

SYLWIA ŚLIWIŃSKA-WILCZEWSKA, ADAM LATAŁA

*Laboratory of Marine Plant Ecophysiology, Institute of Oceanography, University of Gdansk, Al. M. Piłsudskiego 46, 81-378 Gdynia,
E-mail: ocessl@ug.edu.pl*

ALLELOPATHIC INTERACTIONS OF CYANOBACTERIA AND MICROALGAE IN AQUATIC ECOSYSTEM

The term “allelopathy” was introduced to science in 1937 by Hans Molisch, who used the concept of allelopathy to identify negative impact of chemicals secreted by a plant on the growth of other neighboring plants. In 1996, the International Allelopathy Society has broadened the meaning of allelopathy as any inhibitory or stimulatory process in which chemical substances secreted by various organisms interact with their ecosystem. Allelopathy may be one of the factors contributing to formation and maintenance of cyanobacterial and algal blooms, which strongly affect coastal marine ecosystems and cause economic problems for commercial aquaculture. A better understanding of the complexity and nature of underlying allelopathic interactions may help to explain the emergence of massive blooms of cyanobacteria and algae in many aquatic ecosystems.

Key words: allelopathy, aquatic environment cyanobacteria, massive blooms microalgae