Kolloquium BIODIVERSITÄT

CHEMICAL INTERACTIONS OF PLANKTONIC ALGAE:

REGULATIVE PRINCIPLES REVEALED BY METABOLOMICS AND BIOASSAYS

Prof. Dr. Georg Pohnert, Friedrich-Schiller-Universität, Jena



It is well established that unicellular algae from the plankton have means to interact with other organisms in their environment. Especially interactions mediated by chemical compounds have gained a lot of attention during the last years. Algal exudates and metabolites stored in the cells can mediate feeding activity of herbivores, algal algal interactions but also interactions of an alga with the surrounding microbial community. Using an approach based on metabolomics of the cellular and released metabolites of microalgae and bioassays we demonstrate that the chemical properties of algae are highly variable during their growth. Bioassays are presented supporting the hypothesis that this chemical variability has pronounced effects on the chemical interaction of phytoplankton with other phytoplankton species (allelopathy), pathogens, and herbivores (chemical defense).

Mittwoch den 13. April 2011

von 16.15 Uhr bis 17.45 Uhr in Raum ND 03/99

Gäste sind herzlich eingeladen







Gemeinschaftsveranstaltung der Arbeitsgruppen und Lehrstühle:

AG Geobotanik - AG Verhaltensbiologie und Didaktik der Biologie - AG Zoologie/Parasitologie LS Evolution und Biodiversität der Pflanzen - LS Evolutionsökologie und Biodiversität der Tiere