

## Research Article

*A new record of Eurycarcinus integrifrons De Man, 1879 (Decapoda, Brachyura, Pilumnidae ) from NW of the Persian – Arabian Gulf, Iraq*

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## Abstract

The present paper focuses on the first report of the pilumnid crabs *Eurycarcinus integrifrons* from the NW of the Persian – Arabian Gulf, Iraq, at the muddy area of Fao region. The morphological features and distribution information are considered.

**Keywords:** *Eurycarcinus integrifrons*; Brachyura; NW of the Arabian – Persian Gulf; Iraq

## Introduction

The pilumnid crab genus *Eurycarcinus* is presented by two species, *Eurycarcinus orientalis* A. Milne-Edwards, 1867 and *Eurycarcinus integrifrons* De Man, 1879 in the Persian – Arabian Gulf. Although both species had been confused with each other in the past, the two taxa are quite different, and their types differ markedly (Apel, 2001; PKLN, unpubl. Data; Özcan et al, 2010).

*Eurycarcinus orientalis* is so far listed from Saudi Arabia, Kuwait, Bahrain, Dubai, the coasts of the UAE and Qatar (Basson et al. 1977; Jones, 1986 a; Vousden, 1987; Titgen; 1982; Hornby, 1997 and Cooper, 1997), respectively. The new record pilumnid crab, *E. integrifrons* De Man, 1879, is native to the Indian Ocean (Man, 1879; Apel, 2001), the Red Sea and Madagascar.

The present paper lists another record for Iraqi brachyuran crabs from the NW of the Persian-Arabian Gulf, Iraq.

## Materials and Methods

Twelve specimens of *E. integrifrons* were recently collected from NW of the Persian – Arabian Gulf, Fao region (Fig. 1) on February 2010. The specimens were obtained with prawn trammel nets over muddy bottoms. Specimens are preserved in 70% alcohol and deposited in the marine science centre (MSC) (collection number: 32). The main abiotic parameters in the study area by the time of collection were as follows: salinity 38 ppt, water temperature 12 C, pH 8.19.



Fig. 1. Sampling site from Fao region

## Material examined (MSC)

Carapace measurements: Carapace breadth CB × Carapace Length CL.

Two females (22 × 17 mm), (22.5 × 17 mm); 10 males (24.5 × 20 mm), (22 × 17 mm), (21 × 15.5 mm), (24.5 × 19 mm), (22.5 × 17 mm), (24.5 × 20 mm), (22 × 16 mm), (21 × 15.5 mm), (24.5 × 19 mm), (22 × 17.5 mm), collected from Fao region, during February 2010.

## Diagnosis and Remarks

Order Decapoda

Sub Family Pilumnidae Samouelle, 1819

Genus *Eurycarcinus* A. Milne Edwards, 1867

*Eurycarcinus integrifrons* De Man, 1879

(Fig.2, A,B,C and D)

*Eurycarcinus integrifrons* De Man 1879: 55, 56., *Eurycarcinus integrifrons* — Apel 1994: 415, 433, 434; Apel 1996: 331; Al-Ghais and Cooper 1996: 425, 426; Apel 2001: 97; Naderloo and Sari 2007: 344, tab 1; Naderloo and Türkay 2012: 36; Naderloo et al. 2013

## Diagnosis

The carapace smooth somewhat subquadrate, slightly broader than long ranged (CB/CL = 1.2–1.3), posterolateral margins gently converging posteriolaterally (Fig.2A,B). finger and thumb of chela slight darker. The chelipeds are unequal with the thumb of the larger chela bearing a tooth at its base (Fig. 2C ). The first gonopod is bent sharply back at the tip in the form of a hook bearing three unequal large spinules, one large at the base, and 5—6 smaller ones (Fig. 2D)

## Remarks

Most specimens of *Eurycarcinus integrifrons* are covered with some adhesive barnacles and some molluscs. Some specimens are covered from ventral side with crude oil. *E. integrifrons* recorded as an alien species in the Mediterranean Sea (Özcan et al, 2010). It is found in holes in muddy banks exposed at low tide, also in holes on muddy sand flats. Its distribution in the Persian- Arabian Gulf , Iran; Apel 2001; Naderloo and Sari 2007a; Naderloo and Türkay 2012; Naderloo et al. 2013, Saudi Arabia (Apel 1994b, 1996b), UAE (Al- Ghais and Cooper 1996), Gulf of Oman: Iran (Naderloo et al. 2015), Indian Ocean Apel, 2001, the Red Sea and Madagascar the Mediterranean Sea (Özcan et al, 2010).



Fig.2. *Eurycarinus integrifrons* De Man, 1879, male (24.5 × 19 mm): A, posterior view of whole crab, male; B, male ventral view; C, major cheliped, outer surface; D, first gonopod.

### Conflicts of Interest

I declares that there is no conflicts of interest.

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