OCCURRENCE OF CARIDIAN SHRIMP *RHYNCHOCINETES DURBANENSIS* GORDON, 1936 (CRUSTACEA: DECAPODA: CARIDEA) ALONG PAKISTAN COAST

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ABSTRACT

Camel shrimp or hinge beak prawn (*Rhynchocinetes durbanensis* Gordon, 1936) considered to be one of the ornamental crustaceans, popular in marine aquarium trade, is reported for the first time from Jiwani, Balochistan. The specimen is dissected out of a sin croaker (*Johnius dussumieri*) which was found to be infested with an unidentified bopyrid parasite. The paper provides taxonomic details of *Rhynchocinetes durbanensis* which is widely known from Indo-Pacific area and extends its distribution to Northern Arabian Sea along the coast of Pakistan.

Keywords: *Rhynchocinetes durbanensis*, camel shrimp, hinge beak prawn, bopyrid parasite, Jiwani, Balochistan.

INTRODUCTION

Caridean shrimps is one of the groups of decapods, crustaceans comparatively well-known from Pakistan coast (for a review see; Kazmi and Kazmi, 2010). *Rhynchocinetes uritai* Kubo, 1942 is one of the species reported from Pakistan in this monograph (Kazmi and Kazmi, 2010). The species was reported from underwater video taken at Churna Island near, Karachi. In the absence of other details, it seems difficult to ascertain presence of this species in Pakistan, as it is known mainly from tropical waters of the East Indian Ocean, Australia, Indonesia, East Pacific, and central/west Pacific. Present paper reports another species of genus *Rhynchocinetes* from Pakistan.

MATERIALS AND METHODS

A specimen of sin croaker (*Johnius dussumieri*) was collected from commercial landings in Jiwani, Balochistan. Upon dissection of its stomach, an intact specimen of a camel shrimp was found which was photographed. Because of the remoteness and lack of facilities in the area, the specimen could not be preserved. The photographs are kept as a record in the Museum of Marine Fisheries Department, Karachi.

RESULTS

The species of camel shrimp was identified as *Rhynchocinetes durbanensis* Gordon, 1936, a species which is widely distributed in the Indo-Pacific area.

Rhynchocinetes durbanensis Gordon, 1936

(Fig. 1)

Synonymy:
See. Okuno and Takeda, 1992.

Description

Carapace with transverse numerous grooves that are fine but distinct and almost parallel to each other. Third abdominal segment strongly humped dorsally in lateral view. Posterior margins of fourth and fifth segments shallowly concave at each median part. Telson with three short spines at each side of posterior two thirds of dorsal surface; median part of posterior margin with a sharp process, being armed with three spines at each side, the median of which is the longest of all. Eye are very large, round.

Ground color pale pink, rather translucent; brilliant red labyrinth lines cover whole surface; white ocelli and lines in interspace of red lines; all of white ocelli on body smaller than eye. Dorsal surface of carapace with a white Y-shaped mark, accompanying with a longitudinal white line at each side; posterior margin of carapace white. Upper margin of rostrum white, lower margin red. Cornea dark, and eyestalk red with longitudinal white line in

median part. A white band runs from fourth abdominal segment to end of telson. An oblique white line down forward from summit of hump of third segment to anterolateral distal margin of first segment.

Fig. 1. *Rhynchocinetes durbanensis* (a) Lateral view; (b) Dorsal view showing infestation by bopyrid parasite.

Distribution

R. durbanensis is widely distributed in the tropical Indo-West Pacific including South Africa, Philippine and India (Barnard 1950; Dinesh and Zacharia, 2007; Debelius 1983; Okuno and Takeda, 1992; Prakash and Ajithkumar, 2013).

DISCUSSION

A number of species of caridean shrimps are known from Pakistan, however, presence of *Rhynchocinetes uritai* seems to be doubtful, however, present paper reports *Rhynchocientes durbanensis* from Pakistan coast for the first time. Presence of Y-shaped markings on the dorsal surface of the carapace is distinct in *R. durbanensis*, compared to its similar species *R. uritai* (Prakash and Ajithkumar, 2013). Kemp (1925) reported *Rhynchocinetes hendersoni* Kemp from the Gulf of Mannar, Andaman and Nicobar Islands (Kemp 1925; Radhakrishnan, *et al*. 2012), which was recently re-designated as *Cinetorhynchus hendersoni*. Dinesh and Zacharia (2007) reported *R. durbanensis* off the Karnataka coast. Prakash and Ajithkumar (2013) reported this species from Gulf of Mannar, India.

It is interesting that the specimen collected from Jiwani, Balochistan is infested by an unidentified bopyrid parasite, however, since no further details and specimen is available, therefore, it cannot be identified to generic or specific level not even sure attached either branchially or abdominally , otherwise this could have been the second one reported to infest any member of the family Rhynchocinetidae in the world (Saito and Shimomura,2015).

Camel shrimp (*Rhynchocinetes durbanensis*) is considered to be an important aquarium trade and fetches high prices. The discovery of *Rhynchocinetes durbanensis* from Pakistan indicates possibility of initiation of ornamental trade of crustacean and other marine animals including export of these animals which can be a source of foreign exchange earnings. Kazmi and Kazmi (2011) has already stressed upon the importance of ornamental crustaceans and stressed the need to export of these charming and exquisite marine animals.

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