

# Einladung zum Pflanzenwissenschaftlichen Kolloquium

**Freitag, den 18. Oktober 2024, 12 c.t.**

Nussallee 4, Hörsaal Botanik

**Referent: Dr. Chhana Ullah**

*Plant-Pathogen Interactions, Department of Biochemistry, Max Planck  
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**Thema: „Biosynthesis and hormonal regulation of plant chemical  
defenses against pathogens.“**

In nature, plants are subjected to a diverse range of harmful pathogens from multiple kingdoms of life. To cope with diseases caused by bacteria, fungi, oomycetes, and nematodes, plants possess sophisticated defense mechanisms. There has been considerable research on how plants activate defenses by recognizing pathogen attacks through receptors (extracellular and intracellular), and how successful pathogens have evolved to avoid host recognition through the secretion of effectors. Small molecules, conserved across the plant kingdom (e.g., hormones) or synthesized by specific plant taxa (e.g., secondary metabolites), play significant roles in plant immunity. Unlike the model plant *Arabidopsis thaliana*, many trees and cereal crop plants are known to synthesize higher amounts of secondary metabolites with a greater diversity. However, our knowledge of their biosynthesis, regulation, and biological functions is still limited. In my presentation, I will highlight a group of secondary metabolites (e.g., flavonoid phytoalexins) synthesized by poplar and rice, how their induction is regulated by hormones, and their functions in defense against native pathogens.

**Diskussionsleitung:** Prof. Dr. Florian Grundler, INRES Molekulare Phytomedizin, Universität Bonn

Zu diesem Vortrag und zu einer evtl. Nachsitzung sind Sie herzlich eingeladen