Université catholique de Louvain

LBRPP2101

2010-2011

Biology of phytopathogenic bacteria, fungi, nematodes and viruses

5.0 credits

37.5 h + 15.0 h

h |

2q

Teacher(s) :	Legrève Anne ; Bragard Claude (coordinator) ; Colin Jean ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Partie Nématologie : 1. Introduction - historic (0,5 h) 2. Class of nematodes characters (1,5 h) 2.1. common morphology 2.2. specific characters of phytopathogenic nematodes 2.3. classification des nematodes phytopathogenes 3. Description of the main genus et species of phytopathogenic nematodes (2 h) 4. Phytopathogenic nematodes parasitism (1 h) 5. Inportance of the nematodes in the plants diseases spread (2 h) 5.1. sensibilisation to the weakness parasites 5.2. spreading of the fungal and bacterial diseases 5.3. virus transmission 6. Principles et control methods against phytopathogenic nematodes (3 h) 6.1. extraction and analysis technologies 6.2. populations dynamics - intervention threshold 6.3. chemical control 6.4. physical methods and quarantine 6.5. résistance and tolerance use 6.6. biological control Two sessions of practical works (2 + 3 h) : demonstration and implementation of isolation methods, sample preparation and observation.
Aims :	 Partie Nématologie : This course must be considered in a broader context with the target to offer an complete knowledge about the main phytopathogenic organisms responsible of plants diseases : viruses, bacteria, fungi and nematodes. It aims to develop advanced skills in the analysis of these agents, in the understanding of their functions, and in their interaction capacities with plants. The anatomical and morphological characteristics of the phytopathogenic nematodes will be studied, and illustrated with different models. Control methods and related technologies will be more particularly explored (identification and population density evaluation methods, damages, epidemiology data, host-parasite relationships, nematodes reproduction and survival, control strategy). 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".
Other infos :	Partie Nématologie : Teaching aids - A syllabus including detailed information's and pictures - An additional PPT - The slides collection of the FYMY unit - Samples with symptoms
Cycle and year of study :	Master [120] in Agricultural Bioengineering
Faculty or entity in charge:	AGRO