

Georg-August-University Göttingen

Master Program „Crop Protection“

Modul M.Agr. 0023 „Interactions between Plants and Pathogens“

Contents, Objectives		C/H PER SW
<p>Contents: Lecture Different aspects of interactions between plants and phytopathogenic fungi, bacteria, and viruses. The infection by fungi, bacteria and viruses is described (spore germination, invasion of the host plant and spreading of pathogens, virus replication and distribution). Types of plant resistance, i.e. preformed and induced resistance, their importance and possibilities of inactivation through the pathogens as well as induced and systemically acquired resistance(SAR) are presented. The pathosystem Agrobacterium tumefaciens/ dicotyle plants is described and discussed. The gen for gen hypothesis and its experimental proof will be presented and discussed and well known genes of resistance will be described.</p> <p>Practical Phytoalexine extraction in oilseed rape and analysis by HPLC or TLC bioassay.</p> <p>Objectives: Students will acquire knowledge of complex interactions between plants and pathogens and will be able to formulate scientific questions and to critically evaluate methods used.</p>		6 C/4 H PER SW Workload : 180 h Contact time: 56 h Self study time: 124 h
Type of instruction and examination		
Lecture 28 h , practical 28 h		
Examination: Oral examination ca. 20 min.		
Frequency	Duration	
Winter	One semester	
Language	Number of students	
English	36	
Coordinators		
Dr. B. Koopmann		