

PHYTOPLANKTON COMMUNITY STRUCTURE DURING BLOOMS OF *NOCTILUCA SCINTILLANS* (MACARTNEY) KOFOID & SWEZY IN SOUTH ADRIATIC OPEN SEA WATERS

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The phytoplankton community structure was investigated during a mass occurrence of the mixotrophic dinoflagellate *Noctiluca scintillans* in the open sea of the South Adriatic. This study was conducted in April 2009 at three stations (P-100, P-300, P-1200) along a transversal transect from the coast to the Southern Adriatic Pit. The abundance of *N. scintillans* was determined using a Nansen net (250 µm mesh, 1 m in diameter and 255 cm in length). Water samples for the analysis of chlorophyll *a* concentrations and phytoplankton community were taken by 5-L Niskin bottles at standard oceanographic depths from surface to 100 m. The abundance of *N. scintillans* was exceptionally high (93 ind. m⁻³) in the upper 50 m and this has already been linked to hydroclimatic changes in the East Mediterranean in last two decades. At the same time, the average of the chlorophyll *a* concentration for 0-50 m layer was 0.11 mg m⁻³. The phytoplankton community was dominated by dinoflagellates and coccolithophorids. Among diatoms, only small naviculoid cells (15-25 µm) were prominent. Only taxa of genera *Diploneis*, *Cyclotella*, *Cocconeis*, *Navicula*, *Thalassiosira*, *Proboscia*, *Thalassionema*, *Licmophora* and *Biddulphia* were occurred.