### Teacher

Ass. Prof. Dr. Tiina Tosens

### Contact

Estonian University of Life Sciences, Department of Plant Physiology  
Tiina.Tosens@emu.ee

### Lectures

Plant stress

### Key words

Structural and physiological acclimation and adaptation, homeostasis, xerophytes, mesophytes, abiotic and biotic stress, plant structure-function relationships, phenotypic plasticity

### Learning objectives

After the course, the students are expected to know the main plant stresses and stress responses. They should know the main mechanisms of stress acclimation and understand the influences of global change on vegetation and be able to select suitable plant varieties for globally modified conditions. Further, they have completed a lab-project on the field of plant stress biology.

### Main subjects

- capacity of plants to acclimate to their environment  
- the key stress responses and mechanisms of acclimation to environmental stress  
- reduction of the rate of plant physiological processes due to variation in environmental drivers  
- the limits of stress tolerance and acclimation to stresses under globally changing environmental conditions, i.e. elevated atmospheric CO₂ concentration and air temperature and drought in world ecosystems

### Relevance to EduSaPMan

Plant stress biology is essential topic for students to understand the whole ecosystem functioning.

### Recommended literature