

Transnational Access Report

1. General Information

Project Acronym (ID):	SWEETREGIME-Shoot
Project Title	Sugar signaling in the integration of growth and drought stress signaling
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2. Duration of access

Begin of the project	End of the project
14.01.2013	13.02.2013

3. Project summary (max. 250 words)

A strong link of growth processes and the metabolite trehalose-6-phosphate have been unraveled. Also, impact of trehalose and or its precursor trehalose-6-phosphate on the sensitivity of growth to biotic and abiotic stresses has been described. The downstream signaling of T-6-P has been elucidated previously and mutants and transgenic lines are available for a set of known or putative downstream players of T-6-P signaling. Such plants altered in the T-6-P signaling and its downstream pathway were investigated for their rosette growth under stress conditions (cold, darkness), with special focus on the recovery of growth after stress-induced growth repression.

4. Main achievements (max. 250 words)

Arabidopsis rosette growth repression under abiotic stress and recovery has been analyzed in rosette area, morphology and fresh and dry weight for 16 genotypes related to T-6-P signaling. This will give information on how this metabolite and its signaling pathway impacts growth in stress conditions and the recovery after such stress periods. Data analysis is ongoing.