INTERNATIONAL TRAINING COURSE ON MICROSCOPY APPLIED TO TRUFFLE FARMING

Truffle species identification, spore inoculum quality assessment and uses

· Quality control of nursery truffle plants

11th of February, 2024

· Identification of mycorrhiza species commonly found in nursery plants



DATE 11th of February, 2024 (Sunday)

DURATION 8 hours plus breaks (from 10:00 until 19:30 hours)

TAUGHT BY

Luz Cocina Romero (Agricultural Engineer, CEO at MicoLab and former forestry teacher) and María Martín Santafé (PhD in Forest Engineering, researcher at the CITA of Aragón)

WHERE

MicoLab 's training classroom Avda. Corts Valencianes, 75, 46530 Puzol (Valencia, Spain)

PRICE 1050€

It includes:

- The use of professional microscopes (one set of two per student)
- · Two microscopy specialists to offer individual attention
- Fresh and mounted samples of mycorrhizae and truffles for future reference
- Lab equipment and chemicals needed for truffle microscopy
- · Written notes in English and scientific documents
- \cdot Snacks, lunch and refreshments at MicoLab's facilities
- Follow-up of the student's progress via e-mail, phone or WhatsApp/Messenger for a whole year after the course

FOR MORE INFO, PLEASE, CONTACT US

+34 665 911 457 (phone calls or WhatsApp) or info@micolab.com





MICROSCOPY APPLIED TO TRUFFLE FARMING

Truffle species identification, spore inoculum quality assessment. Mycorrhiza monitoring in truffle plantations.

MORNING

TRUFFLE SPECIES IDENTIFICATION, SPORE INOCULUM QUALITY ASSESSMENT

- The use of microscopy for plant production and plantation management of plants inoculated with *Tuber melanosporum*
- Truffle identification, importance and objectives
- Macroscopic characters of truffles
- Truffle sample preparation
- Microscopic identification of truffles: spores and asci
- Microscopic assessment of spore inoculum quality
- Preserving samples
- Bibliography and web links (including identification keys)

MYCORRHIZA MONITORING IN TRUFFLE PLANTATIONS

- Root sampling, needed materials and statistical considerations.
- Available sampling methods, when and how to use each possibility (pros and cons).
- Preparing the plant samples and soil/root samples for cleaning and extraction.
- Preservation techniques.
- Extraction of mycorrhizae from soil samples.
- Cleaning.



- Microscopic identification of most common mycorrhizae present in European truffle plantations.
- Counting and interpreting the results.
- Assessment of the most adequate management techniques in view of the mycorrhiza species present.
- Bibliography and web links (including identification keys)

THE COURSE WILL BE TAUGHT BY:

Luz Cocina Romero Agricultural Engineer CEO at MicoLab Former forestry teacher María Martín Santafé PhD in Forest Engineering Researcher at the CITA of Aragón (Spain)



The student will be provided with the following materials to take home:

- Permanent slides (mounts) prepared by the student for future reference, in a slide carry box
- Fresh samples of truffles for future reference (carefully sealed and labeled)
- Dissection knife, microscopy tweezers and all lab equipment required for truffle and mycorrhiza microscopy
- Basic set of chemicals used in truffle microscopy
 (carefully sealed and labeled and in small quantities)
- Written notes in English, with identification pictures
- Research papers and other important scientific documents (protocols)

COST AND OTHER INFORMATION

Date: Sunday, the 11th of February, 2024 **Duration**: 8 hours From 10:00 till 19:30 hours, including lunch and snack breaks.

A maximum of nine students are allowed per course and they all work individually with their own set of materials and microscopes.

The trainees will be supported by two teachers who are analysts specialized on microscopy in order to offer an individual attention.

The price of the course is 1050 €

In Spain taxes are not applied to training courses.

All students get an official invoice.

The course has to be paid in advance by bank transfer. The price includes the answering of future questions via e-mail or WhatsApp about the training contents and for when the student starts identifying on his/her own (first year after the training). It also includes snacks and lunch at MicoLab's facilities. Students will be allowed to take as many pictures as they want during the training.

