

## A preliminary study on the Rezve stream and a new record for Ostracoda (Crustacea) fauna of Turkey

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The Rezve stream originates from the Istranca Mountains and flows into the Black Sea. The stream borders Turkey and Bulgaria and is under military defense. Beyond that very little is actually known about this stream. It is very hard to study in this area because the region is fraught with geographic irregularities and covered with dense forests. Also there isn't any study about Ostracoda fauna in the Rezve stream. The present paper reports the Ostracoda assemblages of Rezve stream for the first time from Turkey.

The material was collected from five stations, and the following list includes station numbers, dates, and coordinates as follows; St. No. 1, 14.05.04, 41°50.029'N 27° 39.867'E; St. No. 2, 14.07.04, 41° 58.972'N 28°01.755'E; St. No. 3, 14.07.2004, 41°58.731'N 27°59.666'E;

St. No. 4, 14.07.2004, 41°58.886'N 27°54.001'E; and St. No. 5, 14.07.2004, 41°57.267'N 27°38.115'E. All the material was collected with the Müller hand-net with 0.025 mm mesh size, and fixed in 4 % formalin. In the laboratory the material was washed with water using sieves with 0.25, 0.16, 0.08 mm mesh size, and the material was preserved in 70% ethanol. All the specimens were deposited in the Zoological Museum of the Istanbul University (ZMIU). Karanovic (2003) and Danielopol (1980) were used for the classifications.

The Rezve stream was studied, and nine non-marine Ostracoda species have been determined (Table 1). Among them *Kovalevskiella bulgarica* (Danielopol, 1970) is new record for the Turkey fauna.

**Table 1:** Ostracoda species collected from the Rezve stream (Thrace, Turkey)

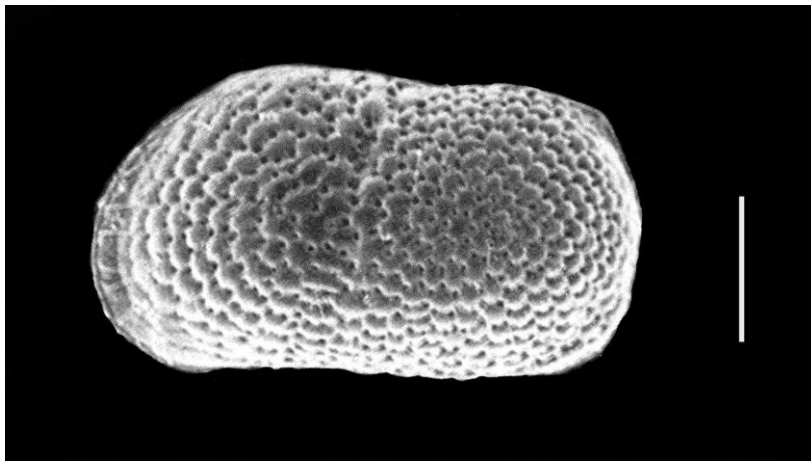
Species	Station Numbers	Specimen Numbers (n)
<i>Candona neglecta</i> Sars, 1887	3	24
<i>Fabaeformiscandona fabaeformis</i> (Fischer, 1851)	3	1
<i>Cypria ophthalmica</i> (Jurine, 1820)	1, 3, 4	57
<i>Physocypria kraepelini</i> G.W. Müller, 1903	3	2
<i>Cypridopsis vidua</i> (O. F. Müller, 1776)	3, 4	38
<i>Leucocythere mirabilis</i> Kaufmann, 1892	2	3
<i>Kovalevskiella bulgarica</i> (Danielopol, 1970)	4	2
<i>Cyprideis torosa</i> (Jones, 1850)	2	12
<i>Tyrrhenocythere amnicola</i> (Sars, 1887)	2, 4, 5	26

Genus *Kovalevskiella* was mentioned from Anatolia initially by Danielopol (1980). He pointed out a representative of the genus *Kovalevskiella*, whose specific status is not yet determined, in the Ereğli cave of southern Anatolia. This information was provided by Danielopol (1980) in personal communication with Petkovski. In addition to Anatolia, the genus was recorded as *Kovalevskiella sp.* in the Thrace region (Özuluğ 2000). With this study, species status of the genus is reported for the first time as *Kovalevskiella bulgarica* in Turkey. Description of the new record is as follows. Taxonomic classification suggested by Meisch (2000) was used.

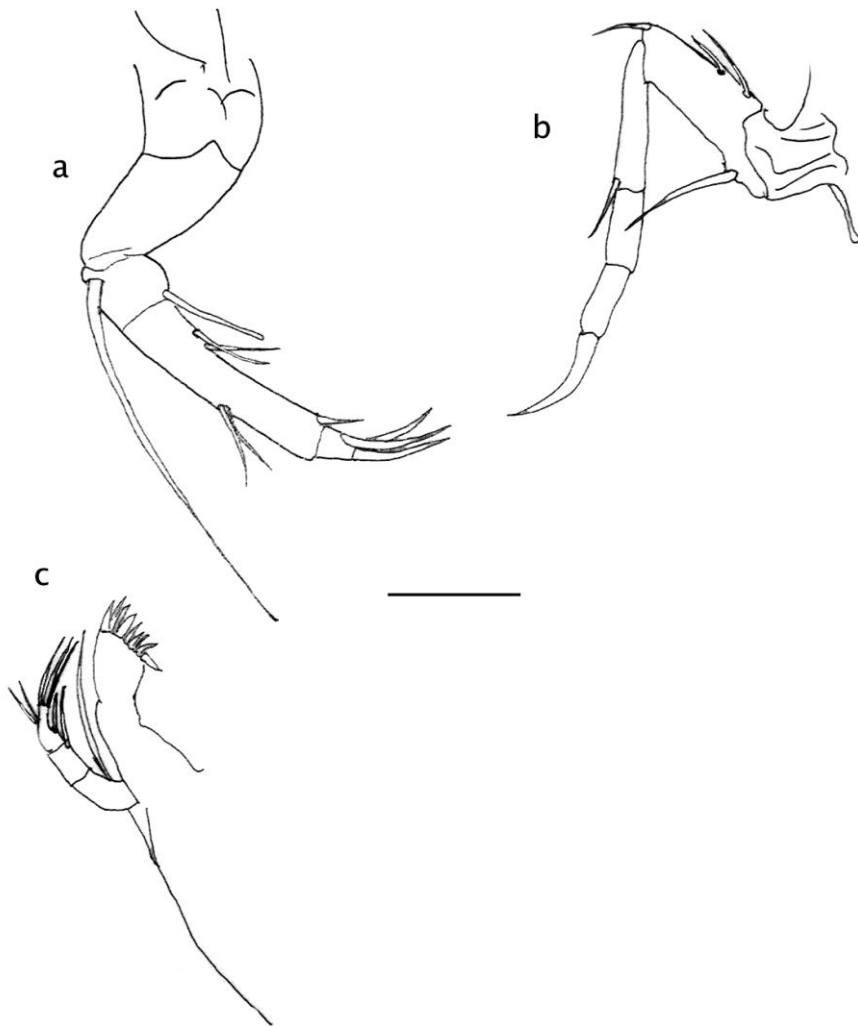
Class: Ostracoda Latreille, 1806  
 Order: Podocopida Sars, 1866  
 Suborder: Podocopina Sars, 1866  
 Infraorder: Cytherocopina Gründel, 1967  
 Superfamily: Cytheroidea Baird, 1850  
 Family: Limnocytheridae Klie, 1938  
 Subfamily: Timiriaseviinae Mandelstam, 1960

*Kovalevskiella bulgarica* (Danielopol, 1970)

Surface of carapace sculptured with shallow pits (Fig. 1). In lateral view, both anterior and posterior margins rounded, ventral margin concave around mouth area and in dorsal view, shell oviform with clear sulcus in the middle. Antennula 6 segmented, Antenna with 2 antero-medial setae on second segment (Fig. 2) According to Danielopole (1980) the hypogean *Kovalevskiella* is a living fossil.



**Figure 1.** *Kovalevskiella bulgarica*, in lateral view left valve. Scale bar=100µm.



**Figure 2.** *Kovalevskiella bulgarica*: a- Antenna, b- Second walking leg, c- Mandibula. Scale bar= 50  $\mu$ m.

### *Distribution*

Southern Bulgaria (Danielopole 1980), central Greece (Karanovic 2003).

As a result, *Cypria ophthalmica* (n: 57) and *Cypridopsis vidua* (n: 38), was found as dominant populations in the study area.

This is a preliminary study of Ostracoda fauna in the Rezve stream. Future studies will

provide more details, including ecological features.

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