

A new Atlanto-Mediterranean Originated Decapod Crustacean
Ebalia granulosa (H. Milne Edwards, 1837) in Sea of Marmara
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ABSTRACT

A new species of Atlanto-Mediterranean Originated Decapod Crustacean of the genus **Ebalia** Leach, 1817 is described from four specimens collected in dredge samples between 28-36m. depth of the North-West of Sea of Marmara. *Ebalia granulosa* (H. Milne Edwards, 1837) is distinguished by yellowish colour with 2 red spots of the carapace and the tubercules on the merus region of the cheliped. This new discovery presents the new record for the species in the west part of Sea of Marmara as representing the first record of Sea of Marmara.

Key words: *Ebalia granulosa*, Atlanto-Mediterranean, Doğan Aslan Bank

Material-Method

Since 1999, numerous field trips were made by the author to the study area with a view of collecting, observing and registering the local fauna. All field trips were made by road to Şarköy and small local fishery motorboats were used to go to the sampling area. Invertebrates were usually collected by beam trawl and a small bottom dredge was occasionally used in the region. Identifications of samples were realized in the laboratory using fixed material while identifications of samples were performed in the field or were based on color prints and slides. Crabs and shrimps were identified using the monographs of Demir (1952), Artüz (1965) and Ingle (1980)

INTRODUCTION

The genus *Ebalia* Leach, 1817 presently contains seven species and occurs in the Southern Norway, Shetland Islands, North Sea, all British Coasta, southwards to Western Sahara, Azores, Madeira, Canary Islands, all the Mediterranean and in a part of the Sea of Marmara. Also numbers of records are indicated from south coasts of Turkey. As a simple distribution table of genus **Ebalia** in Turkish coasts is tabulated in Fig. 1.

Sp./Area	Black Sea	Sea of Marmara	Aegeais	Mediterranean
<i>E. cranchii</i>		+	+	+
<i>E. deshayesi</i>			+	+
<i>E. edwardsii</i>				+
<i>E. nux</i>			+	+
<i>E. tuberosa</i>		+	+	+
<i>E. tumefacta</i>			+	+
<i>E. granulosa</i>		+	+	+

Fig.1. Distribution of genus *Ebalia* in Turkish coasts.

During a dredge sampling survey of the west part of the Sea of Marmara (on the Doğan Aslan Bank) four specimens of the *Ebalia granulosa* were collected from three stations between 28-36m. depth on sandy mud sediment. The two brooding females, an adult male and a juvenile are of a hitherto undescribed species from the Sea of Marmara of **Ebalia** Leach, 1817

SYSTEMATICS

Family Leucosiidae

Ebalia Leach, 1817

Ebalia cranchii Leach, 1817

Ebalia deshayesi Lucas, 1845

Ebalia edwardsii O.G. Costa, 1838

Ebalia nux A. Milne Edwards, 1883

Ebalia tuberosa (Pennant, 1777)

Ebalia tumefacta (Montagu, 1808)

Ebalia granulosa H. Milne Edwards, 1837 (Figs 1-3)

ETYMOLOGY. — From the Latin “granulosa”, meaning granular, grainy. In reference to the merus region of the cheliped, exhibiting a tuberculated structure.

HABITAT. — *Ebalia granulosa* can be found on coarse grounds, from the shallow sub littoral to beyond the edge of the continental shelf.

DESCRIPTION

Ebalia granulosa has a carapace about 9.5mm long up to a maximum of 11mm. and it is a yellowish colour with 2 red spots. The carapace is as broad as it is long and lateral (branchial) regions have surface swellings, which are smaller than those of *Ebalia tumefacta* (Montagu, 1808). The posterior region of the carapace has an indent, with a more sharply pronounced V indent in the males. The claws are of equal length and stout, with sharp longitudinal ridges on fifth segment (carpus) and fourth segment (merus). The other legs bear stout spines.

Ebalia granulosa can be found on coarse grounds, from the shallow sub littoral to beyond the edge of the continental shelf.

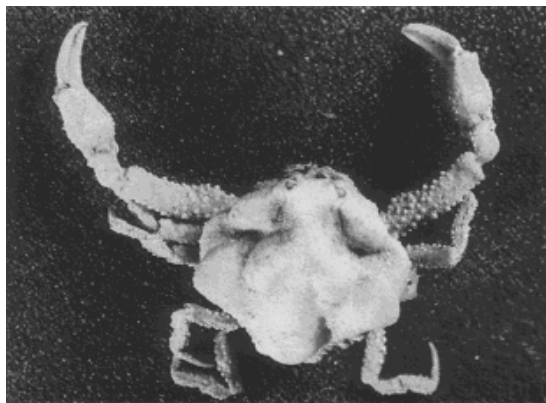


Fig.1. Picture of the one of collected *Ebalia granulosa*

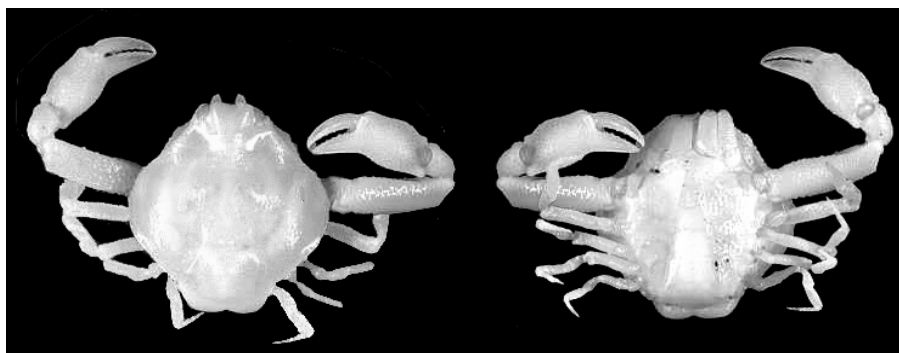


Fig.2. The dorsal and ventral view of male *Ebalia granulosa*

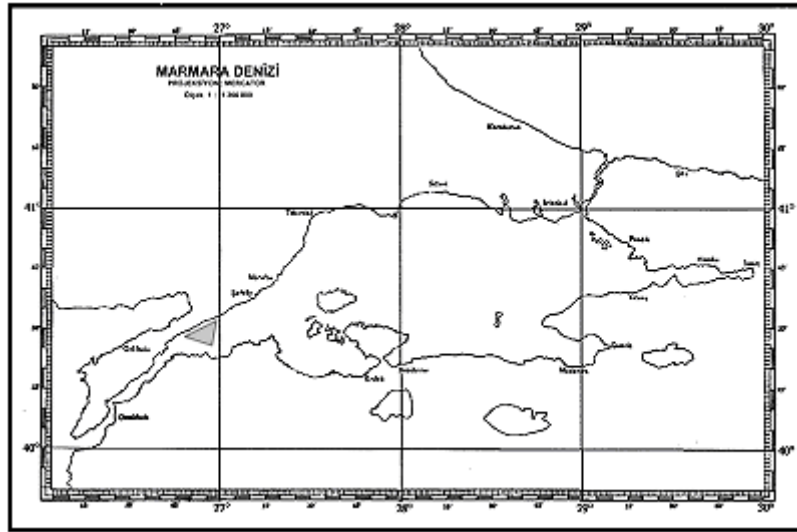
REMARKS

The area is strongly fished all year round. In winter season, fishermen fish with gill nets the pelagic and semi-demersal fishes such as Bonito (*Sarda sarda*), Bluefish (*Pomatomus saltatrix*), Gurnard (*Eutrigla gurnardus*), Sole (*Solea sp.*) and Rays (*Raja sp.*).

In late summer to winter is the season of Long-lines, the fishermen fish with 500-1000 hook Long-lines Gurnards, Sole and Turbot (*Psetta maxima*) in the mentioned area.

In the area the Top-shell (*Rapana thomasiana*) is also collected by scuba divers for the exporters to Japan. Also illegal trawl and beam-trawl fishing often occur.

The Doğan Aslan Bank is located in the region of Çanakkale, on the North-west coast of Sea of Marmara (26°48'04"E and 40°29'04"N) due to this it is considered in the Dardanelles Strait geographic area. Map 1.



Map 1. The location of the geographic area.

In the region, the Dardanelles begins to get narrower. Because of the geological situation of the area there are varieties of divergence and convergence currents. In this connection, the salinity values of the area are variable (Sal ‰24 to Sal ‰38). The area is one of the mixing areas of Mediterranean originated water (Sal ‰38.) and Black Sea originated-Sea of Marmara water (Sal ‰24). In fact, the convergence-divergence currents and all year warm (14.2°C) Mediterranean originated layer obtain an ideal habitat to the *Ebalia granulosa* population in the area.

The specimens were collected from depths between 28-36m., representing the first record of the Sea of Marmara.

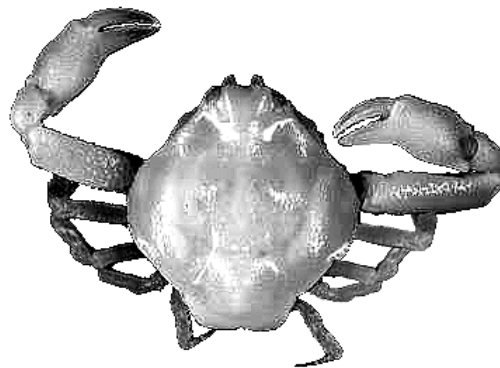


Fig.2. *Ebalia granulosa*

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