

Distribution of *Laurencia caspica*, *Enteromorpha intestinalis* and *Cladophora glomerata* along the Southern Parts of the Caspian Sea and Their Relation with Environmental Factors

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Abstract : *Laurencia caspica* (red macroalgae) *Enteromorpha intestinalis* and *Cladophora glomerata* (green macroalgae) are three major macroalgae that grow along the southern coasts of the Caspian Sea. We investigated spatial and temporal variation of these three macroalgal species on hard substrates and their relation with environmental factors in 2014. Sampling was done seasonally from spring to winter 2014 from eight sites. Results indicated that of these three species had heterogeneity distribution along southern parts of the Caspian Sea. In addition, *C. glomerata* was dominant taxa in all stations and had maximum contribution in dissimilarities between sampling sites. According to BIO-ENV salinity, pH and Silicate were the best subset variables for explaining changes in the abundance over time of the hard-substrates macroalgae fauna under study. However, the position of species in Redundancy Analysis (RDA) plot revealed that *L. caspica* associated with temperature, *E. intestinalis* with pH and *C. glomerata* associated with phosphate and silicate.

Keywords : macroalgae, distribution, environmental factors, Caspian Sea

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