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Short Communication

A record of skeleton shrimp *Paracaprella pusilla* Mayer, 1890 from Mumbai waters

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Abstract

Caprellid shrimp *Paracaprella pusilla* Mayer, 1890 is recorded from Vasai near Mumbai along the northwest coast of India for the first time. Since earlier record of the species from the southwest coast was based on a single female specimen, the description of male with dimorphic characters is presented.

Keywords: Caprellid shrimp, amphipod, *Paracaprella pusilla*

Introduction

Caprellid amphipods, commonly called skeleton shrimps are found clinging on to seaweeds, hydroids, bryozoans, mussels and sometimes inanimate objects. During the course of our study on Vasai creek near Mumbai, we collected epizootic hydroid colonies on the anchoring ropes of the bagnets used for fishing in the creek. A close examination of the hydroid colonies in the laboratory revealed the presence of a number of skeleton shrimps moving in caterpillar like manner. The colonies also showed good number of pycnogonids, gammarid amphipods, polychaetes and nematodes along with the caprellid shrimps. The present species of caprellid shrimp was identified with the key given by Guerra-García (2006) as *Paracaprella pusilla* Mayer, 1890.

Very little information is available on the caprellidean fauna of India. A total of 12 species have been recorded by Giles (1888), Mayer (1890), Sundara Raj (1927), Sivaprakasam (1977) and Swarupa and Radhakrishna (1983). With a single female specimen from Neendakara river mouth in Kerala, Sivaprakasam (1977) recorded *P. pusilla* for the first time from the Indian waters. The present collection consisting of large number of juveniles, males and females of the species is the first record from northwest coast of India. The taxonomic features of the collected specimen were compared with the details given in Catalogue of Life (Anon, 2007).

Material and methods

The specimens were collected from Vasai creek (19°20'11.12" N lat.72°45'47.83"E long.) from a depth of about 10 m. Bunches of hydroid colonies were found adhering to anchoring rope of a bagnet operated at the mouth of Vasai creek. Many caprellids were clinging on to hydroid colonies along with other invertebrates. From several hundred specimens in the sample, 10 males, 10 females and 10 juveniles were examined. The total length measured along the dorsal surface from the rostrum to the base of the abdomen was 12-14 mm for males, 11-12 mm for females and < 2 mm in the case of juveniles. Description of the species (Guerra-García, 2004) in general and male in particular is given below:

Taxonomic account

Phylum : Arthropoda; Class: Malacostraca; Order: Amphipoda; Superfamily: Caprelloidea; Family: Pariambidae; Genus: *Paracaprella* Mayer, 1890; Species: *P. pusilla* Mayer, 1890.

Description **:** Body smooth, flagellum of antenna 2 articulated; pereopods 1 and 2 absent; pereopods 3 and 4 reduced and with 2 articulations; gills on pereonite 3-4, pereopod 5, 6 and 7 six articulated,

head smooth, without any dorsal projections, propodus of gnathopod 2 without ventral projection.

The males of the species were identified on the basis of following characters (Fig. 1a): body smooth, large, pointed projection on anterio-ventral margin of pereonite 2; propodus of gnathopod 1 with proximal grasping spine, dactylus with serrated inner side almost about half of the distal part of its length; presence of setae at the median region of the dactylus; gills on the pereonite 3-4 somewhat oval in shape; gnathopod 2 (Fig. 1b) with a proximal knob under the basipodite and trapezoidal projection on the inner margin of the propodus are the dimorphic distinguished characters of the males (Díaz *et al*., 2005). The males of *P. pusilla* are larger than females.

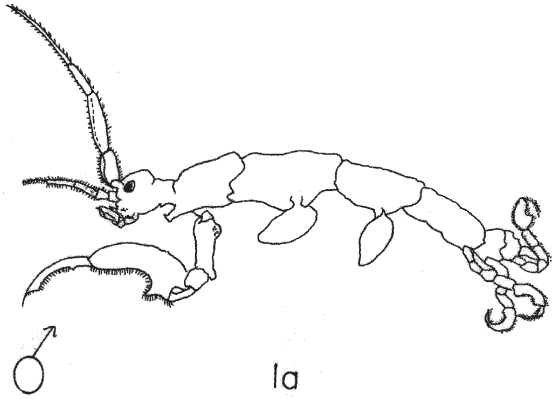

Fig 1. a. Male *Paracaprella pusilla*

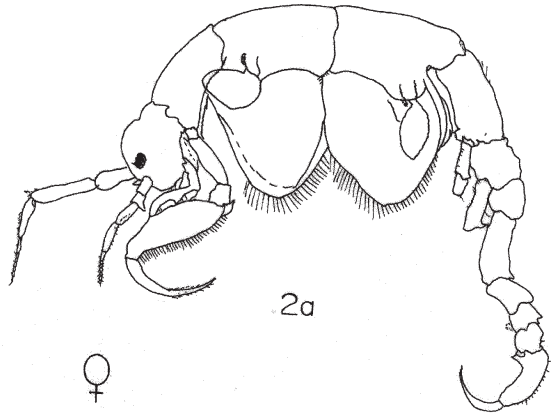

Fig 2a. Female *P. pusilla*

The females were identified on the basis of following features (Fig. 2a): body smooth; pereonite 2 without trapezoidal projection; gills on the pereonite 3-4 oval; propodus of gnathopod 1 with proximal grasping spine; dactylus with 3 teeth on the inner margin with serration; propodus of gnathopod 2 with a grasping spine and palm convex with 2 distal tubercles; pereopod 3-5 composed of six articles. Mature female showed 2 pair of lobes which formed the brood pouch (Fig. 2b). Many females were carrying eggs in their brood pouches numbering as many as 18. In one of the female specimens 23 young juveniles were observed in the brood pouch.

While reporting a female specimen of *P. pusilla* from the southwest coast of India, Sivaprakasam (1977) remarked that the identification of female in the genus *Paracaprella* is a difficult task. However,

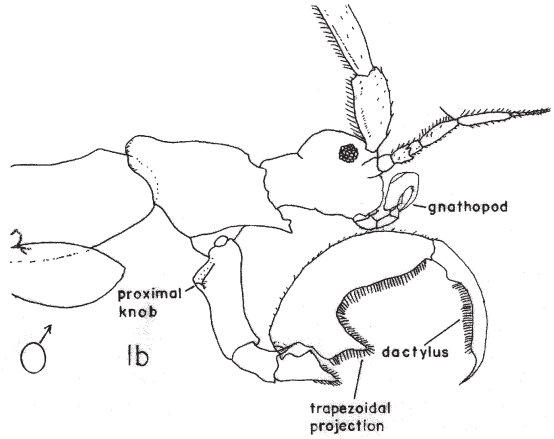

Fig. 1b. Male *P. pusilla* showing gnathopod 2 with proximal knob and trapezoidal projection on propodus

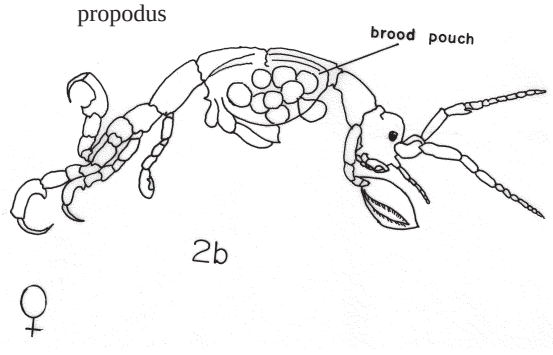

Fig. 2 b. Female *P. pusilla* with brood pouch

he identified the female as that of *P. pusilla* based on the description and figures given by Mcaine (1968). Guerra-García (2006) also opined that in the

absence of the male specimen, it is difficult to identify the species of the genus *Paracaprella*. The present account on the description of the male specimen has filled the gap in our knowledge. Further, Caine (1978) recorded specimens of *P. pusilla* among the erect branching bryozoans, whereas the present report of the species was among the colonies of hydroids.

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