



***NEMATOPALAEMON KARNAFULIENSIS* (ALI AZAM KHAN, FINCHAM & MAHMOOD, 1980) (DECAPODA: CARIDEA: PALAEMONIDAE) A NEW RECORD TO INDIA**

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### INTRODUCTION

The genus *Nematopalaemon* Holthuis, 1950 encompasses five species namely *Nematopalaemon colombiensis* (Squires & Mora L., 1971), *Nematopalaemon hastatus* (Aurivillius, 1898), *Nematopalaemon karnafuliensis* (Ali Azam Khan, Fincham & Mahmood, 1980), *Nematopalaemon schmitti* (Holthuis, 1950b) and *Nematopalaemon tenuipes* (Henderson, 1893). Out of the five species of *Nematopalaemon* described so far, the spider prawn *Nematopalaemon tenuipes* is available in Northwest, South & Northeast coasts of India (Kemp, 1917, Jayachandran, 2001, Radhakrishnan *et al.*, 2012), and it occupies a prominent place among the non-penaeid shrimp resources of the north-west coast (Kizhakudan and Deshmukh, 2009). Ali Azam Khan, Fincham & Mahmood, 1980 described *Nematopalaemon karnafuliensis* (= *Palaemon* (*Nematopalaemon*) *karnafuliensis*) from Karnafuli Estuary, Chittagong, Bangladesh and this species is so far not reported outside its type locality. While studying the unidentified caridean shrimps accumulated in the National Zoological collections of Crustacea Section, Zoological Survey of India, five examples of *Nematopalaemon karnafuliensis* were noticed among the other caridean shrimps namely *Exopalaemon styliferus* (H.M. Edwards, 1840) and *Exhippolysmata ensirostris ensirostris* (Kemp, 1914) collected from Daman during the Gujarat Coastal survey in 1992 by H.C. Ghose.

It forms a first report of the species from India after its description from the type locality.

### MATERIAL EXAMINED

4 Males and 1 Female from Daman, Gujarat Coast, Date: 24-12-1992, Coll: H.C.Ghose. Male CL-6.5-11mm Female CL-7.1mm. Reg. No. C5944/2.

### DIAGNOSIS

The genus *Nematopalaemon* is diagnosed by the characters like generally elongated rostrum (sometimes short as well) with basal crest; presence of antennal and branchiostegal spine and the absence of branchiostegal suture in the carapace; mandible with palp; 3<sup>rd</sup> to 5<sup>th</sup> pereopods with simple, long threadlike dactylus and longer propodus; the endopod of the male 1<sup>st</sup> pleopod without appendix interna. In the species *N. karnafuliensis* rostrum short, straight and extends from 1/2 to end of the 3<sup>rd</sup> segment of the antennular peduncle and not even touches the end of the antennal scale. The dorsal margin of the rostrum bears 6 teeth of which 2 are located



Fig. 1. *Nematopalaemon karnafuliensis*

behind the orbit, the closely arranged proximal 5 teeth are separated from the single tooth near tip by a wide space. The ventral surface of the rostrum carries 3-4 teeth. Adrostral carina originates from distal end of the elevated basal region of the rostrum and fuses with orbital edge. Antennal spine stronger than the branchiostegal spine. In 1<sup>st</sup> antenna anterolateral spine of basal segment is distinct, straight and reaches the distal edge of the second antennular segment. In the second pereopod, carpus is shortest, fingers twice the length of the palm but falls short of merus. Propodus the longest and merus is shorter than chela. The various proportion of the second pereopod is as follows.

Ischium	Merus	Carpus	Palm	Finger
18.25%	30.95%	8.73%	14.28%	27.78%

### REMARKS

*Nematopalaemon karnafuliensis* was described and well-illustrated by Ali Azam Khan, Fincham & Mahmood, 1980 from Karnafuli Estuary, Chittagong, Bangladesh. The species examined from Gujarat coast also agrees with the characters described by the authors. The species can be easily differentiated from its closely related Indian species *Nematopalaemon tenuipes* (Henderson, 1893) based on its short, straight rostrum which not even reaches the apex of the antennal scale and longer anterolateral spine in the basal segment of antennular peduncle (Figs. 1-2).

Until now this species was known only from its type locality Karnafuli Estuary, Chittagong,

Bangladesh. Radhakrishnan *et al.*, 2012 in their annotated checklist of the Penaeoid, Sergestoid, Stenopodid and Caridean prawns has erroneously mentioned the distribution of the species in West Bengal. When the first author was contacted through e-mail regarding the occurrence of species in West Bengal, the author has replied that it is by mistake and the species is so far not reported anywhere in India and Dr. K.V. Jayachandran who made significant contribution on the Palaemonid shrimps of India also has confirmed the fact. So the present observation forms the first record of the species to India.



Fig. 2. *Nematopalaemon tenuipes*

### ACKNOWLEDGMENTS

The author is thankful to the Director Zoological Survey of India for providing necessary facilities, Dr. K.V. Jayachandran and Dr. E.V. Radhakrishnan for their valuable information over phone and e-mail regarding the distribution of the species.

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