

First Record of “pebble crab” *Leucosia signata* Paulson, 1875 in Sea of Marmara

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Abstract

One specimen of *Leucosia signata* Paulson, 1875 (CL-2.1cm.) was obtained by diving on 22 January 2006 at a depth of 12 m. in west part Sea of Marmara. *Leucosia signata* is reported in this study as the first record for Sea of Marmara.

Key words: *Leucosia signata*, Sea of Marmara, exotic-Lessepsian species

INTRODUCTION

Leucosia signata Paulson, 1875 is an exotic-Lessepsian decapod species belonging to the **Leucosiidae** family [1].

Carapace is nearly hemispherical, smooth and is markedly convex. Frontal region is upturned and narrowed. Orbits are deep and completely concealing the minute eyes. Epibranchial margin of carapace is thickened, milled and continuous with finely-milled crest that forms the posterior margin of dorsum of carapace. Lateral epibranchial angle bent downwards to the base of cheliped, forming eave of deep and sinuous thoracic depression.

Chelipeds are symmetrical, massive and ornamented. Thoracic depression is located on above base of cheliped and basally prominently tuberculated. Chelipeds are longer in males as females. Walking legs are short and slender [2-3].

Carapace is marked with M-shaped brownish spot anteriorly. Two submedian spots are located posteriorly and walking legs are with brown band basally on carpus, propodus, and dactyls and distally on merus. Found subtidal to 25 m., on muddy and sandy gravel bottoms, adult forms' common size is appr. CL 2.5 cm. max. [2-3].

MATERIALS AND METHODS

One specimen of *Leucosia signata* was obtained by diving on 22 January 2006, (E:026°54'40"-N:40°31'10") at a depth of 12 m. in west of Sea of Marmara, off Inceburun (Fig. 1) with (CL-2.1cm.).

The specimen were fixed and preserved in 5% formalin solution. Sample has been identified, photographed and conserved privately. (Fig.2a picture, Fig.2b drawing)



Figure 1. The sampling point of *Leucosia signata* in Sea of Marmara

RESULTS AND DISCUSSION

Leucosia signata Paulson, 1875 is an Indo-West Pacific species and recorded as Lessepsian in Mediterranean first from Israel (Holthuis, 1956 [1953]); successively recorded from Egypt (Ramadan and Dowidar, 1976); Lebanon (Shiber, 1981); southern Turkey (Grippa, 1982 [1976]; Kocatas, 1981), Syria (Saker, 2002). One specimen was collected in the Gulf of Afandou, east coast of Rhodes Island, Greece, in August 2005 [4-6].

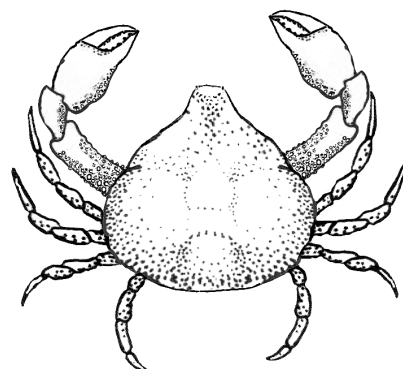


Figure 2b. Drawing of *L. signata* (Artüz)

Because of the geological situation of the area there are varieties of divergence and convergence currents.

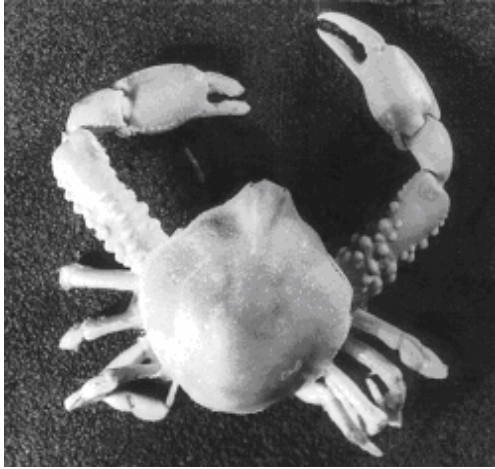


Figure 2a. Picture of *L. signata* (Artüz)

In this connection, the salinity values of the area are variable (24 ‰Sal to 38 ‰Sal). The area is one of the mixing areas of Mediterranean originated water (38 ‰Sal.) and Black Sea originated-Sea of Marmara water (24 ‰Sal). In fact, the convergence-divergence currents and all year warm Mediterranean originated layer (14.2°C) obtain an ideal habitat to the *mediterraneophilic* forms [8].

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