



Plant Stress Physiology

Upon successful completion of the course, students will have knowledge of the main abiotic and biotic stress factors of plants and their effects in the structure and function of plant organisms.

Students will be able to:

- Know the main abiotic and biotic plant stress factors and the effects of each on crop yields.
- To understand the mechanisms through which plants cope with adverse conditions.
- To be able to apply methods and techniques to strengthen plants against stresses.
- Understand the potential for biotechnological applications

Course content:

- Abiotic stress factors: Water stress - Salinity - Extreme temperatures - Radiation - Oxygen deficiency - Mechanical stress - Oxidative stress – Heavy metals - Pollution of the atmosphere.
- Biotic Stressors: The Plant Chemical Arsenal Against Biotic Stressors - Plant Defense Against Biotic Stressors - Secondary Metabolites.
- Interactions of stress factors
- Biotechnological approaches and applications.