

Georg-August-University Göttingen

Master Program „Crop Protection“

Module M.Cp.0023: Plant Pathogenic Bacteria

Contents, Objectives		C/H PER SW
Contents Blended learning module; this module comprises general and specific part. The general part addresses the following topics: history of phytobacteriology; origin and evolution of phytopathogenic bacteria; diversity and taxonomy of phytopathogenic bacteria; general features of phytopathogenic bacteria, their cultivation and preservation; epidemiology and ecology of plant bacterial diseases, and economical significance; pathogenesis, host-pathogen interactions and symptomatology; diagnosis and management of plant bacterial diseases, including use of bacteriophages. The specific part is organized in separate lessons, according to the main bacterial taxa causing diseases on plants. In particular, it covers the most important phytopathogenic bacteria and diseases they cause, and includes sections on their distribution, economical significance, symptomatology, epidemiology, pathogen characteristics and disease management.		3 C/2 H PER SW
Objectives: Students gain knowledge on the most important plant pathogenic bacteria, their biology, dissemination, life cycle, diagnosis and control, as well as on their molecular and taxonomic features. They are able to understand the theoretical background and to apply in practice gained knowledge. In particular, students are able to recognize plant bacterial diseases presented during this course and to make a preliminary diagnosis. They critically evaluate scientific and non-scientific publications on plant pathogenic bacteria, and know where to find relevant and reliable information. Students are able to prepare a scientific presentation according to the standards of international conferences and use interactive teaching material.		Workload : 90 h Contact time: 28 h Self study time: 62 h
Examination		
Written exam, 45 min 50% ; Student presentation with discussion, 50%		
Type of module	Entrance requirements	
Lecture	none	
Frequency	Duration	
Winter	One semester	
Language	Number of students	
English	30	
Coordinator		
Prof. Dr. Andreas von Tiedemann Dr. Kuzmanovic; Dr. Susanne Weigand		