

Workshop

Cork oak woodlands: an ecosystem in the edge of climate change

Organised by: University of Lisbon, School of Agriculture (ISA), Portugal

Contact persons: Prof. Maria Helena Almeida; nica@isa.ulisboa.pt,

Date: September 6 – 9, 2016. Registration before August 16 – New Date

Fees: 75 € (0 € for Evoltree partner members)

Objective of the workshop: The main objective of the workshop is to present cork oak woodlands to the participants highlighting aspects as: climate change, genetic variability, ecophysiology and ecosystem threats.

Trainers/speakers:

MSc. Ana Fonseca, Instituto de Ciências Agrárias e Ambientais Mediterrânica, U. Évora.

Dr. Filipe Costa e Silva, CEF, ISA, U. Lisboa

Prof. Helena Pereira, CEF, ISA, U. Lisboa

Dr. Joana Paulo, CEF, ISA, U. Lisboa

Dr. José Graça, CEF, ISA, U. Lisboa

Dr. José Matos, Instituto Nacional Investigação Agrária Veterinária

Prof. Leonor Morais, Leaf, ISA, U. Lisboa

Prof. M Helena Almeida, CEF, ISA, U. Lisboa

Prof. Manuel Madeira, CEF, ISA, U. Lisboa

Prof. Manuela Branco, CEF, ISA, U. Lisboa

Prof. Margarida Tomé, CEF, ISA, U. Lisboa

Dr. Maria Conceição Caldeira, CEF, ISA, U. Lisboa

Dr. Miguel Bugalho, CEABN, ISA, U. Lisboa

Prof. Pedro Miranda, U. Lisboa

Dr. Teresa Soares David, Instituto Nacional Investigação Agrária Veterinária; CEF, ISA, U. Lisboa

Location: University of Lisbon, School of Agriculture (ISA), Tapada da Ajuda, 1349-017 Lisbon, Portugal

Number maximum 20 and minimum 8 participants

Credit for students: 3 credits

Outline of the course: The course will be organized in lectures, participants' oral presentations followed by roundtable sessions, visit to laboratories where cork oak studies are being conducted, and one day field trip.

Participants should focus their oral presentations on the main workshop topics and preferably on cork oak woodlands, although not mandatory.

A short abstract (maximum 300 words) should be sent **with registration** until **August 16**. Examples of presentation topics:

- i) research regarding Mediterranean ecosystems and threats;
- ii) ongoing research on cork oak or research in preparation;
- iii) cork oak research you would like to discuss with trainees/trainers

Meals are not included. Lunches will be served at ISA Campus but the dinners on their own. During the field trip, lunch (sandwich and fruit) will be provided by the University.

Travelling: The School of Agriculture (ISA) is located 12 km apart from Lisbon airport. Travel options are subway connection to the city center or bus to the School. Participants are expected to arrive on Monday evening (September 5) and depart on Friday evening or Saturday (September 10).

Programme

	Tuesday 6th Sep	Wednesday 7th Sep	Thursday 8th Sep	Friday 9th Sep
Morning	Introduction: Climate change, cork oak woodlands and cork	How do trees cope with climate changes – scenarios and responses	Field Trip	Hands on: modelling
Afternoon	Cork oak, origin and genetic and epigenetic variability	Cork oak woodlands: dealing with threats		Laboratory

Schedule:

Tuesday 6th Sept.

- 9:00-10:00 Welcome participants at ISA. Introduction and overview.
- 10:00-10:40 Climate Change Scenarios in the Mediterranean Regions – P. Miranda
- 10:40-11:00 Break/discussion.
- 11:00-11:40 Cork oak woodlands - Historical and social overview – A. Fonseca
- 11:40-12:20 Cork - how it grows? – J. Graça
- 12:20-13:00 Participants presentation and roundtable.
- 13:00-14:30 Lunch.
- 14:30-15:10 Cork oak Genetic Differentiation and Diversity – J. Matos
- 15:10-15:50 Is epigenetic variability involved in cork quality? – L. Morais
- 15:50-16:10 Break/discussion.
- 16:10-16:50 Genetic variation of *Quercus suber*: a tool for regeneration of cork oak woodlands – M.H. Almeida
- 16:50-17:30 Participants presentation and roundtable.

Wednesday 7th Sept.

- 9:30-10:10 Impact of root structure and functioning of root system in tree water use – T.S. David
- 10:10-10:50 Climatic variability in the cork oak woodlands: effects on carbon sequestration – F. Costa e Silva
- 10:50-11:10 Break/discussion.
- 11:10-11:50 How to naturally regenerate cork oak woodlands? – M.C. Caldeira
- 11:50-12:30 Participants presentation and roundtable.
- 12:30-14:00 Lunch.
- 14:00-14:40 Cork oak management systems. Soil quality and sustainability – M. Madeira
- 14:40-15:20 Cork oak pests and pathogens: what we know what is missing? – M. Branco
- 15:20-15:40 Break/discussion.
- 15:40-16:20 Effect of climate events on cork oak growth and cork quality – H. Pereira
- 16:20-17:00 Sustainable management of cork oak woodlands: conservation of biodiversity and ecosystem services – M. Bugalho
- 17:00-17:40 Participants presentation and roundtable.

Thursday 8th Sept.

9:00-18:00 Field trip: Companhia das Lezírias (Reforestation/restoration) M C. Caldeira, T. S. David, C. A. Pinto

Friday 9th Sept.

- 9:30-10:20 Cork oak stands growth modelling – M. Tomé
- 10:20-10:40 Break/discussion.
- 10:40-11:40 Suber Model a tool to support cork oak stands management – J. Paulo
- 11:40-12:30 Participants presentation and roundtable.
- 12:30-14:00 Lunch.
- 14:00-14:30 Laboratory – H. Pereira
- 14:30-15:00 Synthesis and end of the workshop

Grants

All the EVOLTREE members (i.e., participants from EVOLTREE partner labs) can apply for financial support to cover travel, accommodation and meals during the workshop.

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