



**BioLink Cost Action
Training school
Soil biodiversity in tree crops**

**CIHEAM-IAMB
Bari, Italy, 25-29 September 2017**

Programme

MONDAY

25.09.2017

09:00 - 09:10

Welcoming remarks

Maurizio Raeli (Director of CIHEAM-IAMB)

09:10 - 09:20

The BIOLINK COST Action

Objectives and programme

Mauro Gamboni

09:20 - 10:00

Soil biodiversity from bacteria to earthworms.

Theoretical

Isabel Abrantes

10:00-11:00

Soil biological, physical and chemical properties. Sampling, extraction methods (soil and plants)

Theoretical-

Aurelio Ciancio, Diogo Proença, Isabel Abrantes

Practical

11:00 - 11:30

Coffee break

11:30 - 13:00

Discovering the diversity of soil nematodes. Phytoparasitic nematodes characterisation/identification: biochemical and molecular markers

Theoretical-

Isabel Abrantes, Ivânia Esteves

Practical

13:00 - 15:00

Lunch

15:00 - 18:30

Phytoparasitic nematodes characterisation/identification: biochemical and molecular markers (conclusion)

Practical

Isabel Abrantes, Ivânia Esteves

TUESDAY 26.09.2017

09:00 - 11:00

Impact of agricultural practices on aboveground biodiversity for higher resilient agroecosystems

Generosa Jenny Calabrese

11:00 - 17:00

Fieldwork-Torre Guaceto

WEDNESDAY 27.09.2017

09:00 - 11:00

Methods for assessing diversity, structure and function of microbial communities: culture-based, biochemical and molecular approaches

Theoretical

Annamaria Bevivino, Diogo Proença

11:00 - 11:30

Coffee break

11:30 - 13:00

Methods to assess the diversity, structure and function of microbial communities: culture-based, biochemical and molecular approaches

Theoretical

Annamaria Bevivino, Diogo Proença

13:00 - 15:00 **Lunch**

15:00 - 17:00 Bulk soil microbial diversity: from culture-dependent methods to single
Practical colony DNA
 Annamaria Bevivino, Diogo Proença

THURSDAY 28.09.2017

09:00 - 10:30 Molecular methods for soil microbial genome analysis. Metagenomics
Theoretical analysis of the microbial diversity: the Quercus rhizosphere at Sierra Nevada
 National Park.*
 Manuel Fernandez-Lopez

10:30 - 11:00 **Coffee break**

11:00 - 13:00 Soil metagenomic and bioinformatics approaches
Theoretical- **Pablo J. Villadas, Manuel Fernandez-Lopez**
Practical

13:00 - 14:00 **Lunch**

14:00 - 19:00 Data management
Practical **Pablo J. Villadas, Manuel Fernandez-Lopez**

FRIDAY 29.09.2017

09:00 - 10:30 Soil food webs, functions and services: how biodiversity affects crops
Theoretical ecosystem
 Aurelio Ciancio

10:30 - 11:00 **Coffee break**

11:00 - 13:00 Soil RNA extraction for biodiversity studies
Practical **Mariantonietta Colagiero**

13:00 - 15:00 **Lunch**

15:00 - 17:30 Oral presentations by students**

17:30 - 18:00 Concluding remarks
 Isabel Abrantes, Aurelio Ciancio

*Students are requested to bring their own personal computers. Equipment should be based on 64 bits, with RAM memory \geq 4Gb, operative system Windows \geq 7. The practical class will be based on Windows not in MS-DOS, any program language or Mac.

** Students will give an oral presentation (10 min) of their research project

CHAIR OF THE COST ACTION BIOLINK

Martin LUKAC

PROMOTING AND ORGANIZING COMMITTEE

Isabel ABRANTES

Aurelio CIANCIO

Paola GRENNI

Generosa Jenny CALABRESE

Olimpia ANTONELLI

Mauro GAMBONI

Manuel FERNÁNDEZ-LOPEZ

Marina KATANIC

Maria SAKKA

Jesus MERCADO BLANCO

LOCAL SCIENTIFIC SUPPORT

Generosa Jenny CALABRESE, CIHEAM-IAM - International Officer and Research Coordinator, calabrese@iamb.it

EDUCATION & TRAINING OFFICE

Olimpia ANTONELLI, CIHEAM-IAM - Head of the Office, oliant@iamb.it

TRAINEES SELECTION PANEL

Isabel ABRANTES

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