In their natural environment, plants are constantly exposed to a variety of biotic and abiotic (stress) factors. Plant responses to these external factors lead to changes in the regulation of gene expression, the activity of enzymes and the levels of a variety of metabolites. Some of these responses lead to increased stress resistance/tolerance. The lecture will not only discuss these plant responses and the mechanisms of perception and signal transduction. It will also examine the strategies of microorganisms and herbivores for using plants as a source of nutrients.

Intended learning outcomes

Students are able to understand the interaction between plants and the environment on a molecular level and to discuss the topic in the context of the scientific state of the art.

Courses

V + S (no information on SWS (weekly contact hours) and course language available)

Method of assessment

a) written examination (30 to 60 minutes, including multiple choice questions) or b) oral examination of one candidate each (approx. 30 to 60 minutes) or c) oral examination in groups of up to 3 candidates (approx. 30 to 60 minutes)

Master’s degree (1 major) Biology (2011)
Master’s degree (1 major) Biology (2014)