



Microscopy applied to truffle growing

Truffle species identification, spore inoculum quality assessment

Plantation mycorrhiza sampling and preparation for analysis

Identification of mycorrhiza species commonly found in plantations

Morning

TRUFFLE SPECIES IDENTIFICATION, SPORE INOCULUM QUALITY ASSESSMENT

The use of microscopy for truffle plantation management

Truffle identification, importance and objectives

Macroscopic characters of truffles

Microscopy 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 field sampling methods, pros and cons

Preparing the root samples for cleaning and extraction

Preservation techniques

Extraction of mycorrhizae from soil samples

Cleaning

Afternoon

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)

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)

More info:

+34 665 911 457 (WhatsApp) / info@micolab.com

www.micolab.com

Materials for the student

The student will be provided with the following materials:

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

Cost and other information

Date: Sunday, the 9th of February, 2025

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 specialized on *Tuber* species microscopy in order to offer an individual attention.

The price of the course is 1.050 €

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.