

Role of carbon allocation in plant acclimation and response to abiotic stress



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Plants are sessile organisms and have to cope with environmental abiotic stresses. They can respond in their life cycle with the **acclimation** and **rapid responses to stress** modulated by species phenotypic plasticity, i.e. the ability of an organism to change in morphology and physiology in response to environmental inputs.

Stress conditions imply a different allocation of carbon compounds. Several studies suggest the involvement of **non-structural carbohydrates (NSC)** in plants stress recovery, as osmotic compounds and energy donors. Hence, the project aims to investigate carbon dynamics in plants during physiological stress conditions and their interplay with growth and between different plant organs.

Gain new insights about the complex mechanisms behind plant responses to abiotic stress can improve the forecast of the dynamics in plant communities in natural environments and help the research to find new strategies to protect the plants to ongoing climate changes.

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Drought



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