Jan Evangelista Purkyně University in Ústí nad Labem

Faculty of Environment

Study material

PRACTICAL MEASUREMENTS OF PLANT PHYSIOLOGY

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Objectives

The aim of this course is to provide students with a comprehensive overview of basic problem areas in the field of plant physiology. Emphasis will be placed on linking knowledge about plant morphology and plant function at the molecular and cellular level, at the level of tissues and the whole organism. The basic physiological processes that participate in the formation of plants as an organic whole - they participate in the flows of energy, matter and plant information will be described. The variability of plant-external environment relations, related physiological adaptations and their ecological impact will be described. The student will support this knowledge with practical experiments and own measurements. After consultation with the student, an experiment compatible with the topic of his dissertation will be planned.

Study topics

1. Methods of measuring stress parameters in plants

2. Measurement of leaf fluorescence

3. Non-invasive measurement of leaf dye content

Study literature

PROCHÁZKA a kol. Fyziologie rostlin, Academia. 2002.

ŠETLÍK, I.; SEIDLOVÁ, F.; ŠANTRŮČEK, J. Fyziologie rostlin. Biologická fakulta Jihočeské univerzity, 1998.

HEJNÁK, Václav, et al. Fyziologie rostlin. Česká zemědělská univerzita, 2005.

GLOSER, Jan. Fyziologie rostlin. Masarykova univerzita, 1995.