Georg-August-University Göttingen

Master Program „Crop Protection“

Module M.Agr. 0057 „ Plant Virology"

Contents, Objectives

Contents:

Lecture: Methods for detection of plant viruses are the main topic of this module. Additionally in the lecture the classification of plant viruses, virus vectors and ways of transmission, symptoms caused by viruses in cultivated plants, the organization of the virus genom and gene expression of plant viruses will be presented. Selected methods of control will be discussed.

Practical: Diagnosis and detection of plant viruses:Diagnosis by test plants, ELISA, Immunocapture-RT-PCR, separation of nucleic acids and total protein extracts, morphological description of viruses in electron micrographs. Electron micrographs of virus inclusion bodies

Objectives: Knowledge of the classic and molecular plant virology; acquisition of practical detection methods of plant viruses using electronic microscopy, immunological techniques and molecular biological methods; Students will be able to formulate scientific questions and to critically judge methods based on their own practical experience in the laboratory.

C/H PER SW

6 C/4 H PER SW

Workload :
180 h

Contact time:
80 h

Self study time:
100 h

Type of instruction and examination

Lecture 25 h , practical 55 h
Examination: Written test 45 min.

Type of module	**Entrance requirements**
Elective module	none
Frequency	**Duration**
Winter	One semester
Language	**Number of students**
English	12

Coordinator

Prof. Dr. M. Varrelmann