

3rd Science for the Environment Conference Aarhus Denmark 1-2 October 2015

MONITORING MARINE BENTHIC MACROPHYTES (SEAWEED AND SEAGRASS) SPECIES IN SAROS BAY (NORTH AEGEAN SEA, TURKEY) MARINE PROTECTED AREA

Ermine Şürkan Okudan Aslan, Berrin Dural, Hüseyin Erdugan, Volkan Demir, Ali Karacuha, Veysel Aysel

Akdeniz University, Faculty of Aquatic Sciences and Fisheries, Department of Basic Aquatic Science, Turkey. Ege University, Faculty of Science, Department of Biology, Turkey. Çanakkale Onsekiz Mart University, Faculty of Science, Department of Biology, Turkey. Istanbul University, Institute of Marine Sciences and Management, Department of Marine Environment, Turkey. Sinop University, Faculty of Aquatic Sciences and Fisheries, Department of Basic Aquatic Science, Turkey. Dokuz Eylül University, Faculty of Sciences, Department of Biology, Turkey.

ABSTRACT

This study was funded by the Turkish Ministry of Environment and Urbanization, General Directorate For Environmental Management as a part of "Determination of Terrestrial and Marine Biodiversity in Saros Bay Specially Protected Area" Project and was performed during 2013-2014. Macrophytes species distributed in the region have been determined and facies regions were mapped in the scope of the study. Samples were collected by vertical and horizontal underwater scanning in 16 different stations at 0 – 40 m depth by Scientific SCUBA and free diving.

As a result of this study, total of 209 taxon species and sub species have been identified: Red algae (98 taxon, Rhodophyta), brown algae (51 taxon, Ochrophyta), green algae (56 taxon, Chlorophyta), blue-green algae (one taxon Cyanobacteria), diatoms (one taxon, Bacillariophyceae) and seagrasses (two taxon Tracheophyta),. There were three new registries for Turkish coastal zones, and 11 for Saros Bay. Additionally, five exotic species and five protected species were determined during the study. At the end of the study, distribution areas of protected species, especially P. oceanica beds, are mapped and sensitive regions are classified under five categories. Overall evaluation of the region is rated as rich in terms of algae vegetation and healthy P. oceanica beds.

Keywords: Seaweed, Seagrasses, Saros Bay, Aegean Sea, Turkey.

