

## **ANTIFOULING TOXICITY ON MARINE MICROALGAE**

**D. LEKKAS, Th. PLOMARITIS, G. TSIRTSIS and M. KARYDIS**

*Aquatic Ecosystems Laboratory, Department of Environmental Studies, University  
of the Aegean, 81 100 Mytilini, Greece*

### **ABSTRACT**

The toxicity of a commercial antifouling painting (Bravo by Hempel Ltd.) was tested on microalgae using microcosm systems and a unialgal culture of *Dunaliella tertiolecta*. The release of antifouling in the microcosm caused mortality in the phytoplankton community whereas, the bacterial community was not affected. The toxicity mechanism of the antifouling was quantified in *D. tertiolecta* using a mathematical model. The good reproducibility of the experiments and quantification of the toxic processes with the model suggest that both microcosm systems and the use of simulation models can be powerful tools for the toxicity assessment of antifoulings.