# ADDITION TO THE KNOWLEDGE OF TURKISH MOLLUSC FAUNA

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# Abstract

The present study reports 15 new mollusc records for the Turkish mollusc fauna. Samples were collected along the Turkish Aegean and Levantine coasts, at depths 0-200 m, between 2000 and 2005. Among the established species, *Tiberia minuscula* Monterosato, 1880, is also reported for the first time from the Aegean Sea. In this study, ecological remarks on the established species are presented. *Keywords : Mollusca, Aegean Sea, Levantine Basin.* 

### Introduction

Nearly 2000 mollusc species are known from the Mediterranean Sea, 745 of which were reported from Turkish seas (1). In recent years additional records were added (2, 3, 4, 5 and 6), and the number of species is estimated at over 800. In the present study, 15 mollusc species are reported for the first time from Aegean and Levantine coasts of Turkey.

#### Materials and methods

The samples were collected along the Turkish Levantine and Aegean coastline in the framework of various studies conducted between years 2000 and 2005 with different purposes. The sampled material was taken at depths ranging from 0 to 200 m. The specimens are deposited at the museum of the Faculty of Fisheries, Ege University, Turkey (ESFM).

## Results and discussion

As a result of our studies, 15 new records to Turkish Seas (14 gastropods and a bivalve) (Table 1) were identified of which 7 species are from northern Aegean Sea, 2 species are from southern Aegean Sea, 3 species are both from northern and southern Aegean Sea and 3 species are from Levantine Sea.

Tab. 1. The list of mollusc species determined as new records and some of their ecological characteristics and the regions where they are established: \* Levantine Sea, \*\*Northen Aegean Sea, \*\*\* Southern Aegean Sea, \*\*\*\* Aegean Sea (total)

Species	Depth (m)	Habitat	Ind.
GASTROPODA			
**Bittium lacteum (Philippi, 1836)	46	Sand+corralligen	2
*Alvania fractospira Oberling, 1970	5	P. oceanica	1
**Nodulus contortus (Jeffreys, 1856)	0.5	Padina pavonica	10
***Monophorus erytrosoma (Bouchet & Guillemot, 1978)	13	P.oceanica + sand	2
** <i>Aclis attenuans</i> Jeffreys, 1883	94	sandy mud	2
**Graphis albida (Kanmacher, 1798)	105	muddy sand	1
****Parvioris ibizenca (Nordsieck, 1968)	6-15	P.oceanica+sand	8
**Microdrillia loprestiana (Calcara, 1841)	115 195 169	muddy sand clay mud	2 2 3
**Raphitoma atropurpurea (Locard & Caziot, 1900)	41	sand	1
***Mathilda gemmulata Semper, 1865	9	P. oceanica+sand	1
** <i>Tiberia minuscula</i> Monterosato, 1880	160	sandy mud	1
*Crenilabium exile (Jeffreys, 1870)	7	muddy sand	1
****Japonacteon pusillus (McGillivray, 1843)	160 194 169	sandy mud mud mud	1 2 1
**Ascobulla fragilis (Jeffreys, 1856)	44	sandy mud	1
BIVALVIA			
*Mytilastersolidus Monterosato, 1883	0-1	On rocky substrata	~ 5000/m

Among the new records, *T. minuscula* is being reported for the first time from the Aegean Sea, which seems to be a new report also for the eastern Mediterranean according to literature. In addition, *Dizoniopsis coppolae* (Aradas, 1870) has also been found in this study. A total of 9 individuals of this species were sampled from Salih Island coast, near Bodrum (Southern Aegean Sea), obtained from *P. oceanica* and sand mixture dredged from a depth of 13 m. *D. coppolae* was reported from the Turkish coasts only once, from the Sea of Marmara (7).

In the last two decades, parallel to the increasing number of researches carried out, the mollusc species known from Turkish coasts was also increased. On the other hand, a rapid increasing of the rate of alien species known from Turkish seas is another remarkable point as a result of these studies. For example, according to the addendum given by (8), 90 alien

mollusc species are recently known from Turkish coasts, of which the majority (84 species) were reported from Levantine coast of Turkey. It should not be neglected that the monitoring of these species (both settled and potential settlers) incoming the region by various pathways is of great importance, in order to determine their probable negative effects on time in the ecosystem where they have been settled, even they make contribution to the biological richness of the region and no evident negative effect to the native fauna has been reported to date.

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#### References

1 - Öztürk, B. and Çevik, C., 2000. Molluscs Fauna of Turkish Seas. C. Conch. Inform., 32: 27:53.

2 - Albayrak, S., 2003. On the Mollusca fauna of the Black Sea near Istanbul. *Zool. Middle East*, 30:69-75.

3 - Öztürk, B. and Poutiers, J. M., 2005. *Fulvia fragilis* (Bivalvia:Cardiidae): a lessepsian mollusc species from Izmir Bay (Aegean Sea). *J. Mar. Biol. Ass. U. K.*, 85: 351-356.

4 - Çeviker, D. and Albayrak, S., 2006. Three alien molluscs from Iskenderun Bay (SE Turkey). *Aquatic Invasions*, 1: 76-79.

5 - Öztürk, B. and Can, A., 2006. Indo-Pacific gastropod species in the Levantine and Aegean Seas. *Aquatic Invasions*, 1: 124-129.

6 - Öztürk, B., Poutiers, J. M., Önen, M. and Dogan, A., 2006. On the occurrence of *Rhomboidella prideaux* (Leach, 1815) (Mollusca:Bivalvia:Mytilidae) in the Eastern Mediterranean. *The Veliger*, 48: in press.

7 - Ostroumoff, A., 1896. Otçet o dragirovkah i planktonnih ulovaht ekspeditsia "Selyanica". *Bulletin de l'Académie Impériale des Sciences de St. Petersbourg*, 5: 1-92.

8 - Çinar, M. E., Bilecenoglu, M., Öztürk, B., Katagan, T. and Aysel, V., 2005. Alien species on the coast of Turkey. *Medit. Mar. Sci.*, 6: in press.