

**FIRST RECORD OF A CRAB *SESARMA SMITHI* H.M. EDWARDS
(CRUSTACEA : DECAPODA : GRAPSIDAE) FROM INDIAN COAST.**

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INTRODUCTION

During a recent collection trip to Sundarban Tiger Reserve area, West Bengal, India undertaken by Sri S. Chattapadhyaya, one example of grapsid crab was collected. The crab has been identified as *Sesarma smithi* H.M. Edwards. It is a large crab, in spirit preserved condition reddish brown in colour. This species has not been recorded previously from India. The original and subsequent descriptions of the species are inadequate, no distinct plates and figures for its important diagnostic characters are illustrated anywhere in the available literature and no adequate descriptions are given before.

Order DECAPODA
Family GRAPSIDAE, Dana 1852
Subfamily SESARMINAE, Dana
GENUS *Sesarma*, Say 1817

***Sesarma smithi* H.M. Edwards**
(Pl. 1-3, T Fig. 1)

Sesarma smithi H. Milne Edwards, 1853 : 149 ; A. Milne Edwards 1873 : 305 ; de Man 1890 : 94 ; Rathbun, 1910 : 328 ; Tesch, 1917 : 199 ; Tweedie 1936 : 68 ; Miyake 1936 : 497 ; Sakai 1939 : 686.

Material : Seen one male from brackish Water of Baghmara Khal, Sundarban, West Bengal, India, 17.9.1983 ; Coll. S. Chattapadhyaya, Z.S.I. Regd. No. C 3221/1.

Dimensions :

Maximum width of carapace	— 35.75 mm
Maximum Length of carapace	— 34.5 mm
Width of frontal margin	— 16.5 mm
Distance between external Orbital teeth	—
Width of posterior margin	— 31.0 mm
Depth of carapace	— 16.3 mm
	— 29.0 mm

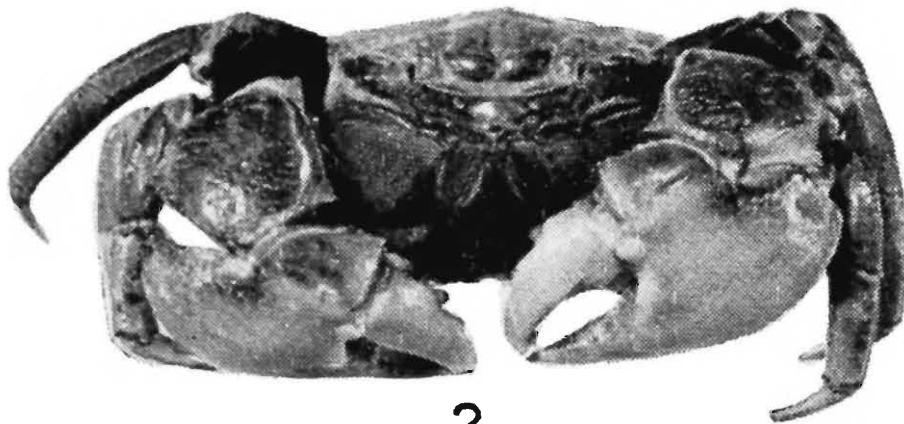
Diagnosis : Carapace square in shape, slightly broader than long, moderately convex in both the directions very deep. Meso-gastric area is distinctly outlined and

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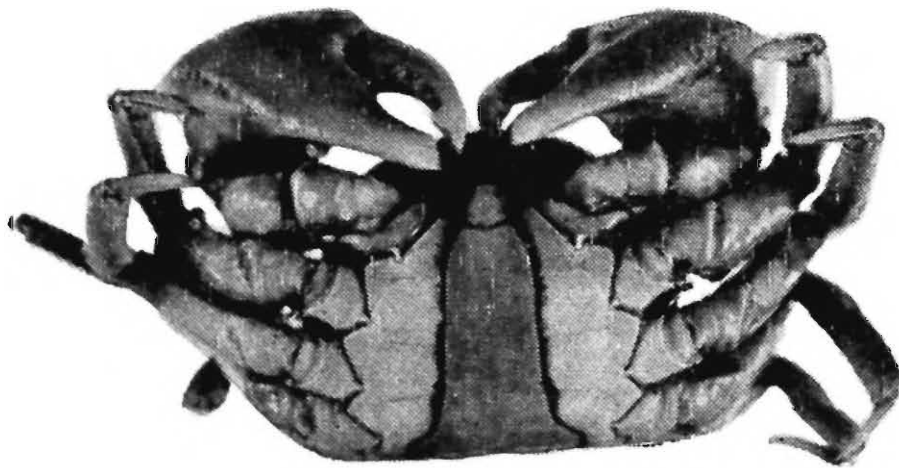
PLATE I



1

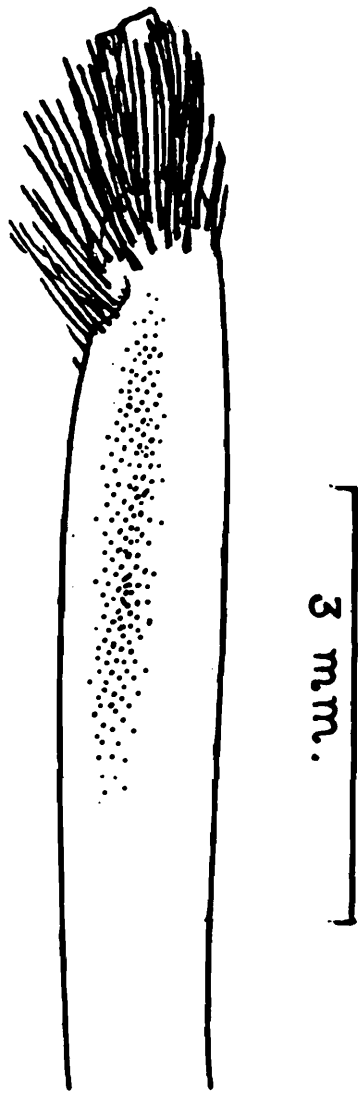


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3

1. *Sesarma smithi* H. M. Edw. (Dorsal view).
2. Same frontal view.
3. Same ventral view.



1. Anterior male pleopod. of *Sesarina s.nithi* H.M. Edw.

markedly convex, bounded posteriorly by very deep cervical groove. Cardiac and intestinal regions are also outlined laterally by shallow grooves. Two median post frontal lobes are very broad, convex, smooth; shiny and rounded forwards and the outer pair of post frontal lobes are narrow and not at all prominent. Front deflexed downwards, free frontal edge deeply concave medially. Antennules vertically folded, epistome broad, Orbits large, diagonal; elongate, upper edge sinuate lower edge finely crenulate, outer orbital corner acute angular. Epibranchial tooth two, last one smallest, antero-lateral sides of carapace sharp, crestlike and slightly concave just after the second anterolateral tooth and then little divergent posteriorly and meet at the base of third pair of legs. Last pair of legs are dorsal in position. Short oblique ridges from the posterolateral sides extend on the carapace towards the middle. Chelipeds massive and equal in male, in spirit dark brownish to reddish in colour, fingers and palms are light orange. Upper edge of arm of chelaeped ends in a sharp, subdistal spine and the distal corner is tooth like. Upper outer surfaces of arm and wrist transversely rugulose, inner side of arm hairy; inner corner of wrist is dent-like, crenulate, angular, upper edge of wrist is also finely crenulate. Palms are very high, upper edge rough, lower edge granular. One more smooth ridge on upper outer side and another granular longitudinal ridge present on the middle of the palm. Fingers are broad, stout, distal end whitish, tips obtusely pointed and dark

brown in colour. Upper edge of dactylus of palm armed with two stout dark blunt spines. Cutting edges of fingers adorned with one tooth at the base and one tooth on subapical end, the closed fingers meet only at tips and leaves an eye shaped gap between them. Leg joints short, stout, anterior edges of merii of legs are armed with a subdistal, strong, sharp spine, upper edges of carpal joints adorned with 3-4 ridges. Upper surfaces of first three pairs of merii are rough, spinulose, of last pair smooth. Upper surfaces of last three leg joints are smooth, with one exception, i.e. dactylus which is having two rows of short hairs on their lateral sides; upper edge of dactylus smooth.

Male abdomen is very long, reaches upto the base of external maxillipeds, it is seven jointed, sixth joint is 10 mm long and 9 mm wide and lateral sides are convergent distally, seventh joint oblong. Anterior meale pleopod is a strong, stout and grooved process, apical and subapical regions are hairy.

Remarks : This newly recorded species is adequately described and illustrated here as it is recorded for the first time from India. It may easily be recognised by the distinctive shape of the carapace and the colourations. This species was so far unknown from Indian subcontinent. The recent collection of the species was made from the mangrove swamp. *Sesarma* species from India are essentially littoral, keeping quite close to the shore, in shallow-water or haunting the sea beach.

Distribution : Sundarban, Lower Bengal, India (First record) ; South Africa, (type locality) ; New Caledonia ; Zanzibar ; Natal (A.M. Edwards) ; Madagascar (Hoffman, de Man) ; Queensland (Mc Culloch) ; Java ; Celebes (de Man) ; Fizi (de Man, Ortman) ; Siam (Rathbun) ; Japan.

SUMMARY

A specimen of *Sesarma smithi* H.M. Edwards, 1853 has been recorded for the first time from Sundarban, West Bengal, India and its diagnostic features are discussed with suitable illustrations.

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