



Using FSPM to study the influence of cucumber canopy structure on salinity stress

Supervisor: Prof. Dr. Hartmut Stützel and Dr. Katrin Kahlen

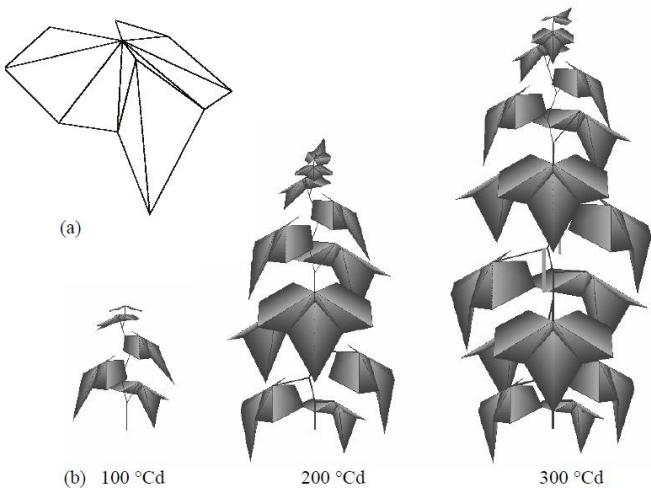
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Preliminary works (in L-Studio):

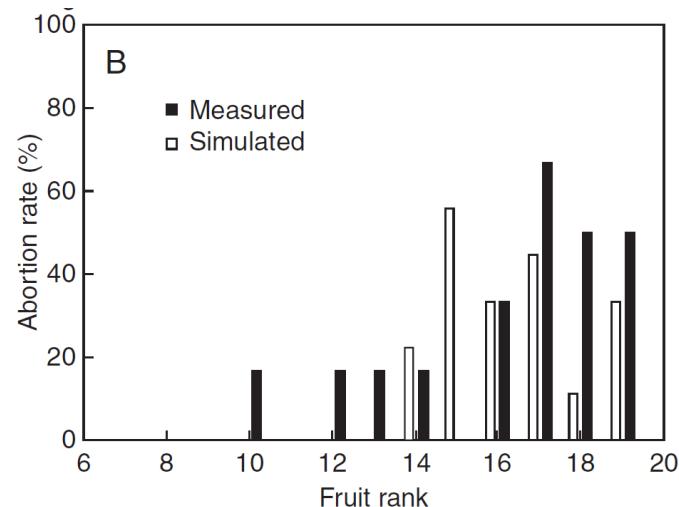
Cucumber morphology
(Kahlen, 2006) in *cpfg*



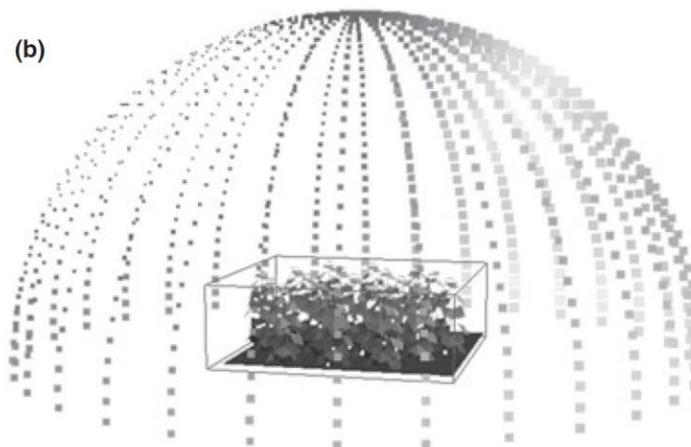
Leaf phototropism
(Kahlen *et al.* 2008) in *cpfg*



Dry mass partitioning and Farquhar model (Wiechers *et al.*, 2011) in *cpfg*

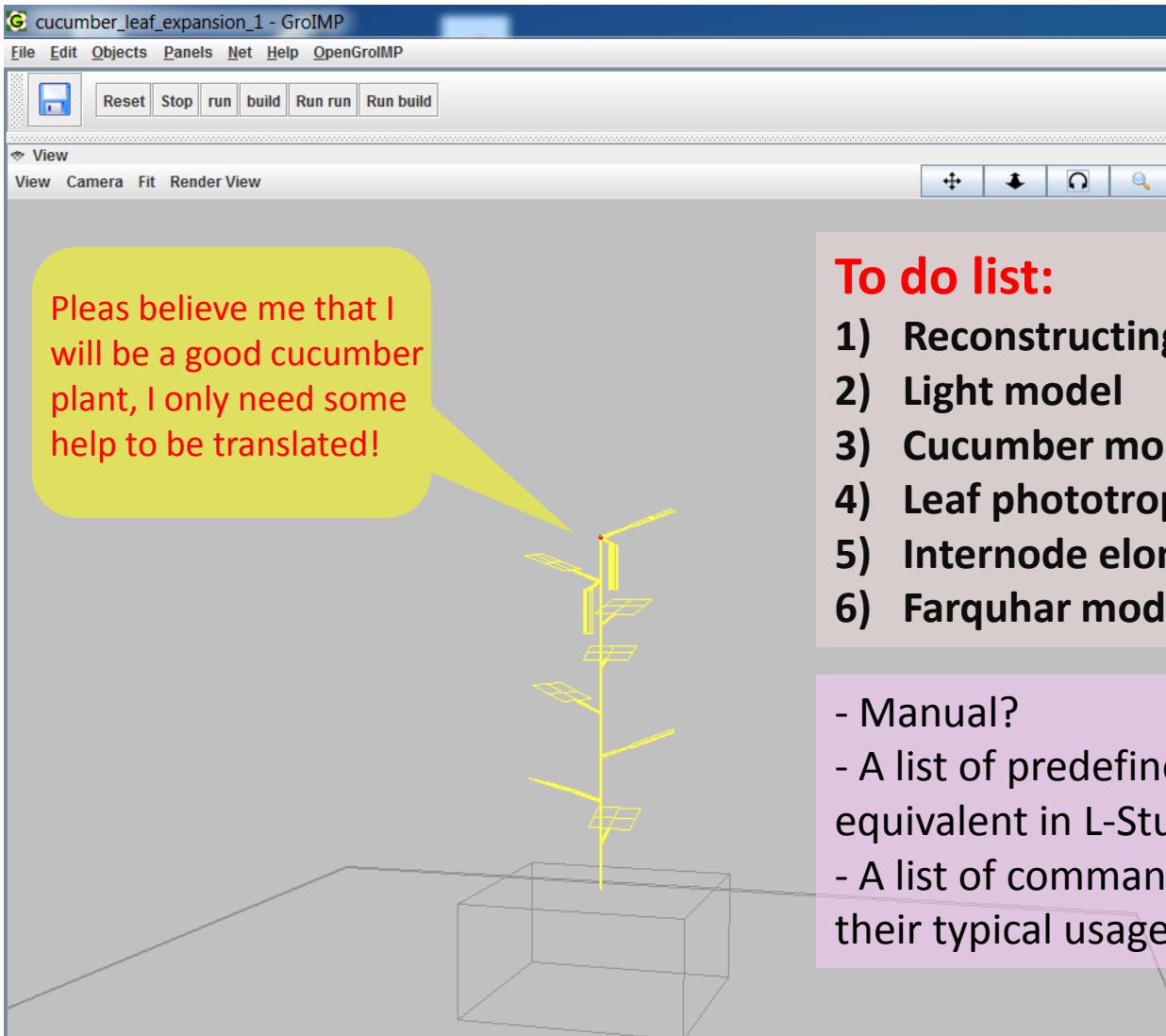


Final internode elongation
(Kahlen & Stützel, 2011) in *Ipfg*



Recent works (in GroIMP):

Translating our preliminary works in GroIMP



To do list:

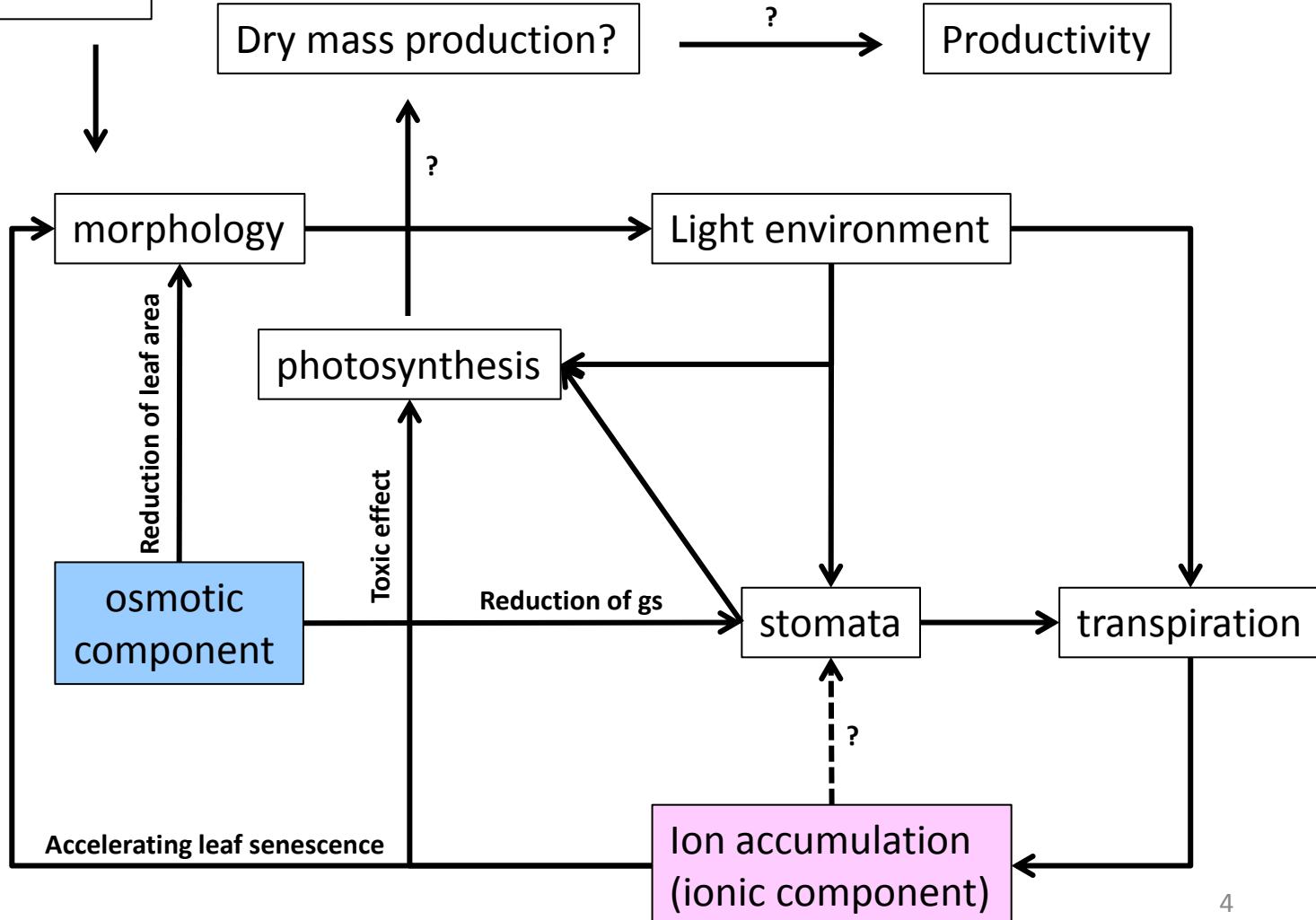
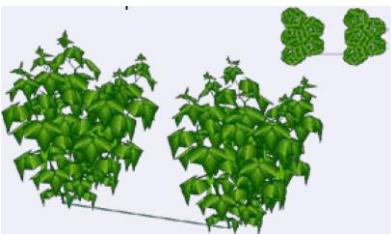
- 1) Reconstructing greenhouse structure
- 2) Light model
- 3) Cucumber morphology
- 4) Leaf phototropism (require R:fR light ratio)
- 5) Internode elongation
- 6) Farquhar model for photosynthesis

- Manual?
- A list of predefined modules and their equivalent in L-Studio (if possible)
- A list of commands and description about their typical usage

Future works (in GroIMP):

Using FSPM to study the influence of cucumber canopy structure on salinity stress

Different canopy structures



Thanks for your attention

