

**AN INDIAN OCEAN RECORD FOR A PORCELLANID CRAB,
RAPHIDOPUS CILIATUS STIMPSON, 1858.**

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ABSTRACT: Several specimens of a porcellanid crab *Raphidopus ciliatus* are being reported for the first time from the northern Arabian Sea, extending the range of the species into the Indian Ocean. Specimens were found in by-catches landing at Fish Harbour, four specimens were recovered from stomachs of noncommercial fish, *Batrachus grunniens*. Salient features of the species are described. Individual variations specially noted.

KEY WORDS: *Raphidopus ciliatus* - porcellanid crab - Indian Ocean record.

INTRODUCTION

Recently, on 23rd February, 1992, several specimens of *Raphidopus ciliatus* Stimpson, 1858 were picked from by-catches landing at the Karachi Fish Harbour. Later on more specimens were added, four specimens were obtained from the stomach of a noncommercial fish, *Batrachus grunniens* (Linnaeus, 1758) thrown away as trash.

Since the species is new to the region it is being described. Considerable variations in the armature of the carapace, chelipeds and pilosity are noticed. The abbreviations used are cl, carapace length, and cb, carapace breadth.

The material will be deposited in the collections of the Marine Reference Collection and Resource Centre (Cat.No.ANOM.228). One male and one female will be deposited in the National Museum of Natural History, Leiden, the Netherlands (Reg.No.42856) and two specimens (male and female) in the Smithsonian Institution, Washington, D.C., USA.

SYSTEMATIC ACCOUNT

***Raphidopus ciliatus* Stimpson, 1858**

(Fig. 1A-J)

Raphidopus ciliatus Stimpson, 1858:241, 1907: 185, pl.22, fig.5; Henderson, 1888: 113; Gordon, 1931:526 (list); Miyake, 1943: 146, figs.61,62 (synonymy); Haig, 1966: 63, fig.7; 1992: 324, fig.2D.

MATERIAL EXAMINED

23.2.1992, Karachi Fish Harbour, 8 males, cl.6.0-8.0 mm, cb.8.0-10.0 mm, 7 females, cl.5.5-7.0 mm, cb.7.2-9.1 mm, MRC Cat No.ANOM.228; 9.5.1992, stomach of *B. grunniens*, 2 specimens, cl.6.0-6.6 mm, cb.7.5-9.0 mm; 10.12.1992, stomach of *B. grunniens*, 2 specimens, cl.5.0-8.1 mm, cb.7.0-10.0 mm; undated, Karachi Fish Harbour, 1 male, cl.8.0 mm, cb.10.0 mm, 1 female berried, cl.8.0 mm, cb.10.5 mm.

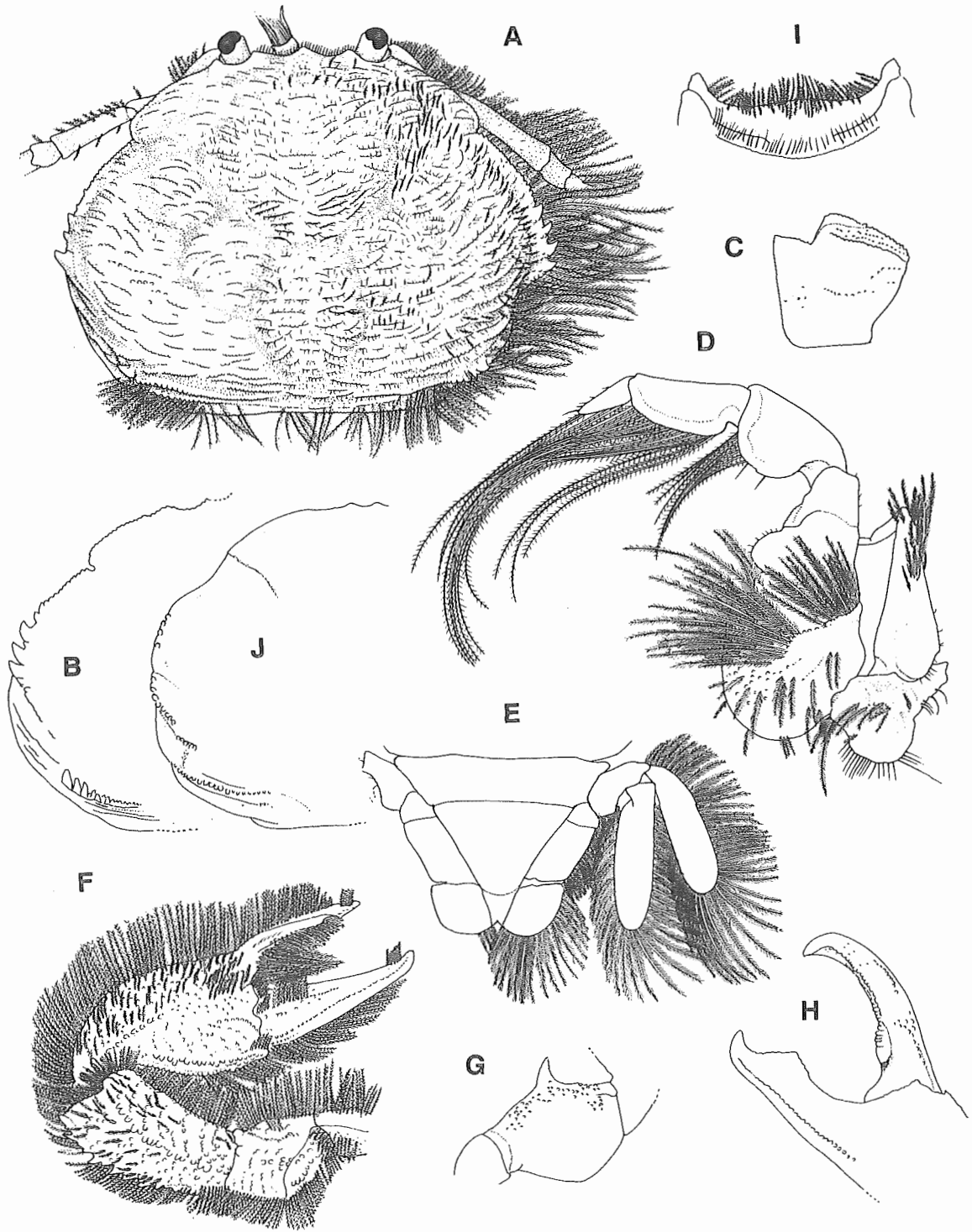


Fig.1. *Raphidopus ciliatus* Stimpson, 1858. A,C-H, Female. cl.8.0 mm. A, carapace, dorsal view; B, male cl.6.5 mm, left side of carapace; C, basal segment of antennule; D, third maxilliped; E, telson, and right uropod; F, left cheliped, outer view; G, merus of the same; H, fingers of the same; I, sternum male, cl.6.5 mm; J, left side of carapace, female. cl.6.5 mm.

REMARKS

Raphidopus ciliatus Stimpson, 1858 is a small sized species which is quickly noticed due to its shaggy appearance. The Pakistan specimens measure 5.0-8.0mm in cl. and 8.0-10.0mm in cb. The species shows variations even in characters which are of specific importance (see Haig, 1966). Since a fair number of specimens are available individual variations are carefully noted. The specimens differ mainly in pilosity, which may be very dense (Fig.1A) or only moderately so, armature of the carapace and the chelipeds as given below:

The lateral margin of the carapace has 1-4 spines, the number may vary on the two sides of the same individual. The oblique posterolateral ridge is with one prominent spine, there are, however, some specimens where the oblique ridge has a pectinate appearance having a row of several unequal spines followed by prominent granules (Fig.1B), it is noted that the number of spines are subjected to variations on the two sides.

The front is tridentate with the lobes obtuse or pointed. The antennule (Fig.1C) and antennae are normal. The third maxilliped (Fig.1D), has scaly granules on the ischium. The telson is normal (Fig.1E). The chelipeds (Fig.1F) are slightly unequal, rough and very hairy. The ischium has numerous tubercles on the ventral surface, a large tooth-like spine is present on the merus (Fig.1G), the wrist has prominent tubercles, the posterior margin is armed with a row of strong spines. The palm is swollen ventrally. The fingers have strongly curved tips; the cutting edges are serrated and each is with a tooth, as illustrated (Fig.1H).

The ambulatory legs are as already described by earlier authors. The sternum of the third maxilliped (Fig.1I) is boat-shaped.

One female (cl.6.5mm) collected on 23.02.1992 differs from all the other specimens in being less pilose. The carapace and chelipeds have fewer granules. The lateral margins and the oblique posterolateral ridge of the carapace are unarmed (Fig.1J). The specimen shows characters which are more like those of *Raphidopus indicus* Henderson, 1893. However, we are placing it under *R. ciliatus* Stimpson, 1858 till more specimens are available.

The specimens recovered from the stomach of the fish can easily be identified they are, however, without hairs and brittle not allowing much handling, their sex can not be determined.

COLOUR

Fresh specimens are cream coloured with large blotches of brick red on carapace and chelipeds.

DISTRIBUTION

Indo-Pacific: Korea, Formosa Strait, China, Hong Kong, Gulf of Thailand, Singapore, Japan, Australia, Malay Peninsula (Haig, 1992) and now from the northern Arabian Sea.

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