

Transnational Access Report

1. General Information

Project Acronym (ID):	RRES-GA-Drought
Project Title	Investigating the role of gibberellin signalling in the response to drought in <i>Arabidopsis</i>
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2. Duration of access

Duration of the access refers to the use of the installation only and does not include the preparation of the experiment or data analysis.

Begin of the project First day the installation was used	End of the project Last day the installation was used
12.4.13	23.5.13

3. Project summary (max. 250 words)

The plant hormone gibberellin (GA) promotes plant growth and development throughout the plant lifecycle, and there is also accumulating evidence supporting a role for GA in the response to abiotic stress. We are investigating the role of GA in the response to drought in *Arabidopsis*. The aim of our project was to investigate growth and stress responses to drought in a range of *Arabidopsis* lines with altered GA metabolism and signalling, or related phenotypes. We aimed to collect data on morphological characteristics and chlorophyll fluorescence over the course of a drought-treatment and during a recovery (re-watering) period, in order to determine how alterations in GA metabolism and signalling affect growth and stress responses to drought in these lines.

4. Main achievements (max. 250 words)

Use of the automated GROWSCREEN-FLUORO system allowed us to collect detailed information on rosette growth and stress responses to drought in a number of *Arabidopsis* lines with altered GA metabolism and signalling (and related phenotypes). Experimental work has been completed and data analysis is on-going.