

A software pipeline of model-assisted image analysis for the phenotyping of plant architectural development

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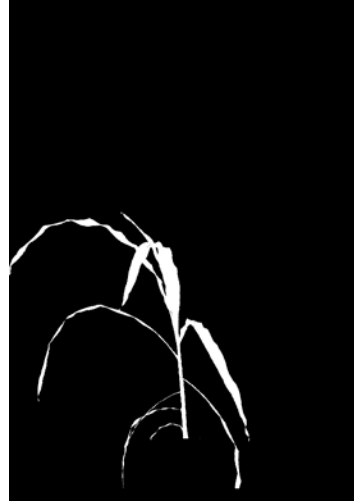


The Phenoarch phenotyping platform



- Monitoring of plants by imaging from several perspectives (sideviews, topviews).
- High-throughput (1650 plants)
- Possibility to investigate large number of environmental responses of genotypes to environmental conditions.

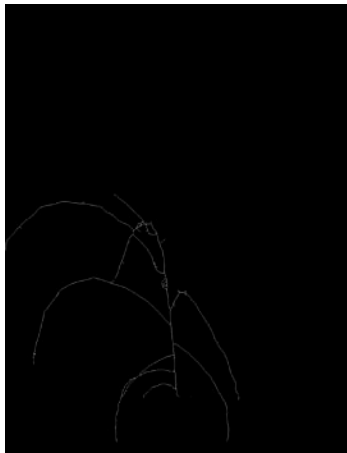
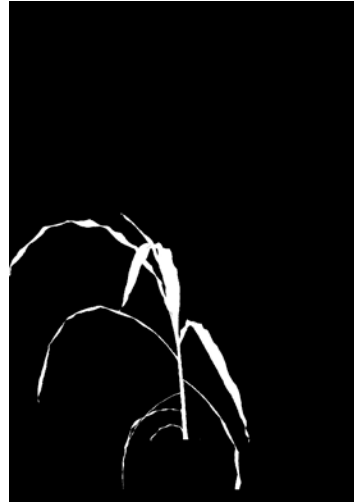
Exemplary processing pipeline



- Imaging
- Binarization
- 2D Analysis and extraction of morphological parameters
- 3D reconstruction
- Optimization by pre-knowledge
- Analyse plant Architecture and development of single plant organs

Optimization by pre-knowledge

Exemplary processing pipeline



- Initial steps –
Implementation of
the reconstruction
pipeline in
OpenAlea
 - Work on
demonstration
- Optimization by pre-knowledge**

Thank you

- For your attention and also to
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- Agreenskills