

LARGER OSTRACODA IN THE SEA OF MARMARA: GENERAL
DISTRIBUTION OF *BOSQUETINA DENTATA* (G.W. MÜLLER, 1894),

MARMARA DENİZİNDE İRİ OSTRACODA: *BOSQUETINA DENTATA* (G.W.
MÜLLER, 1894)'NİN GENEL DAĞILIMI

CEMAL TUNOĞLU

Hacettepe University, Geological Engin. Dept. 06532 , Beytepe/ANKARA

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Abstract

Bosquetina dentata (G.W.Müller, 1894) is a benthic ostracoda specimen which has larger dimensions than the other ostracoda species of the Sea of Marmara. This species is known very common in all around of the Mediterranean. *B. dentata* are found and observed generally shallow-circolittoral but fairly deep-marine in the Sea of Marmara.

Introduction

There are many ostracoda investigations and publications about Mediterranean (Sissingh, 1972; Bonaduce et.al. 1975; Bonaduce et.al. 1976; Yassini, 1979; Bonaduce et.al. 1983a, Bonaduce at.al. 1983b; Aranki, 1987; Oertli-ed., 1985, etc.). But few ostracoda investigations are at present in the Sea of Marmara (Nazik, 1996 and Tunoğlu, 1996).

The ostracoda appears more or less homogeneous at all 16 stations (Figure 1) but there are small and local differences between them. All of the ostracoda consists of over 60 species. Description of the species is based only on the characters of the carapace.

Systematic Description

Phylum: ARTHROPODA

Class : CRUSTACEA Pennant, 1777

Subclass: Ostracoda Latreille, 1806

Order: Podocopida G.W. Muller, 1894

Suborder: Platyropa Sars, 1866

Family: Trachyleberididae Sylvester-Bradley, 1948

Genus: Bosquetina Keij, 1957

Bosquetina dentata (G.W. Müller, 1894)

Pl. 1 Figs. 1-8

1894 *Cythereis dentata* G.W. Müller, p.379, pl.32, fig. 23,27,31.

1975 *Bosquetina dentata* (G.W.Müller), Bonaduce, Ciampo, Masoli, p.48, pl.31, fig.9,10.

1985 *Bosquetina dentata* (G.W. Müller), Oertli-ed. Atlas Des Ostracodes de France. Pl.103, fig. 9,10.

Description: The carapace is heavily and thick calcified, subtriangular in lateral view and triangular in rear view. Anterior end is broadly rounded and has twenty denticulate spin. Posterior end subacute. Dorsal margin straight at the hinge area but has corner toward anterior and posterior margins. Ventral margin is convex. The carapace is smooth at the anterior and posterior area of the valve but finely pitted around of muscle scar and center of the valve. Anterodorsal corner is strongly angular of the left valve. Posterior end has spines. It has ventro-lateral keel.

Dimensions: Length: 1.4 mm Height: 0.8 mm width: 0.7 mm

Material: 565 valves (all of the samples)

Age: Late Oligocen-Recent (in this study)

Remarks: Bonaduce et.al. suggested that *B. dentata* Müller could be a present day representative of *B. carinella*. *B. dentata* differs from *B. carinella* (Reuss) and *B. rhodiensis* (Sissingh) by the spinous ventrolateral keel and relatively swollen carapace.

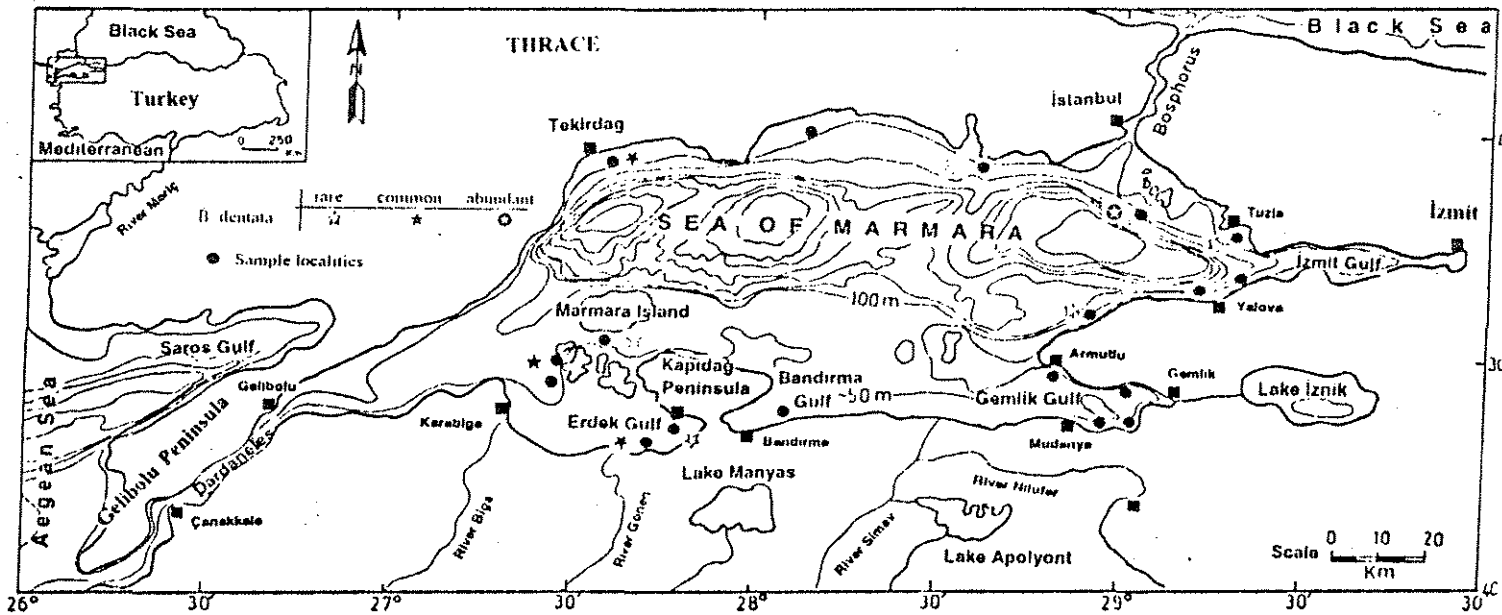


Figure 1. Location map of the investigation area and distribution and frequency of *Bosquetina dentata* (G.W. MULLER) in the Sea of Marmara.

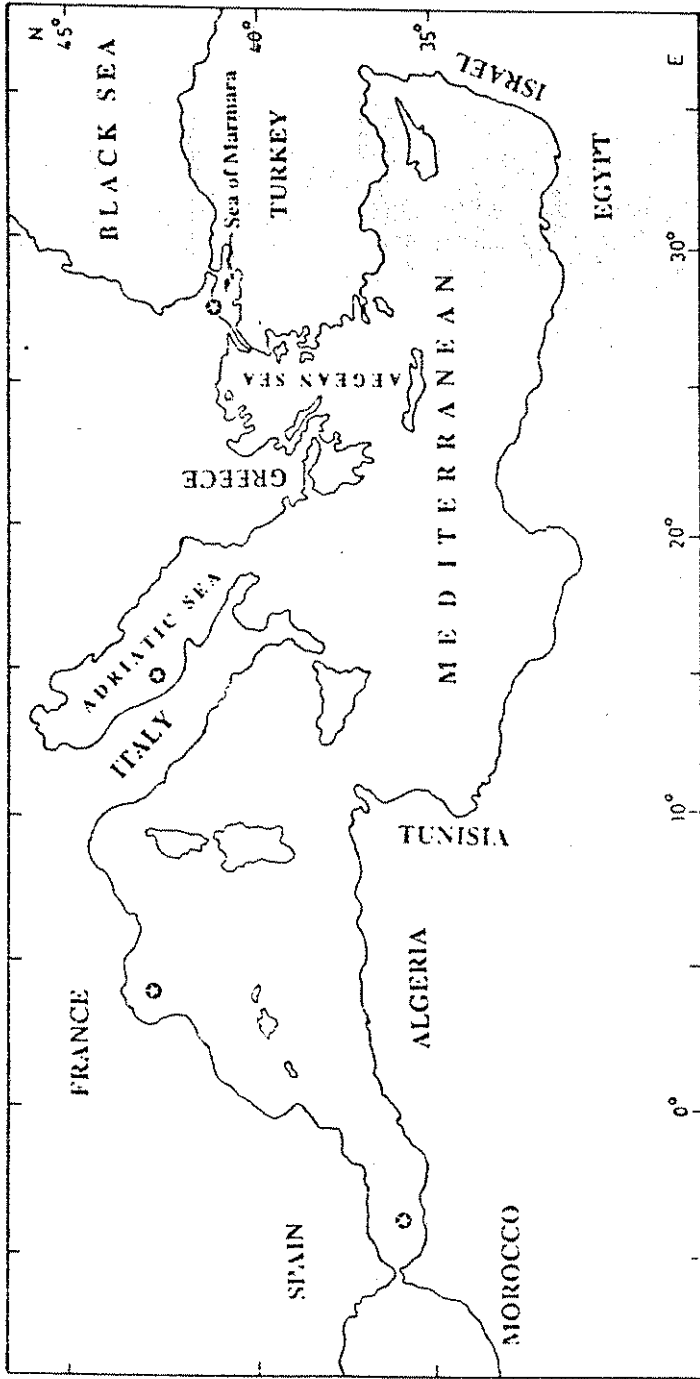


Figure 2 Distribution of *Bosporina dentata* (GW. MULLER) (⊙) in the Mediterranean.

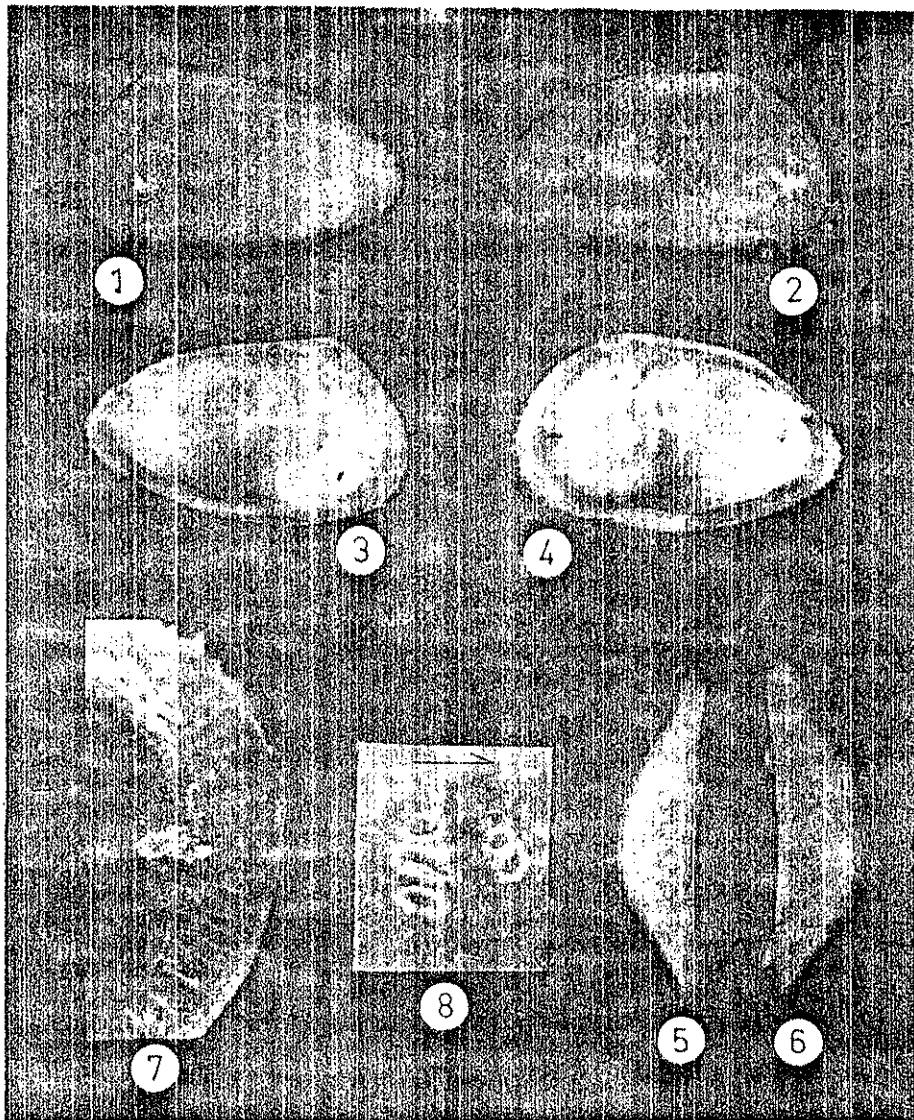


Plate 1. Different position photographs of carapace and shell of *Hosquetina dentata*

(G.W. MULLER). Sea of Marmara, Offshore of Armuthi Island, Sample no: 5 d3.

1. Left valve, external view, X40 2. Right valve, external view, X40 3. Left valve, internal view, X40 4. Right valve, internal view, X40 5. Left valve, dorsal and hinge area view, X40
 6. Right valve, dorsal and hinge area view, X40 7. Marginal pore canals, left valve, internal view, X120 8. Central muscle scars, X120

Ecology, Habitat and Geographic Distribution of *Bosquetina Dentata* (G.W. Müller)

B. dentata is living in shallow (circalittoral) environment in the Sea of Marmara. Bonaduce et.al.(1975) suggested that the distribution and abundance of the specimen increases with the increasing depth. Habitat of *B. dentata* is generally shallow water. Salinity* is about 22-38 ‰ but bottom salinity is 38‰ in the Sea of Marmara. This species generally prefers clear environment with high oxygen value.

B. dentata specimen is very rare or absent which due to the industrial pollution in the Gemlik and İzmit Gulf. Bottom temperature is generally 14 °C in the Sea of Marmara. *B. dentata* association are found abundantly among calcareous alga levels which dominantly prefer sandy, fine sand and silty substrate in the Sea of Marmara. *B. dentata* is generally found all together with *Pterigocythereis jonesii*, *P. ceratoptera*, *Cytheridea neopolitana*, *Carinocythereis carinata*, *C. neulankampi*, *Falunia plicatula*, *Costa edwardsii*, *C. tricostata*, *Bythocythere reticulata* and *Loxocoanha agilis*. *B.dentata* are known common in the Mediterranean (Figure 2), especially in the Adriatic Sea, coasts of France and Marocco but generally observed in the northern coasts of Mediterranean.

Özet

Bosquetina dentata (G.W. Müller, 1894) Marmara denizindeki ostrakod türleri içinde en iri boyutlara sahip bentik ostrakoda türüdür. Bu tür tüm Akdenizde yaygın olarak bilinmekte ve Marmara Denizi'nde genellikle sığ, sirkolitoral ortamda bulunmakta ve daha derin kesimlerde ise daha az oranda rastlanmaktadır.

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* All of the ecologic and water parameters have been taken from METU (Middle East Technical University) Marine Science Institute, Erdemli/İÇEL

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