
REPORT

WP3. Training activities in plant clinic units for diploma program

Task 3.4 Training of academic staff from partner universities on ECTS and pedagogical education system by EU experts

The University of Naples Federico II (UNINA) is the leader of the WP.3 in which it is planned to carry out training activities in Plant Clinic for diploma program.

In order to apply ECTS system on the new DPCP program modules in teaching and evaluation, the task 3.4 includes the training of Academic staff from each Egypt partner university by EU experts on the following topics:

The aim of these training sessions is to foster collaborations in new PRO-PDCP program among partners and to acquire recent experience and knowledge on **Plant Clinics Modern Techniques**.

The Training programming is built around:

- The transfer of knowledge and good practice
- Learning from shared experience
- The acquiring of new practical skills
- To discovery of new ideas for teaching and learning

Following several meetings and email exchanges between the partners, the following points were defined:

- Due to the pandemic situation and the well-known difficulties for mobility of the Egyptian partners a first part of the training will be carried out online on Team platform to facilitate the participation of the partners. The lessons will be recorded and will be available online.
- Each European partner will hold approximately 8 lessons. One/two lessons per week will be held, starting from April until the end of May 2022.

- Each Egyptian partner will identify at least 2 participants for each proposed lesson, according to their expertise, age and English skills.

UNINA was responsible for distributing the course content and dates among the European partners and modifies the agenda adapting it to the requests and needs of all the partners. The following detailed agenda was defined and shared among all the partners and participants.

Course Agenda

- 1) 6 April 2022, 10:30 - 13:30 (CET) _ "Postharvest disease: prevention and control" _ **Prof. Nadia Lombardi (UNINA)**
Zoom link:
<https://us06web.zoom.us/j/84767075441?pwd=dGZlVG9JelB5bElYMkllMlJtZ2gxQT09>
ID: 847 6707 5441 Passcode: 540462
- 2) 11 April 2022, 10:30 - 13:30 (CET) _ "Basic principles and practical aspects of biological control in agriculture" _ **Prof. Vili Harizanova (AUP)**
Zoom link:
<https://us06web.zoom.us/j/88199706608?pwd=MzhmWTlPZDNDNHBSis0S2lZOXRZdz09>
ID: 881 9970 6608 Passcode: 592900
- 3) 14 April 2022, 10:30 - 13:30 (CET) _ "Application of beneficial microbes for the biofortification of crop plants" _ **Prof. Roberta Marra (UNINA)**
Zoom link:
<https://us06web.zoom.us/j/81054422611?pwd=NHB3OEtsZVlXM0VwZjdHOFBySmI4QT09>
ID: 810 5442 2611 Passcode: 231249
- 4) 18 April 2022, 10:30 - 13:30 (CET) _ "Plant disorders, induced by mineral nutrient deficiencies" _ **Prof. Andon Vasilev (AUP)**
Zoom link:
<https://us06web.zoom.us/j/89801621902?pwd=STFsdm84NnZJRzJlR2lrQ1ExVXczQT09>
ID: 898 0162 1902 Passcode: 949662
- 5) 20 April 2022, 15:30 - 18:30 (CET) _ "Novel approaches to improve fungal antagonists." _ **Prof. Roberta Marra (UNINA)**
Zoom link:
<https://us06web.zoom.us/j/89417883838?pwd=R1JMQWl3V1NFbzZpNG5KVEJoMVNBUT09>
ID: 894 1788 3838 Passcode: 815852
- 6) 26 April 2022, 10:30 - 13:30 (CET) _ "Microscopy to study plant-microbes' interactions" _ **Prof. David Turrà (UNINA)**
Zoom link:
<https://us06web.zoom.us/j/89310738686?pwd=S1Jlem5rZk9jV0FmV0hGWHVJk54UT09>

ID: 893 1073 8686 Passcode: 552650

- 7) 28 April 2022, 10:30 - 13:30 (CET) _ “How plant pathogens gain access and colonize their hosts” _ **Prof. David Turrà (UNINA)**

Zoom link:

<https://us06web.zoom.us/j/84171411287?pwd=dVQ4NnYvOUQ2RXhmemlwRDMvaFlzZz09>

ID: 841 7141 1287 Passcode: 084914

- 8) 3 May 2022, 12:00 - 15:00 (CET) _ “Plant disorders, induced traditional abiotic stresses and xenobiotics (heavy metals and herbicides)” _ **Prof. Andon Vasilev (AUP)**

Zoom link:

<https://us06web.zoom.us/j/86400688422?pwd=UE84bkpMS0NjL1FISnNFTIVZN2k3QT09>

ID riunione: 864 0068 8422 Passcode: 448830

- 9) 5 May 2022, 10:30 - 13:30 (CET) _ “Biological control with mycoviruses” _ **Dr. Laszlo Radocz (UNIDEB)**

Zoom link:

<https://us06web.zoom.us/j/81292871605?pwd=b0JtM1V6NkVhOW8zL2taaHp4Qmo0dz09>

ID riunione: 812 9287 1605 Passcode: 003361

- 10) 9 May 2022, 10:30 - 13:30 (CET) _ “Trichodermas in plant protection” _ **Andras Csoto (UNIDEB)**

Zoom link:

<https://us06web.zoom.us/j/89470189664?pwd=R3R3MmV3bEIPs2RzV1EwU3FMWEIvQT09>

ID riunione: 894 7018 9664 Passcode: 244228

- 11) 12 May 2022, 10:30 -13:30 (CET) _ “Fungal secondary metabolites: from antibiotics to mycotoxins” _ **Prof. Francesco Vinale (UNINA)**

Zoom link:

<https://us06web.zoom.us/j/83957256992?pwd=aTJiMURGbElpRjZ5a3IDZjFLT1pvdz09>

ID riunione: 839 5725 6992 Passcode: 234075

- 12) 13 May 2022, 10:30-13:30 (CET)_Plant protectional extension services_ **Mohunnad Massimi (UNIDEB)**

Zoom link:

<https://us06web.zoom.us/j/81614475176?pwd=cU81WWpsbWdHMGRYaW43VC9tMFlxQT09>

ID riunione: 816 1447 5176 Passcode: 865359

- 13) 16 May 2022, 10:30 - 13:30 (CET) _ “Phytophagous mites as pest of agricultural crops and ornamental plants – identification, biology and damage” and “ Predatory mites as biocontrol agents - biology and identification” _ **Assoc. Prof. Atanaska Stoeva (AUP)**

Zoom link:

<https://us06web.zoom.us/j/83315297295?pwd=TTNSS0JoWU5EN1RjL2ZESHE2Ukl1dz09>

ID riunione: 833 1529 7295 Passcode: 066943

- 14) 17 May 2022, 10:30 - 13:30 (CET) _ “Integration of disease forecasting into the overall crop technology” _ **Assist. Prof. Zvezdomir Jelev (AUP)**

Zoom link:

<https://us06web.zoom.us/j/82217337194?pwd=RzJyUnA0TXQ4eWpsemFidVIEVmxJUT09>

ID riunione: 822 1733 7194 Passcode: 366293

- 15) 18 May 2022, 10:30 - 13:30 (CET) _ “Plant-insect interactions” _ **Prof. Vili Harizanova (AUP)**

Zoom link:

<https://us06web.zoom.us/j/87816174638?pwd=SWlmQVZFZlF0IHKzRqaFITTUJQQT09>

ID riunione: 847 3585 7851 Passcode: 894073

- 16) 19 May 2022, 10:30 - 13:30 (CET) _ “Selection of biological control agents for sustainable agriculture” _ **Prof. Sheridan L. Woo (UNINA)**

Zoom link:

<https://us06web.zoom.us/j/87816174638?pwd=SWlmQVZFZlF0IHKzRqaFITTUJQQT09>

ID riunione: 878 1617 4638 Passcode: 136690

- 17) 23 May 2022, 10:30-13:30 _ “Plant protection forecasting” _ **Dr. Laszlo Radocz (UNIDEB)**

Zoom link:

<https://us06web.zoom.us/j/82736242362?pwd=N0p0ZndFUDImUmVGVnplbkIqUDhiQT09>

ID riunione: 827 3624 2362 Passcode: 979672

- 18) 24 May 2022, 10:30-13:30 _ “Precisional plant protection applications” _ **Arpad Illes (UNIDEB)**

Zoom link:

<https://us06web.zoom.us/j/86419727231?pwd=YjQ4S1gzSnc1M1JqVmpOcVRpTzJDQT09>

ID riunione: 864 1972 7231 Passcode: 561214

- 19) 27 May 2022, 10:30-13:30 _ “Invasive weed species, weed ecology, weed competition” _ **Arnold Szilágyi (UNIDEB)**

Zoom link:

<https://us06web.zoom.us/j/81750586329?pwd=WUVNc2p2cnNjdm9xWmsyU0ZXRGVgZ09>

ID riunione: 817 5058 6329 Passcode: 015364

- 20) 30 May 2022, 10:30-13:30 _ “Biological weed control and management” _ **Dr. Laszlo Radocz (UNIDEB)**

Zoom link:

<https://us06web.zoom.us/j/87892505386?pwd=cStnSE1FTjhuaGMxVUhXekJXL1ZGdz09>

ID riunione: 878 9250 5386 Passcode: 581587

- 21) 31 May 2022 _ “Drones and remote sensing in plant protection diagnostic” _ **Laszlo Radocz jr. (UNIDEB)**

Zoom link:

<https://us06web.zoom.us/j/88540910469?pwd=RUNsVnFUUXVHVlhXd21iUnVkwkVFUT09>

ID riunione: 885 4091 0469 Passcode: 662131

The Egyptian partners identified the participants and sent the following list to UNINA. UNINA communicated with the participants by sending the information to participate in the training. Furthermore, UNINA supported the experts during their presentations and moderated the speeches for the entire duration of the training.

Table 2 List of participants

Name	E-Mail	Partner - University
Amany Saad Mohamed	dramany83@gmail.com	P4 - Mansoura
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Mohaed El-sayed Youssef	Youssefm2006@yahoo.com	P9 – Sohag

The teaching material (Slides and videos) has been uploaded online (<https://mega.nz/folder/3tFShDhD#ttH9V-jsL7Z5sz7uuwFkHA>; <https://mega.nz/folder/cPMgWISY#tqcDt6rDXeKfRZ-3TOtd9w>) and the download links have been sent to all participants.

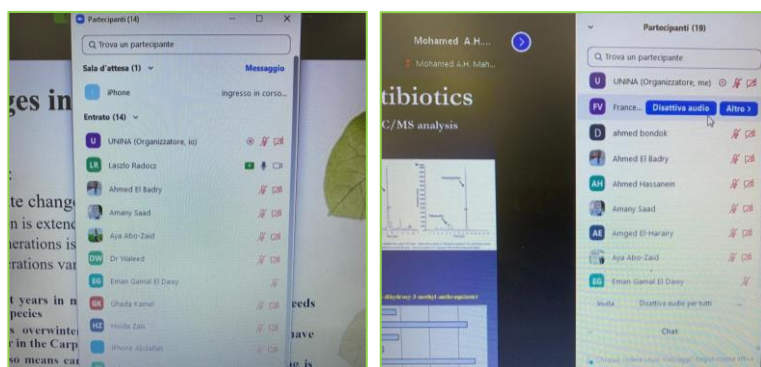


Figure 1 Participants of the online training

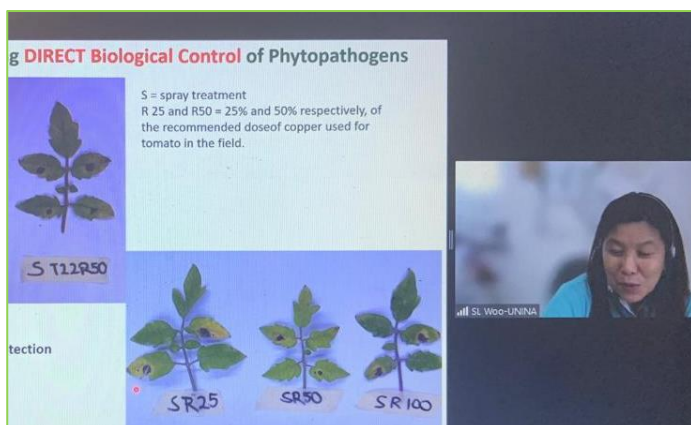


Figure 2 Online training, during the lesson by Prof. Woo

The practical part of the training has been planned in cooperation with all the partner. Each European university has planned the dates and contents of the practical training and has communicated the informations to all the partner.

The University of Agriculture in Plovdiv organize the training from 26 to 30 September 2022. Below, the final agenda of the training:

Monday 26 September 2022

08:00-08:15	Registration of participants from SVU	
08:15-08:30	Welcoming by Prof. Vili Harizanova, Project Coordinator	
08:30-13:30	Assist. Prof. Mariana Petkova, PhD	Laboratory training: “Microbe-microbe interactions, plant-microbe interactions”

Tuesday 27 September 2022

09:00-09:15	Registration of participants from SVU	
09:15-11:00	Visiting the Department of Entomology	Teaching and training practices in Entomology, Nematology and Acarology, Biological control, Plant Quarantine
11:15-13:30	Visiting the Department of Plant pathology	Teaching and training practices in Plant pathology, Forecast of diseases

Wednesday, 28 September 2022

10:00-10:15	Registration of participants from ALU, MAU, SCU, SVU, and SOU	
10:15-12:00	Prof. Vili Harizanova	” Biocontrol agents – morphology, biology,

application of predatory species from Hemiptera, Coleoptera, Neuroptera, and Diptera”

12:00-13:00	Lunch break	
13:00-15:00	Assist. Prof. Zvezdomir Zhelev	Visit to the Center for Integrated Disease management
15:00-17:00	Assist. Prof. Zvezdomir Zhelev	Practical training in “Integration of disease forecasting into the overall crop technology”

Thursday, 29 September 2022

10:00-10:15	Registration of participants from ALU, MAU, SCU, and SOU	
10:15-11:00	Prof. Vili Harizanova	” Biocontrol agents – morphology, biology, application of parasitoid species from Hymenoptera and Diptera”
11:00-12:15	Lunch break	
12:15-17:00	Assist. Professor Dobrinka Balabanova	Practical training in “Plant disorders, induced by mineral nutrient deficiencies”, and “Plant disorders, induced by xenobiotics (herbicides and heavy metals)”

Friday 30 September 2022

9:00-9:15	Registration of participants from ALU, MAU, SCU, and SOU	
9:15-12:00	Prof. Vili Harizanova Assoc. Prof. Atanaska Stoeva	Visit to the Institute of vegetable crops “Maritza” and collecting leaf samples for laboratory identification of mites.
12:15-13:00	Lunch break	
13:00-17:00	Assoc. Prof. Atanaska Stoeva	Practical training in ”Phytophagous mites as pest of agricultural crops and ornamental plants – identification, biology and damage”



Figure 3 Practical training in Plovdiv

UNINA organize the training from 7 to 11 September 2022. Below, the final Agenda:

Monday, 7 November

- 9:30-9:45 Registration of participants
- 9:45-10:00 Welcoming by Prof. Francesco Vinale
- 10:00-13:30 Biocontrol Lab training_Biological control agents and plant growth promoting microorganisms for sustainable agriculture (Prof. Woo/Prof Lombardi)
- 13:30-14:30 Lunch break
- 14:30-17:00 Biocontrol Lab training_Biological control agents and plant growth promoting microorganisms for sustainable agriculture (Prof. Woo/Prof. Lombardi)

Tuesday, 8 November

- 9:30-9:45 Registration of participants
- 9:45-13:30 Omics Lab training_Fungal secondary metabolites: from antibiotics to Mycotoxins (Prof. Vinale/Dr. Staropoli/ Dr. Vassetti)
- 13:30-14:30 Lunch break
- 14:30-17:00 Omics Lab training:_Fungal secondary metabolites: from antibiotics to Mycotoxins (Prof. Vinale/Dr. Staropoli/Dr. Vassetti)

Wednesday, 9 November

- 9:30-9:45 Registration of participants
- 9:45-13:30 Microscopy Lab training_ Microfabrication and microscopy: thigmotropism in fungal pathogens (Dr. Vitale/Dr. Guastafarro/Dr. Russo)
- 13:30-14:30 Lunch break

14:30-17:00 Microscopy Lab training_ Microfabrication and microscopy: thigmotropism in fungal pathogens (Dr. Vitale/Dr. Guastafarro/Dr. Russo)

Thursday, 10 November

9:30-9:45 Registration of participants

9:45-13:30 Molecular Lab training: Molecular characterization of Fungi (Prof. Marra/ Prof. Lombardi)

13:30-14:30 Lunch break

14:30-17:00 Molecular Lab training: Real Time PCR (Prof. Marra/ Prof. Lombardi)

Friday, 11 November

9:30-9:45 Registration of participants

9:45-13:30 Insight and clarifications on the training's topics



Figure 4 Practical training in Naples