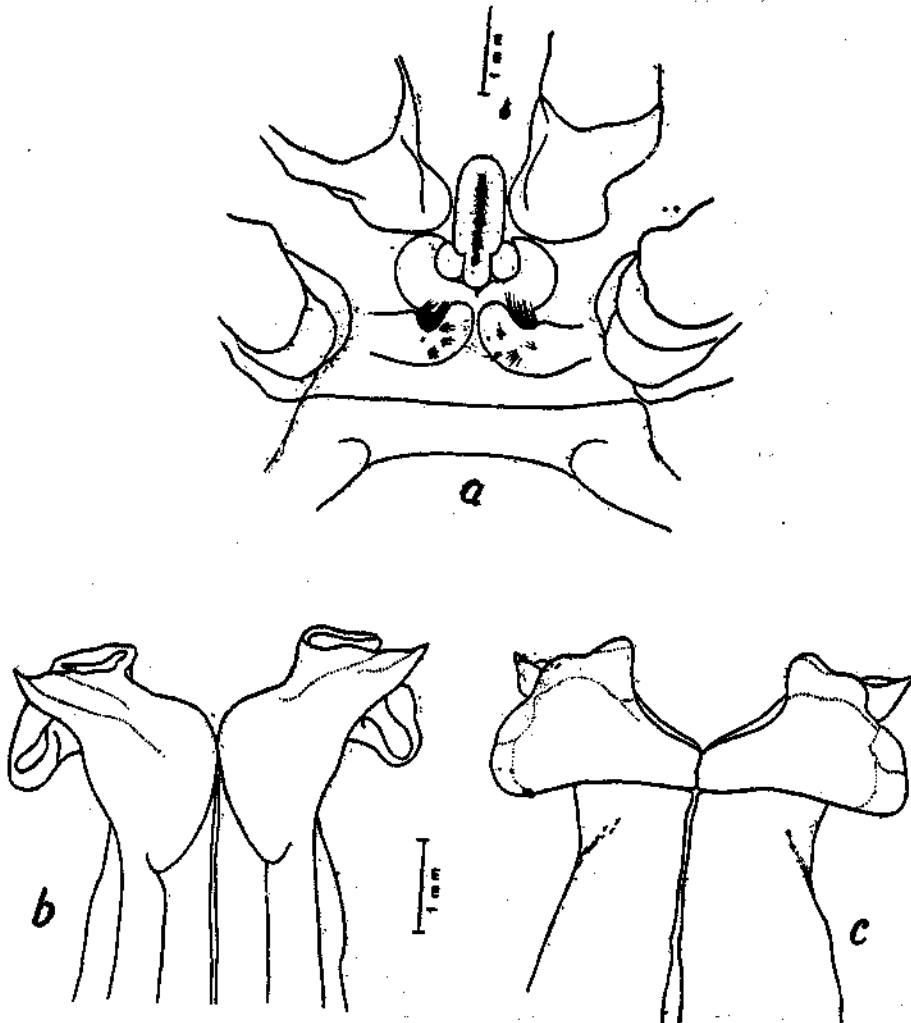


Fig. 1. *Metapenaeus krishnatrit* sp. nov.—a. Thelycum, b. Petasma—dorsal view and c. Petasma—ventral view.

Distribution :

As yet known from the type locality only.

Discussion :

Metapenaeus krishnatrii shows affinities to *M. suluensis* Racek & Dall, but can be readily distinguished from it by the following characters :

Characters	<i>M. krishnatrii</i> sp. nov.	<i>M. suluensis</i> Racek & Dall
(1)	(2)	(3)
Pubescence	Male with setae in hepatic fossa, postocular sulcus and 4 to 6 abdominal segments; female with setae on dorsum of entire length of carapace and patches of setae on all abdominal segments.	Completely lacking in male; in female restricted to dorsum on anterior $\frac{1}{2}$ of carapace and lateral patches on 4 to 6 abdominal segments.
Rostrum	6-7 teeth + epigastric, not sexually dimorphic.	6-7 teeth + epigastric, strongly sexually dimorphic.
Ischial spine on 1st pereopod	Sharp and $\frac{1}{2}$ size of basal spine.	Sharp, only slightly smaller than basal spine.
Petasma	Distomedian lobes with bluntly triangular apices with median margins parallel to each other, barely projecting beyond anterior margin of distolateral projections.	Distomedian lobes projecting well beyond the anterior margin of distolateral projections, apices semicircular, turned at about 30° towards midline.
Thelycum	Anterior plate tongue-like with raised lateral margins parallel; lateral plates flat, bounded posteriorly by two transverse anteroventrally directed protuberances with smoothly rounded median ends; tufts of setae on lateral and posterior surfaces of transverse protuberances.	Anterior plate spoon-like with raised lateral margins tending to converge posteriorly; lateral plates with raised ventral ridges, each with an anterolateral and posteromedian spinous process without tufts of setae.

The male of *M. suluensis* described by Racek & Dall (1965) is almost identical in size with the holotype male described in this paper and hence the differences noted in the petasma of the two species cannot be considered as due to different developmental stages of the same species.

The new species differs from *M. monoceros* (Fabricius), which it superficially resembles, in the absence of dorsal carination on the first three abdominal segments, the presence of a sharp, well developed ischial spine on the first pereopods and in the characteristically different thelycum and petasma.

REFERENCES

- RACEK, A. A. AND W. DALL 1965. Littoral penaeinae (Crustacea Decapoda) from Northern Australia, New Guinea, and adjacent waters. *Verhandl. Koninklijke Nederlandse Akad. Wetensch. AFD Natuurkunde*, 56 (3): 1-116.