



Instituto Politécnico de Castelo Branco  
Escola Superior Agrária



## Workshop “*In vitro* propagation of plant species”

### Aim

The aim of this workshop, integrated in the “International Plant Fascination Day”, is to contribute to the knowledge of plant propagation methodologies in *in vitro* conditions, using culture media of defined formulation, maintaining the cultures under aseptic conditions and in a controlled environment.

### Date, time and location:

May 20, 2019, from 9:30 a.m. to 6:00 p.m.

- Laboratory of Biology of the Higher School of Agriculture of Castelo Branco
- Micropropagation Laboratory of Beira Interior Plant Biotechnology Center

### Program

#### Module I - Micropropagation

Theoretical part

- General concepts and fundamentals of micropropagation
- Advantages and disadvantages of the propagation technique
- Phases of micropropagation

Practical part

- Practical application in the establishment and multiplication phases of plant species

#### Module II - Bioreactors

Theoretical part:

- Basic concepts applied to plant tissue culture and to temporary immersion bioreactors

- Theoretical and conceptual presentation of bioreactor models
- Theoretical presentation of practical applications of bioreactors

Practical part:

- Some constituents of the bioreactor
- Wash and sterilization
- Working methodology with bioreactors in laminar flow chamber
- Subculture and inoculation in bioreactors
- Automated system programming of immersion and aeration bioreactors
- Functional activation of bioreactors in the culture room

**Target audience:** Students of secondary education, higher education, as well as the general public interested in the field of micropropagation.

Number of participants: minimum 10, maximum 15.  
Selection by order of registration and target audience.

**Online registration** (deadline - May 10, 2019) on <https://goo.gl/forms/JSYPd7WzZgLQ9bpk1>

Secondary students: 10 euros. Other participants: 20 euros.

Issue of vocational training certificate.

**Information:** [pedrolopes@ipcb.pt](mailto:pedrolopes@ipcb.pt) or 272339900