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Research Article

A new record of *Eurycarcinus orientalis* A. Milne-Edwards, 1867 (Decapoda, Brachyura, Pilumnidae) from the north western part of the Persian-Arabian Gulf

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Abstract
The present note lists the first record of the pilumnid crab *Eurycarcinus orientalis* from the north western part of the Persian-Arabian Gulf, Iraq, in the muddy area of Fao region. Morphological features and distribution information are given.

Keywords: *Eurycarcinus orientalis,* Brachyura, Pilumnidae, Iraq

Introduction

Up to date, two pilumnid crabs belonging to the genus *Eurycarcinus* are found in the Persian-Arabian Gulf: *Eurycarcinus orientalis* A. Milne-Edwards, 1867 and *E. integrifrons* De Man, 1879 (Ng et al., 2018).

E. orientalis is so far listed from Saudi Arabia, Kuwait, Bahrain, Dubai, the coasts of the United Arab Emirates and Qatar (Basson et al., 1977; Titgen, 1982; Jones, 1986; Vousden, 1987; Hornby, 1997; Cooper, 1997), respectively.

More recently, Naser (2018) listed a new record of *E. integrifrons* from the north-western of the Persian-Arabian Gulf. The present note adds another record of *E. orientalis* from the same area.

Materials and methods

One specimen of *Eurycarcinus orientalis* was collected from the north western part of the Persian-Arabian Gulf, Fao region (Fig. 1) on March 2011. The specimen was obtained with prawn trawling nets over muddy bottoms. The specimen is preserved in 70% alcohol and deposited in the Marine Science Centre (MSC), University of Basrah, Iraq. The sizes of Carapace Width (CW) and Carapace Length (CL) were taken with an electronic calliper and are given to the nearest mm. The main abiotic parameters in the study area by the time of collection were as follows: salinity 37 ppt, water temperature 17°C, pH 8.23.

Results and Remarks

Systematics

Order Decapoda
Family Pilumnidae Samouelle, 1819
Subfamily Pilumninae Samouelle, 1819
Genus *Eurycarcinus* A. Milne Edwards, 1867
Eurycarcinus orientalis A. Milne-Edwards, 1867
(Figs. 2 A-D)

Examined material – Iraq, 29°55'59.92"N, 48°36'25.08"E, near Fao, March 2011, coll. M.D. Naser, 1 male, 23.5 × 15.0 mm (MSC 12).

Diagnosis – Carapace smooth, distinctly oval, markedly broader than long (CW/CL = 1.57) (Fig. 2A), posterolateral margins sharply converging posteriorly, yellowish purple, finger and thumb of chela slight darker. The thoracic sternites 3 and 4 are elongate and the suture between sternites 2 and 3 is medially interrupted (Fig. 2B). The chelipeds are unequal with the thumb of the larger chela bearing a tooth at its base (Fig. 2C). The tip of the first gonopod (G1) is sharply bent downward forming a hook like structure (Fig. 2D).

Figure 1. Sampling site from Fao region.

Remarks – *Eurycarcinus orientalis* and *E. integrifrons* had been confused with each other in the past, but they are different for several characters (Apel, 2001; Özcan et al., 2010; Ng et al., 2018). The carapace of *E. orientalis* is distinctly oval, markedly broader than long (CW/CL = 1.57), posterolateral margins sharply converging, while the carapace of *E. integrifrons* is somewhat subquadrate, slightly broader than long (CW/CL = 1.2–1.3), posterolateral margins gently converging (Naser, 2018).

Distribution – Persian Gulf: Iran (Naderloo and Sari, 2007; Naderloo and Türkay, 2012: Naderloo et al., 2013), Kuwait (Jones, 1986), Saudi Arabia (Basson et al., 1977; Apel, 1994a, 1994b), Qatar (Al-Khayat and Jones, 1996; Apel, 2001), Bahrain (Vausden, 1987; Apel, 2001), UAE (Titgen, 1982; Cooper, 1997; Hornby, 1997; Apel, 2001). Gulf of Oman: Iran (Naderloo et al., 2015). World distribution: Indian Ocean: Gulf of Aden, Persian Gulf, Gulf of Oman, Pakistan, India and Thailand.

Habitat – Intertidal zone, muddy substrates.

Figure 2. *Eurycarcinus orientalis* A. Milne-Edwards, 1867, male (23.5 × 15.0 mm): A, dorsal view; B, ventral view; C, major cheliped, outer surface; D, first gonopod.

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Conflicts of Interest

The author declares that he has no conflicts of interest.

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