## Additional Records of Two Rare Crabs, *Ilia nucleus* (Linnaeus, 1758) and *Ethusa mascarone* (Herbst, 1785) from Izmir Bay, Aegean Sea, Turkey

# İki Nadir Yengeç Türünün, *Ilia nucleus* (Linnaeus, 1758) ve *Ethusa mascarone* (Herbst, 1785), İzmir Körfezi'nden (Ege Denizi) İlave Kaydı

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## ABSTRACT

One specimen of *Ilia nucleus* and one specimen of *Ethusa mascarone* were collected from Urla coasts, Izmir Bay, Aegean Sea. Up to now, both rare species are being reported for the three and four times from Izmir Bay, respectively.

Keywords: Brachyura, Ilia nucleus, Ethusa mascarone, Izmir Bay, Aegean Sea.

## ÖZET

Bir *Ilia nucleus* ve bir *Ethusa mascarone* bireyi İzmir Körfezi Urla kıyılarından toplanmıştır. Şimdiye dek her iki nadir tür İzmir Körfezi'nden sırasıyla üç ve dört kez kaydedilmiştir.

Anahtar sözcükler: Brachyura, Ilia nucleus, Ethusa mascarone, İzmir Körfezi, Ege Denizi.

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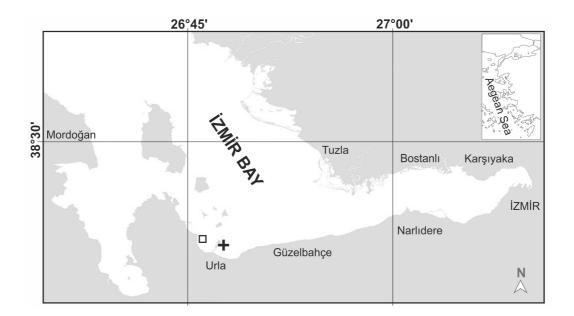
### **1. INTRODUCTION**

Izmir Bay, one of the largest bays in the eastern Aegean Sea, is a very productive area due to discharging of Gediz River. At the same time, the bay is semi-closed with L-shape, about 20 km wide and 40 km long (Sayın, 2003) and relatively shallow (maximum depth is 77 m in outer part). Because of being closed area for the large scale fishery and having sufficient hydrological conditions, this bay has good species richness.

Although, there have been some intermittent studies on the crustacean species in Izmir Bay since the late 1960s, recently, a total of 444 crustacean species were listed in an updated checklist for Izmir Bay's crustacean fauna (Bakır and Çevirgen, 2010). Both species, mentioned in the title, were listed as rare species. Thus, this short note presents the additional records of *Ilia nucleus* and *Ethusa mascarone*, collected from the new localities of Izmir Bay.

### Ilia nucleus (Linnaeus, 1758)

Material examined: Iskele, Urla, Izmir Bay (38°22.687 N - 26°45.994 E; Figure 1), sandy bottom with *Posidonia* meadows, 20 m depth, trammel net, 27 August 2013, 1  $\stackrel{?}{\circ}$  (Figure 2), Carapace length (CL) 22 mm.



**Figure 1.** The sampling locations of *Ilia nucleus*  $(\Box)$  and *Ethusa mascarone* (+) in Izmir Bay, Aegean Sea.



**Figure 2.** *Ilia nucleus*, caught from Izmir Bay, Aegean Sea (Horizontal bar: 10 mm) (Photograph: O. Akyol)

Remarks: *Ilia nucleus* was first mentioned from Izmir Bay by Kocataş (1971), who collected this species from Karaçamur (between former Ragıppaşa Lagoon and Tuzla) by scoop net and beam-trawl during the expeditions between 1967 and 1970. After a quarter century, *I. nucleus* was being recorded from Foça, located at the outermost portion of the Bay of Izmir during 1995-1996 (Kırkım et al. 2005).

### Ethusa mascarone (Herbst, 1785)

Material examined: East of Karantina Island, Urla, Izmir Bay ( $38^{\circ}22.202 \text{ N} - 26^{\circ}47.270 \text{ E}$ ; Figure 1), sandy bottom, 3 m depth, trammel net, 10 May 2016, 1 ovigerous  $\mathcal{Q}$  (Figure 3), 11 mm CL.

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**Figure 3.** *Ethusa mascarone*, caught from Izmir Bay, Aegean Sea (Horizontal bar: 10 mm) (Photograph: O. Akyol)

Remarks: *Ethusa mascarone* was also first mentioned from Izmir Bay by Kocataş (1971). Kocataş (1971) collected *E. mascarone* from the coast of Foça during the beam-trawl surveys between 1967 and 1970. Any specimens of *E. mascarone* were not ovigerous. Later, Ozel and Mavili (1990) obtained a total of 9 zoea larvae of *E. mascarone* from Izmir Bay at depths of 29-110 m in both 1977 and 1987. Between 1995 and 1996, a total of 4 specimens were collected from the outer part of Izmir Bay (Doğan et al. 2008).

In conclusion, occurrence of *E. mascarone* indicates an established population in the area in terms of ovigerous females and its zoea larvae. On the other hand, *Ilia nucleus* is also established due to different locality and collected dates. Moreover, there is a necessity on further studies about these poorly known species in the Bay of Izmir.

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