http://www.pjbs.org



ISSN 1028-8880

Pakistan Journal of Biological Sciences



Asian Network for Scientific Information 308 Lasani Town, Sargodha Road, Faisalabad - Pakistan

© 2004 Asian Network for Scientific Information

A Ghost Shrimp *Upogebia assisi*, Barnard (1947) Offering a New Record from Karachi, Pakistan

Naseem Ghani

Marine Reference Collection and Resource Centre, University of Karachi, Karachi, Pakistan

Abstract: Two species of *Upogebia* are hitherto recorded from the marine muddy habitat of Karachi coast, this *Upogebia assisi* Barnard, 1947 is the third one and this is a subsequent record, extending the range considerably towards north. The first record of the species is from South Africa.

Key words: A ghost shrimp

INTRODUCTION

Earlier two species of *Upogebia*, *U. quddusiae* Tirmizi and Ghani (1978, 1979) and *U. Kampi* Sankolli, 1972 were recorded from Pakistan. These ghost shrimps live in the burrows of mud and need a special type of habitat. They build tunnels usually U-shaped. Along Karachi coast these ghost shrimps are present on small patchs of Pacha, Cape Monze and Buleji. The habitat is now mostly destroyed and it seems that the species of *Upogebia* along Karachi coast are going to be vanished. The species at hand is the second record of the *Upogebia* assisi Barnard, 1947. It was originally recorded from South Africa. With this record the range of distribution is considerably extended towards North. Abbreviations used are SL. For shield length and CL for carapace length.

Family Upogebidae Genus *Upogebia Upogebia assisi* Barnard, 1947 (Fig. 1A-G) *Upogebia assisi* Barnard, 1947: 381, 1950: 520 fig. 97 a-d.

MATERIALS AND MEASUREMENTS

1 ovigerous female SL 3.5 mm, CL 7.5 mm, Cape Monze. (Collected on 7-10-83, Kept alive for hatching, died on (19-10-83).

Description: The rostrum (Fig. 1A) is somewhat triangular, it bear spines on the lateral margin, the dorsal surface is with the longitudinal groove and some spines. The lateral margins of the rostro-gastric shield (Fig. 1B) are not projecting. These lateral margins are provided with spines and setae, the base of the rostrum is separated by a wide groove running parallel to the lateral margin, dorsally the rostro-gastric shield is granular and setose, the setae are more pronounced anteriorly, no spinules on the antero-lateral margin of the carapace at the base of

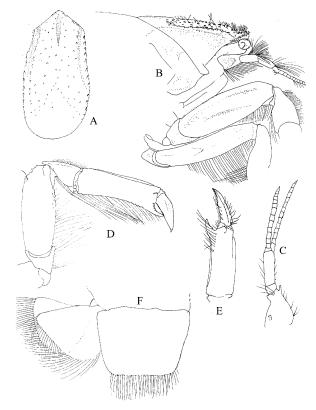


Fig. 1: Upogebia assisi, Barnard, 1947. A, Rostrogastric sheild, dorsal view; B, Anterior part of the body, lateral view; C, Antennule; D, Cheliped; E, Dactylus and propodus of cheliped; F, Telson and left uropod, dorsal view

antennule. The eyes are well pigmented. The basal segment of the antennule (Fig. 1 C) is provided with a prominent spine on the inner antero-lateral angle, the flagella are sub-equal in length. The antenna (Fig. 1B) is with three long basal segments.

The chelipeds (Fig. D and E) are equal and subchelate, the carpus is with a spine on the inner distrolateral angle, the fixed finger is with a few denticles on the base, while movable finger is without any prominent tooth

The fifth pereopod (Fig. 1 F) has a thumb like process giving the appendage a sub-chelate appearance, this thumb-like proves is with a few denticles on the base while dactylus is also provided with blunt teeth.

Telson (Fig. 1G) is broader than long, without any carina and spine.

The species *Upogebia assisi* Barnard, 1947, is quite comparable to the one described by Barnard, 1950: 520. The shape and armature of the rostro-gastric shield, without any spine on the antero-lateral margin above the antenna two, shape of cheleped, fifth leg, and telson, however, there are some differences, specially that the outer surface of movable finger of the cheliped is devoid of any tuberculation.

Distribution: South Africa and Pakistan.

ACKNOWLEDGEMENTS

My Sincere thanks are for my brother, Nasir Ghani, Assistant Professor Govt. college Islamabad for typing the MS.

REFERENCE

- Barnard, K.H., 1947. Descriptions of new species of South African Decapod Crustacea, with notes on synonymy and new records:- Annals and Magazine of Natural History. (XI.), 13: 374-381.
- Barnard, K.H., 1950. Descriptive Catalogue of South African Decapod Crutacea. Ann. South African Mus. 38: 400-524, text figs. 75-97.
- Tirmizi, N.M. and N. Ghani, 1978. *Upogebia quddusiae* N. sp. from Pakistan (Decapoda, Thalassinidea). Crustaceana, 35: 134-138.
- Timizi, N.M. and N. Ghani, 1979. Notes on two decapod Crustacea new to Pakistan waters. Pak. J. Zool., 11: 139-142.