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### **ICHTHYOPHTHIRIUS MULTIFILIIS INFESTATION IN BROOK TROUT (*SALVELINUS FONTINALIS*, MITCHILL 1814) AT LOW WATER TEMPERATURES**

Water temperature is very important factor for parasitic infestation in fish. Therefore, between the water temperature and parasitic damages in cultured fish species was commonly investigated in all aquatic systems. In the present study, “white spot disease” caused by *Ichthyophthirius multifiliis* of brook trout, (*Salvelinus fontinalis*), at low water temperatures was determined. While optimum water temperatures for *Ichthyophthirius multifiliis* infestation were stated as 20-25°C, in the present study, *Ichthyophthirius multifiliis*, caused 15% fish mortalities at 11°C.

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### **ABUNDANCE AND BIOMASS OF CYANOBACTERIA *SYNECHOCOCCUS SPP.* IN SOUTH EASTERN BLACK SEA DURING LATE SPRING 2010**

*Synechococcus spp.* are known to be major contributors to primary production in the world's ocean. However, knowledge of the *Synechococcus spp.* distribution and biomass is quite restricted, and consequently, little is known about the carbon cycling of the Black Sea ecosystem. The aim of this study is to understand the distribution and relative contribution of *Synechococcus spp.* to the carbon cycle and how they relate to nutrients, light and temperature. The relationships among environmental conditions and cyanobacteria *Synechococcus spp.* abundance were characterized during late Spring 2010 in the South Eastern Black Sea shelf waters. Seawater samples were taken 10 meter intervals from surface to 60 meter depths in two stations. Epifluorescence microscope and the image analysis system were used to estimated abundance and biomass of *Synechococcus spp.* Abundance range from 0,03x10<sup>4</sup> cells ml<sup>-1</sup> - 65,77x10<sup>4</sup> cells ml<sup>-1</sup> whereas biomass range from 0,015 µg C l<sup>-1</sup> - 23,87 µg C l<sup>-1</sup>. During sampling period maximum abundance and biomass of *Synechococcus spp.* were found at 1% light level at June 2010. No direct correlations were found between *Synechococcus spp.* abundance and nitrate, nitrite, phosphate, and silicate.