Revision To The Diagnostic Characters Of Trachypenaeopsis Minicoyensis Thomas,1972

Angsuman Chanda

Abstract: T. minicoyensis was described by Thomas from Laccadive sea. Record of the species is very rare as it is a reef inhabiting species. Present study is mainly based on the type material preserved in the National collection of Zoological Survey of India Kolkata and CMFRI-substation at Mandapam, Tamil Nadu .During the study some important diagnostic characters have been added for better diagnosis of the species. Here, characters of carapace, antennules and thelycum is added to the diagnosis of the species which the author have observed are not mentioned in the original description.

Key words: Record, Type, Diagnosis, Character, Carapace, Antennules, Thelycum.

Introduction:

Penaeid prawn is a commercially important group of marine product. Therefore, lot of work have been done by several workers both in cultural aspect as well as taxonomy and biodiversity of the group. Among Indian scientists George [1][2] contribute a comprehensive taxonomic work on the group. Other workers like Thomas [3], Reddy, [4], Paulinose [5], Chanda and Bhattacharya [6], Chanda and Roy [7] and so on contributeadditional knowledge to the Indian literature on penaeid prawn. Scientists working on Indian prawns from abroad are Fabricious [8], Alcock [9] [10], Edwards [11], De Man [12],Tirmizi [13],Dall et. al., [14], Farfante and Kensley [15] and so on. Literature survey reveals that the genus *Trachypenaeopsis*consists of three species through out world [15]. *Trachypenaeopsis* has three species, one in Atlantic ocean viz., *T. mobilispinis*(Rathbun, 1915), remaining two are Indo-West Pacific in distribution viz., *T. richtersii* (Miers, 1884) and *T. minicoyensis* Thomas, 1972. The last one being the only species found in India. Present study is mainly based on the studies of type materials. The author have studied the holotype and allotypepreserved in the National collection of Zoological Survey of India Kolkata and CMFRI-substation at Mandapam, Tamil Nadu respectively. During the course of study author have astonishingly found that some important diagnostic characters are not described in the original description which the author have observed in the preserved type materials. So, present work is the addition of those characters in the diagnosis of the species with suitable diagram.

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Materials and methods:

No specimens was collected during the present study. Author, however, has examined the type material of *T. minicoyensis*: Holotype, female (31.5 mm) preserved in National collection of Zoological Survey of India (Reg. No. C2462/2) and allotype, male (29.5 mm) preserved in CMFRI-substation at Mandapam, Tamil Nadu (Reg. No. 164), collected by M. Ali Manikfan from western lagoon of Minicoy Island, Laccadive Archipelago on 7.1.1967. Study have been made with the help of stereoscopic binocular microscope and line drawing have done by help of cameralucida.

Results and discussions:

Trachypenaeopsisminicoyensis was described by Thomas (1972)from Laccadive sea. Record of the species is very rare as it is a reef inhabiting species. A brief history of the species with special reference to Indian contributions are given below

1972 Trachypenaeopsisminicoyensis Thomas, Indian J. Fish., 17: 116-121 [for 1970]; Dall et. al., 1990, Adv. Mar. Biol., 27 : 1-489; Perez Farfante and Kensley, 1997, Mem. Mus. nat. d'Hist. nat., 175: 1-233.

Type Species: Trachypenaeopsisminicoyensis Thomas, 1972, Indian J. Fish., 17: 116-121 [for 1970].

Type Locality: Laccadive Sea, India.

Diagnosis of the species:

Body glabrous, pubescence restricted to anterior and posterior portion of the cervical sulcus; rostrum straight, pointed, tip slightly raised, reaching upto middle of first segment of antennular peduncle, armed with 5-6+1 dorsal teeth; epigastric tooth conspicuously separated from penultimate tooth; carapace with well defined hepatic and antennal spine; postocular sulcus deep; orbital spine small, lacking pterygostomian spine; cervical sulcus well defined and setose, hepatic sulcus little posterior to hepatic spine sigmoidal anteriorly, hepatic carina distinct; branchiocardiac carina distinct, branching anteriorly; antennule without parapenaeid spine, flagella subequal, upper one shorter than lower; dorsal carina start from fifth somite end in midposterior margin of sixth somite in a short spine; telson armed with three pairs of movable lateral spines, distal pair projecting from shoulder like projection; petasma bilaterally

symmetrical, semiclosed, with ventrolateral lobule produced into three flat distal processes, anterior one longest, middle one shortest with pointed tip, proximal one diverge from the base, being twice as long as broad, with maximum width at the middle; thelycum closed type with anterior plate on sternite XIII, posterior plate on sternite XIV, a pair of lateral plate flanking posterior plate, base of anterior plate on sternite XIII and XIV; anterior plate conical in forward direction; posterior plate with an acute projection in between posterior end of the lateral plates, set close to the anterior edge of the last thoracic sternite; lateral with pointed apex, concave inner margin, convex outer margin, rounded posteriorly; posterior thoracic ridge behind thelycal plates bearing a small, pointed median protuberance.

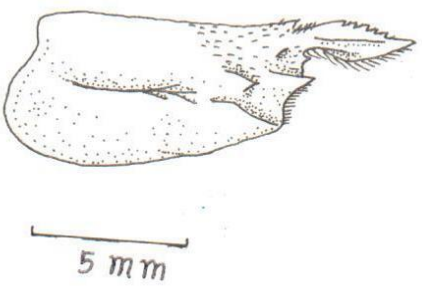

Figure-1: Carapace of *Trachypenaeopsisminicoyensis* Thomas, 1972

Distribution:Reported so far only form the type locality, Laccadive Sea, India.

Conclusions:

Following observations which were not recorded in the original description have been added here: a well defined hepatic carina; post ocular sulcus deep; branchiocardiac sulcus distinct, branching anteriorly; antennules are equal; posterior thoracic ridge behind thelycal plates bearing a small, pointed median protuberance.

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