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Plant material preparation and salt imposition for PlantScreen analysis

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Protocol status: Working

We use this protocol and it's working

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Abstract

Reproducible and efficient high-throughput phenotyping approaches, combined with advances in genome sequencing, are facilitating the discovery of genes affecting plant performance. Salinity tolerance is a desirable trait that can be achieved through breeding, where most have aimed at selecting for plants that perform effective ion exclusion from the shoots. To determine overall plant performance under salt stress, it is helpful to investigate several plant traits collectively in one experimental setup. Hence, we developed a quantitative phenotyping protocol using a high-throughput phenotyping system, with RGB and chlorophyll fluorescence (ChlF) imaging, which captures the growth, morphology, color and photosynthetic performance of *Arabidopsis thaliana* plants in response to salt stress.

