

3.0 credits

30.0 h

1q

Teacher(s) :	Legrève Anne ; Bragard Claude (coordinator) ;
Language :	Français
Place of the course	Louvain-la-Neuve
Inline resources:	Icampus
Prerequisites :	Basic knowledge in Microbiology (LBIR1323) and Plant Physiology (BIO1341)
Main themes :	Introduction to plant health and consequences of plant pest and diseases.
Aims :	<p>a. Contribution of the activity to the LO (LO from the program) 1.1 to 1.5 ; 2.1, 2.2, 2.4 ; 4.1 to 4.4 ; 6.2 to 6.3 ; 7.1 to 7.2 ; 8.1 and 8.5</p> <p>b. LO from the program specific to this activity</p> <p>At the term of the activity, the student will be able to:</p> <ul style="list-style-type: none"> - know the causes of abiotic and biotic plant diseases; - describe the pests and plant diseases; - integrate the different factors influencing plant disease development; - schematize plant disease cycle ; - know the diagnostic methods for plant pests and diseases; - understand the emergence of plant epidemics; - list and integrate known pests and diseases control measures; - elaborate and recommend control strategies against a plant pest or disease; - generalize concepts or ideas developed; <p><i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i></p>
Evaluation methods :	Written examination
Teaching methods :	Lectures with the use of images and movies. Personal search of information and synthesis by the students.
Content :	Overview of abiotic and biotic causes of plant diseases. Biological characteristics of plant pathogens and pests. Initiation to the plant disease cycles as well as to the plant-environment-microbe interactions. Overview of the integrated pest & mp; disease management and to the crop protection strategies: quarantine measures, phytotechnical measures, plant resistance, chemical protection measures (including resistance, residues, impact on health and environment), biological control, agroecological approaches, integrated management. Losses due to plant diseases and pest, economical damage threshold, forecasting and warning systems.
Bibliography :	Files on iCampus. Numerous references available at the Plant Pathology Laboratory Library (e.g. Agrios, G., 2004. Plant Pathology, 5th ed., Schuman, G.L., D'Arcy, C.J., 2009. Essential Plant Pathology). Systematic use of plant pests and diseases images. Use of the APS'
Cycle and year of study :	> Master [60] in Biology > Master [120] in Agricultural Bioengineering > Advanced Master in Tropical and Subtropical Culture Protection
Faculty or entity in charge:	AGRO