

***Orchestia cavimana* Heller, 1865 (Amphipoda,
Talitridae) in the Turkish Black Sea Fauna**

**Türk Karadeniz Faunasında *Orchestia
cavimana* Heller, 1865 (Amphipoda, Talitridae)**

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Abstract

This study deals with 1 amphipod species (*Orchestia cavimana* Heller, 1865) sampled at Sinop Peninsula coasts (0-0,5 m.) at the mouth of Sarikum lagoon lake (1-2m.)

45 species of marine crustacea Amphipoda have been identified in Black Sea coast of Turkey. However, *Orchestia cavimana* Heller, 1865 is a new species for the Turkish Black Sea coastal waters.

Key Words: *Orchestia cavimana*, Talitridae, Crustaceae, Amphipoda, Turkish Black Sea.

Introduction

The species belonging to *Orchestia* genus are common in Mediterranean, Black Sea and in fresh and brackish waters of Europe. The specimens live among decayed photophile algae and under stones and are known as sand-hoppers or beachfleae. 7 species belonging to *Orchestia* genus are known in the Mediterranean ecocystem. These are *O. platensis*, *O. montagui*, *O. mediterranean*, *O. gammarella*. But, *O.*

Mozdukhay-Boltouskoy (1969). Is was reported in Manyas and Apolyont lakes in Turkey (Kocataş and Katağan 1978). It was notified that this species would live near spring water, in rivers, under stones at supralittoral and sometimes in fresh water and lagoon areas (Ruffo, 1993).

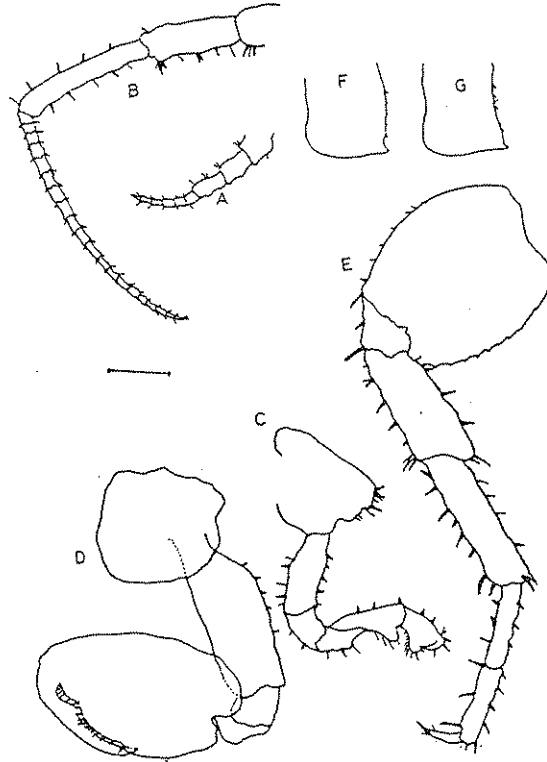


Figure 1. *Orchestia cavimana* Heller, 1865 (♂). A, antenna I; B, antenna II; C, gnathopod I; D, gnathopod II, E, pereopod VII; F, epimeral plate II, G, epimeral plate III, scale bar: 500µ.

In the present study, this species is encountered at the mouth of Sarikum lagoon lake in June - July 1996. Water temperature and salinity of this area changes between 26 - 29 °C and 6,3 - 8 ‰, respectively. But inner parts of Sarikum lake that has 4 ‰ salinity, *O. cavimana* was not encountered. At the same time it is encountered at Sinop Peninsula coast among stones and aquaplant debris at supralittoral zone. In a benthic study about Mollusc and Crustaceans along the Anatolian coast of Black Sea by Mutlu (1990), *Orchestia cavimana* is not encountered

gammarella, *O. montagui* and *O. platensis* are found in Turkish Black Sea coasts (Kocataş, Katağan, 1980). *Orchestia cavimana* is reported first time for the Turkish Coast of The Black Sea.

Material and Method

The samples were collected at the mouth of Sarikum Lake (Long-Lat) and the coast of Sinop Peninsula under stones and among putrified water plant of littoral zone using scoop-net that has 1 mm mesh size. The samples were fixed in 70 % ethyl alcohol. They were determined under light binocular microscope.

Result

Material examined:

Orchestia cavimana: 4 ♂ Sarikum lake, 6 ♂ Sinop Peninsula

Description: ♂ total body length is 13,4 mm. The eyes are rounded and black in color. It has similarities with *O. gammarella*. But, Gnathopod 1 with merus are bearing a small prominence at posterior margin. Gnathopod 2 propodus broadly suboval, palm oblique are generally sinuate in 3 protuberances, the central excavation deep specially in adults, dactylus long with inner margin bearing a protuberance corresponding to the palmar excavation. P7 is not specially widened at any age. Telson is longer than broad, distinctly cleft, each lobe with several small spines.

Epimeral plate 3 is distal angle quadrate, posterior margin weakly crenulate. Antenna 1 is about reaching end of peduncle article 4 of antenna 2, flagellum about 7 articulate. Antenna 2 ♂ up to half body length, peduncle robust, flagellum up to about 22 articulate.

The natural color of the obtained specimens is reddish orange.

Some body extremities belonging to *Orchestia cavimana* Heller, 1865 (♂) are shown in Figure 1.

Discussion

The observed taxonomical and ecological features are harmonized with the description in Ruffo (1993). This species was reported in coasts of France by Chevreux and Fage (1923) and Italian coasts by Della Valle (1893). Besides, it was reported in Romanian coasts in Black Sea by Carauşu and et. al. (1955) and in Russian and Azov Sea by F.D.

In conclusion, *Orchestia cavimana* is firstly identified in Turkish Black Sea coasts by this study.

Özet

Bu çalışma Sinop Yarımadası kıyılarında (0 - 0,5 m.) ve Sarıkum lagün gölünün Karadeniz'le birleştiği ağız kesiminde (1-2 m.) yapılan bentik örneklemeler sırasında elde edilen bir Amphipod türüyle ilgilidir. Türkiye'nin Karadeniz kıyılarında denizel amfipod krustaselerin 45 türü bulunduğu bilinmektedir. Bununla birlikte *Orchestia cavimana* Heller, 1865 Türkiye'nin Karadeniz kıyıları için yenidir.

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