

Georg-August-University Göttingen

Master Program „Crop Protection“

Module M.Agr. 0056 „ Plant Breeding Methodology and Genetic Resources“

<b>Contents, Objectives</b>  <b>Contents:</b> Principles of breeding methodology: Response to selection, breeding methods for clonal, line, hybrid and population cultivars. Marker assisted selection for monogenic and polygenic traits. Use of plant genetic resources: wild species, <i>ex-situ</i> and <i>in-situ</i> conservation, on-farm management. Breeding for marginal environments, demonstrated with examples from temperate and tropical regions.  <b>Objectives:</b> Students learn to combine classical and molecular techniques to solve present problems in plant breeding. Students learn to draw critical conclusions from recent research papers and to clearly communicate these to scientists and students in their own seminar presentations.		<b>C/H PER SW</b>  6 C/4 H PER SW  Workload : 180 h  Contact time: 56 h  Self study time: 124 h
<b>Type of instruction and examination</b>  Lecture 44 h , seminar 12 h  Examination: Written test 90 minutes, seminar presentation-20 minutes Grade composition: Written test 80%, presentation 20%.		
<b>Type of module</b>  Elective module	<b>Entrance requirements</b>  Basic knowledge (B.Sc. level) in genetics and plant breeding	
<b>Frequency</b>  Summer	<b>Duration</b>  One semester	
<b>Language</b>  English	<b>Number of students</b>  25	
<b>Coordinator</b>  Prof. Dr. Scholten		