PROJECT: EpiGrowth

Date: **17.12.2023** **REPORTING**

ID: 29

PROJECT TITLE

Phenotyping epigenetic reader knockouts

CONSORTIUM

P 1	Falk Butter		

SUMMARY OF THE REPORT

Conserved epigenetic modifications on the histone, DNA and RNA level are essential for fine-tuning expression, development and adaptation to environmental conditions. We have previously shown the successful characterization of a methyl-DNA reader complex based on results from an interactomic screen and for the shortlisted proteins we already collected transcriptome and proteome data using knock-out lines. In this project we employed the APPP-A platform at IPK Gatersleben to assess growth and photosynthetic efficiency of these plants under normal and drought conditions. Preliminary data analysis of few time-points shows a strong reduction in size under drought stress as well as a lower photosynthetic efficiency. Data quality was high and is promising to detect potential differences between the lines. Visual difference in the performance of the lines can be already observed.