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## New Records of Crabs: *Halimede tyche* (Herbst, 1801) (Crustacea: Decapoda) from Iraqi Coast, Iraq

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**Abstract** The species of crabs, *Halimede tyche* (Herbst, 1801) are reported from Khor Abudallah south Al-Faw city, NW-Arabian Gulf, Iraq, during 2016. brachyuran crabs now consist of some species are reported from Iraqi coast. The specimens were collected from Iraqi coast by trawl net. Morphological measurements of this species are highlighted and a figure is provided. The results found that it is the first record of this species.

**Keywords** New records; Arabian Gulf; Brachyuran; *Halimede tyche*

## Introduction

*Halimede ochtodes* (Herbst, 1783) is the common species in the intertidal and subtidal zones of the Arabian Gulf, found in variety of habitats including rocky, cobble, oyster banks, muddy, and mangroves. but it was not found in the present studied area. The present paper deals with new record for Iraq of *Halimede tyche* (Herbst, 1801) from Khor Abudallah south Al-Faw city, coast of NW-Arabian Gulf. It is the first report of this species in the Arabian Gulf.

Gallil (2001) was divided The genus *Halimede* de Haan, 1835 into three species: *H. fragifer* de Haan, 1835, *H. ochtodes* (Herbst, 1783), and *H. tyche* (Herbst, 1801). A specimens of *H. tyche* were collected for first times from the coast of east Mediterranean (Gallil, 2001).

The present paper focuses on the first report of the brachyuran crabs *Halimede tyche* from NW Arabian Gulf, Iraq.

## 1 Materials and Methods

The specimens of *Halimede tyche* (Figure 1A; Figure 1B) were collected from intertidal and sub tidal area at Khor Abudallah south Al-Faw city, NW-Arabian Gulf, Iraq by trawl net (Figure 2). Specimens are preserved in 70% alcohol and deposited in the marine science centre (MBD-MSC) (collection number: 47). The specimen was identified following Serène (1984), Barnard (1950).

Some main abiotic parameters in the study area by the time of collection were as follows: salinity 37 ppt, water temperature 12.5 °C, pH 7.85.

## 2 Results and Discussion

### 2.1 Systematics

Order Decapoda

Superfamily Xanthoidea MacLeay, 1938

Family GALENIDAE Alcock, 1898

*Halimede tyche* (Herbst, 1801)

## 2.2 Material examined

MV- MSC, one male, cl 26 mm x cb 34 mm. (Figure 1A; Figure 1B).

3 Males and 1 females; the maximum CL is 3.5 cm and the minimum CL is 2.5 cm (12/11/2016).

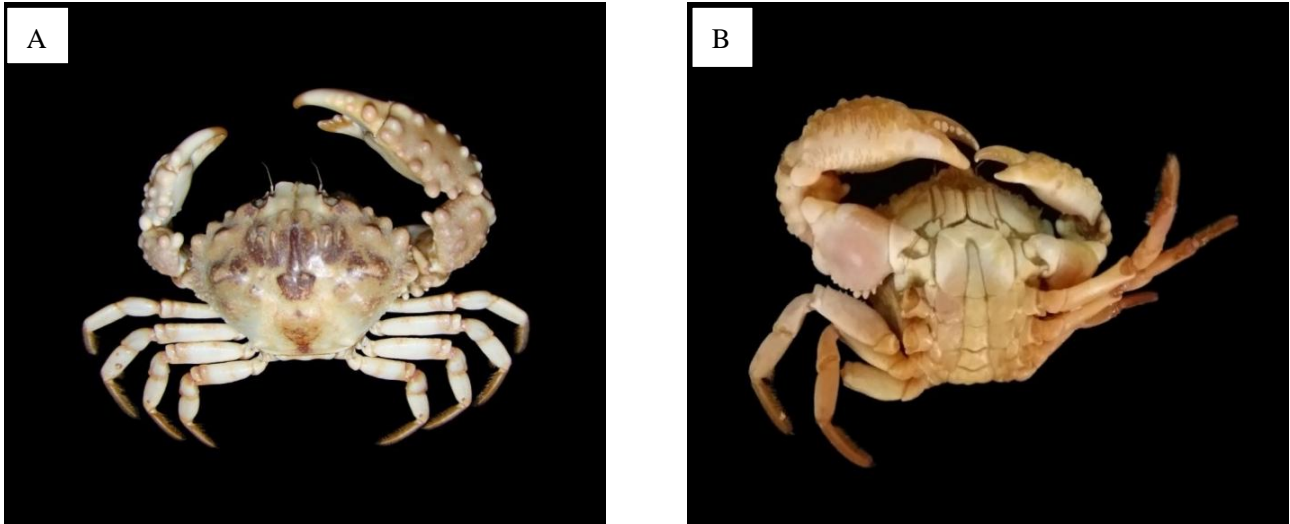


Figure 1 A-B *Halimede tyche* general view

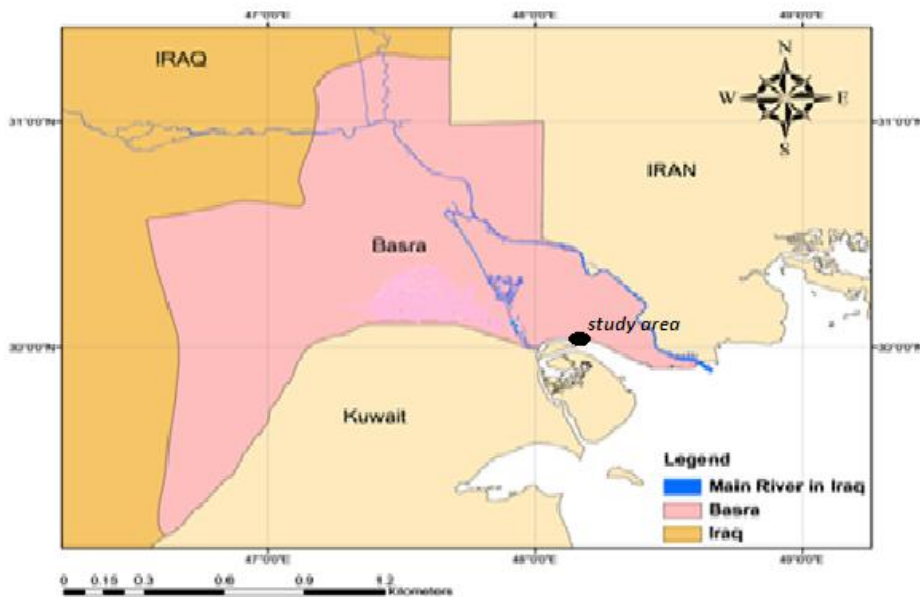


Figure 2 Map of study sites

## 2.3 Diagnosis

The Carapace: broader than long, surface convex, largest male specimen (cl 26 x cb 34 mm), every region covered with isolated tubercles of various sizes; spaces between tubercles covered with short tomentum. The dorsal surface of the carapace is provided with lobes separated by broad shallow depressions. The regions are indistinct. the antero-lateral borders equal or less than two-thirds the length of the postero-lateral borders (Figure 2A), Antero- and postero- lateral margins clearly demarcated: anterolateral margin with distinct rounded lobes, never dentate or spiniform endostomial crests absent. The antero-lateral borders with four rounded lobes, which are distinct and decrease in size (from posterior to anterior).

The chelipeds are unequal in shape (Figure 1A), prominently in males; Both chelipeds are with lobes and tomentum (Figure 1B) similar to that on the dorsal surface of carapace and anterolateral surface of the carapace. The Ambulatory legs with short hairs on the anterior and posterior margins.

The male abdomen: is seven segmented, all the segments are clearly marked, the last segment is tongue-shaped. Male abdomen so, very slender. Elongate. Reaching to level of anterior edge of base of chelipeds: telson very elongate, more than twice length of any other abdominal segment. Male first gonopod almost straight, with distal part slender, not sharply bent at stout basal segment.

#### 2.4 Remarks

*Halimede* genus currently includes four species (Ng et al., 2008). *Halimede tyche* can be distinguished from its congeners by the ill-defined regions of the carapace (versus well-defined) (Miers, 1884; Galil, 2000).

#### 2.5 Habitat

Muddy or sandy- muddy coast, into 20-30 m deep. (Dai and Yang, 1991)

#### 2.6 Distribution

Northern coast of Australia, China (Guangxi, Hainan, Hong Kong), the Philippines, Indonesia (Dai and Yang, 1991; Davie, 2002), Red Sea and now for the first time from Iraqi coast.

#### Authors' contributions

All authors have contributed equally toward the publication of this paper.

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