Simulation of biomass production

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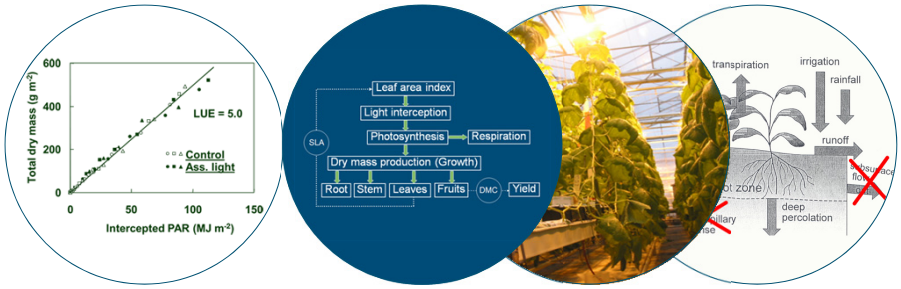
Introduction



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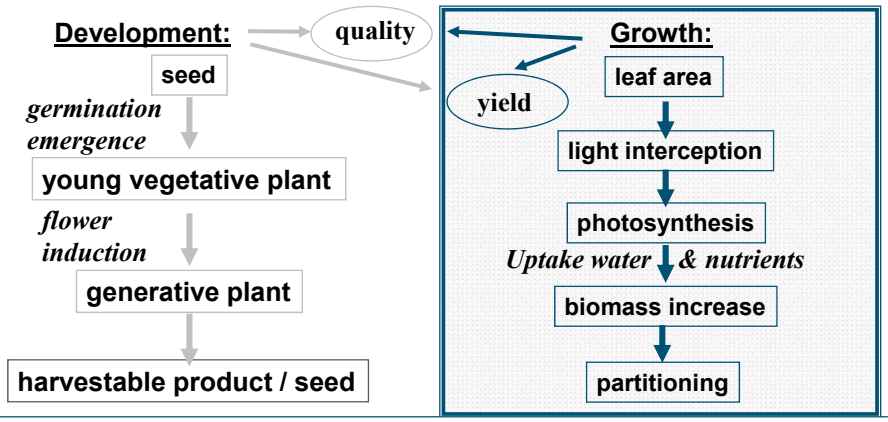
Simulation of biomass production
– *scope of the course* -



Influencing factors: light (*amount/quality/day length*), temperature (*level/day & night regime*), CO_2, humidity, EC, water, nutrients, plant density, pruning.
Interactions between climate factors and crop in a greenhouse.
Not considered: organic matter mineralization, specific nutrients, pests & diseases, plant breeding.

Simulation of biomass production
- *contents* -

- Crop models: what are they and why useful/important?
- General scheme of a photosynthesis-driven crop growth model
- Details of processes: - light interception
  - photosynthesis and respiration
  - dry matter production
  - *dry matter partitioning*

  (other subject - concept of sink strength)

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Simulation of biomass production
- *contents (cont.)* -

- Examples from
  - wheat
  - fruit vegetables (tomato, sweet pepper, cucumber)
  - cut chrysanthemum
- Educational methods
  - Theory: syllabus/hand-outs/examples/exercises
  - Training assignments: LINTUL, TOMSIM

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