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HRVATSKO DRUŠTVO ZA BILJNU BIOLOGIJU



Poziv na predavanje

Drage kolegice i kolege,

Pozivamo Vas na predavanje koje će nam održati prof. dr. sc. Sabine Rosahl s Leibniz Institute of Plant Biochemistry, Halle (Saale) u utorak <u>6. prosinca 2022. u 14:30 h</u> u seminaru ZMB, Horvatovac 102a, mala zgrada 1. kat.

Svi članovi društva koji neće biti u mogućnosti prisustvovati predavanju uživo, moći će ga u realnom vremenu pratiti u našem timu Hrvatsko društvo za biljnu biologiju na platformi Microsoft Teams.

Naslov i sažetak predavanja te nekoliko informacija o našoj predavačici možete pronaći u nastavku Poziva.

Lijepi pozdrav

Predsjedništvo HDBB

Defense mechanisms against *Phytophthora infestans*

Sabine Rosahl; Leibniz Institute of Plant Biochemistry, Weinberg 3 06120 Halle (Saale), Germany; Sabine.Rosahl@ipb-halle.de

Phytophthora infestans is the causal agent of late blight, the most important disease of potato. To understand defense mechanisms against this devastating pathogen, we study plants that are resistant, such as wild potato species and the nonhost plant Arabidopsis. The first encounter of foliar pathogens with their (potential) host plant occurs on the leaf surface. Here, specialized metabolites contribute to the decision whether the pathogen can enter the plant tissue or is warded off by the plant. Metabolites and enzymes from both plant and pathogen shape the chemical composition on the leaf surface and, thus, contribute to chemical communication between the partners. Using untargeted metabolomics, we identified leaf surface metabolites that may contribute to successful defense. Our work concentrates on two points: (1) how are plant metabolites synthesized and exported to the leaf surface, and (2) how do metabolites contribute to defense.

Sabine Rosahl – introduction

Prof. Rosahl has been a Group Leader at Leibniz Institute of Plant Biochemistry, Halle (Saale), Germany, since 1995. Before that (1987-1995), she was a Group Leader at the Max-Planck-Institute for Plant Breeding Research in Cologne. She was appointed Honorary Professor for Plant Biotechnology of the Anhalt University of Applied Sciences, Köthen, Germany.

Prof. dr. sc. S. Rosahl has long term experience in molecular phytopathology and studying the interaction of *Phytophthora infestans* with its host plant potato and with the nonhost plant *Arabidopsis thaliana*. For potato, analysis of the recognition of the pathogen, signal transduction and characterization of the pathogen defense are of the major interests. Prof. Rosahl is principal investigator of several current projects including "The role of suberin biopolymers for pathogen resistance" within the graduate program Agripoly (MLU Halle, Anhalt University of Applied Sciences), and "Secondary metabolites from wild potato species with anti-oomycotic activity" a DFG-funded project. She is also the co-leader of numerous inter-institutional collaborations, and the author of numerous prominent publications. Read more at:

https://www.ipb-halle.de/en/research/biochemistry-of-plant-interactions/research-groups/metabolite-based-defense-mechanisms/