

<b>Georg-August-Universität Göttingen</b> <b>Module M.Cp.0020: Ecotoxicological Risk Assessment for Plant Protection Products</b>	3 C 2 WLH
<b>Learning outcome, core skills:</b> To gain a basic knowledge of ecotoxicology and understanding its principles and associated testing and ecological risk assessment methods, specifically for application to plant protection products.	<b>Workload:</b> Attendance time: 28 h Self-study time: 62 h
<b>Course: Ecotoxicological Risk Assessment for Plant Protection Products</b> (Lecture, Exercise) <i>Contents:</i> In this module, students will be lectured on the basics of risk assessment for plant protection products. The most important aspects and definitions in the field of exposure, selection of representative test species, (statistical) data evaluation and risk assessment will be discussed. The for registration purposes considered organism groups, i.e. birds, mammals, aquatic organisms (incl. fish, invertebrates, primary producers), honeybees, soil organisms (incl. earthworms), non-target arthropods and non-target plants, and the corresponding data requirements will be reviewed. Specific aspects of exposure and assessment of each of these organism groups will be discussed. Furthermore, the importance of ecotoxicology in the registration process of a plant protection product will be discussed.  The theoretical basis will be handled in the lectures and subsequently some aspects will then be applied in the practical part. This includes:  <ul style="list-style-type: none"> <li>- Methods in ecotoxicology (e.g. standardisation and quality of testing)</li> <li>- Exposure pathways, bioavailability</li> <li>- Selection of test species and testing methods</li> <li>- Risk assessment and risk management</li> </ul> In the practical part, students will learn to design, conduct and evaluate acute toxicity tests with plant protection products in the laboratory. It is planned to use test species from the group of arthropods, mainly insect larvae (depending on animal availability). The aim of the tests is to obtain a dose-response relationship and (mathematically) derive EC50 or LC50 values and also, if the data permit, to (statistically) derive NOEC and LOEC values.  Finally, a choice of publically available European registration dossiers will be reviewed and critically discussed.	2 WLH
<b>Examination: Written examination (60 minutes)</b> <b>Examination requirements:</b>	3 C

Knowledge of ecotoxicological testing methods and their evaluation for the risk assessment of plant protection products.	
<b>Admission requirements:</b> Plant Health/Crop Protection	<b>Recommended previous knowledge:</b> none
<b>Language:</b> English	<b>Person responsible for module:</b> Prof. Dr. Lennart Weltje
<b>Course frequency:</b> each winter semester	<b>Duration:</b> 1 semester[s]
<b>Number of repeat examinations permitted:</b> twice	<b>Recommended semester:</b>
<b>Maximum number of students:</b> 15	