

THE BRYOZOA FAUNA OF BOZCAADA ISLAND (NE-AEGEAN SEA)

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Abstract

The Bryozoa of Bozcaada Island (NE Aegean Sea) were studied at 11 stations during 2000-2001. Bottom depths of the stations ranged from 0.5- 40 m. The samples were collected by means of dredging, drift netting, bottom trawl and scoop netting. Sixteen species, belonging to 12 families, were identified, in total, 46 species are known from Bozcaada Island.

Keywords : *Bryozoa, Aegean Sea, Dardanelles.*

Introduction

Bryozoans have an abundant fossil record stretching back over 400 million years. In aquatic habitats, bryozoans may be found on all types of hard substrates: sand grains, rocks, shells, wood, and blades of kelp and other algae may be heavily encrusted with bryozoans. While some species have been found at depths of 8200 meters, most bryozoans inhabit much shallower water. Most bryozoans are sessile and immobile, but a few colonies are able to creep about, and a few species of non-colonial bryozoans live and move about in the spaces between sand grains. Bryozoans feed on small microorganisms, including diatoms and other unicellular algae. These are trapped by the protrusible ciliated feeding tentacles, or lophophore. In turn, bryozoans are preyed on by grazing organisms such as sea urchins and fish, and are also subject to competition and overgrowth from sponges, algae, and tunicates [1].

The Aegean Sea is one of the four major basins of the Eastern Mediterranean. In the north it is connected to the Black Sea through the Strait of Dardanelles, the Sea of Marmara and the Strait of Bosphorus, and in the south to the Ionian Sea and the Levantine Sea, which are two of the other major basins of the Eastern Mediterranean.

Bozcaada Island which is located at the Aegean Sea (39° 47' 30" - 39° 50' 90"N, and 25° 57' 80" - 26° 05' 00" E) has an area of 42 km² and is situated nearly 5 km off the coast of the mainland, between the Strait of Dardanelles and Bababurnu (Figure 1).

Unsal, 1975 [2] studied Bryozoa species and reported 112 species from all of the Turkish coast and 35 species of them were from Bozcaada Island.

Materials and Methods

The samples were obtained during 2000 and 2001 from 11 stations (Fig. 1) at the depths of 0.5-40 m by dredging, drift netting, bottom trawling and scoop netting.

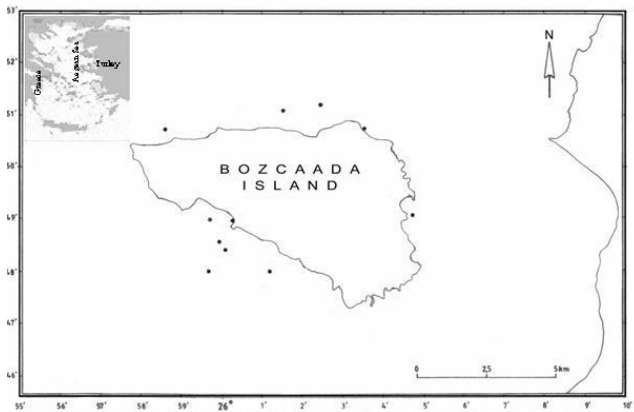


Fig. 1. The maps of the Aegean Sea and Bozcaada Island.

Samples were sieved with 0.5 mm mesh size. The residuals on the mesh were fixed in 3% formalin solution. In the laboratory Bryozoa were then sorted under magnification, preserved in 70% alcohol and identified to species level.

Results

A result of this study, totally 16 Bryozoa species belonging to 12 families were determined from Bozcaada Island. These species were as follows: *Crisia eburnea* (Linnaeus, 1758), *Idmonea bidenkapi* Kluge, 1955, *Aetia truncata* (Landsborough, 1852), *Electra crustulenta* (Pallas, 1766), *Electra monostachys* (Busk, 1854), *Caberea boryi* (Audouin, 1826), *Adeona vio-*

lacea (Johnston, 1847), *Fenestulina malusii* Audouin, 1826, *Cryptosula pallasiana* (Moll, 1803), *Calpensia nobilis* (Esper, 1796), *Reteporella couchii* (Hincks, 1878), *Reteporella beani* (King, 1846), *Hippaliosina depressa* (Busk, 1854), *Alcyonidium mamillatum* Alder, 1857, *Alcyonidium polyoum* (Hassal, 1841), *Mimosella gracilis* Hincks, 1851.

Discussion

Eight species were newly recorded for Bozcaada Island. Unsal [2] reported 35 species from Bozcaada Island, so in total 43 species are now known from Bozcaada Island.

Ünsal [2] reported 130 Bryozoa species from the Turkish Seas. On the other hand, 255 species are known from the Ionian Sea, the Aegean Sea, the Black Sea and the Levantine Seas [3]. While Italian Seas bryozoans where 305 species have been recorded [4], the total number of recorded species is 222 from the Eastern Adriatic [5]. Since around 400 species have been recorded in the Mediterranean so far, future research is expected to yield more species in the Eastern of Mediterranean Sea.

References

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