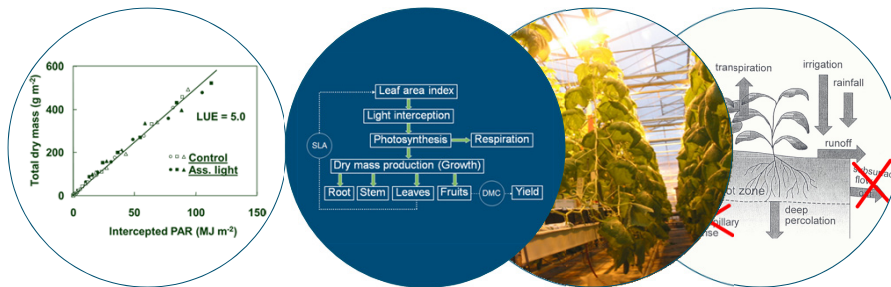


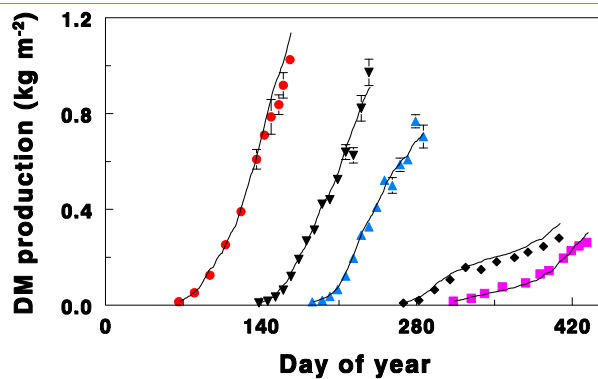
Simulation of biomass production

Compare model with experimental data



Simulation of biomass production

- Validation of dry matter production model -



Symbols and lines correlate with each other
 → Dry matter production is predicted well for all these situations using the model

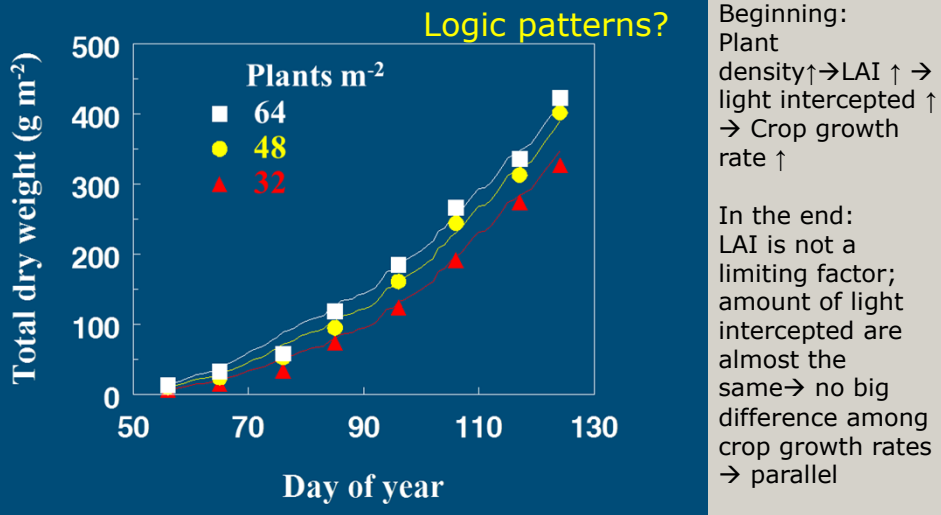
Measured (symbols) and simulated (lines: model TOMSIM) dry matter production for tomato in Dutch greenhouses at 5 planting dates. Relevant model input: daily outside radiation integral, hourly greenhouse temperatures and CO₂ concentrations, crop leaf area index.

(Heuvelink, 1995, Annals of Botany 75: 369-379).



Simulation of biomass production

- Measured and simulated total dry weights -

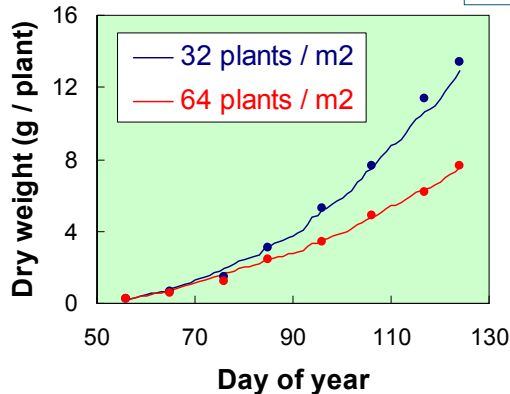


Simulation of biomass production

- Examples of simulation of crop growth -

Note: y-axis is per plant!

Chrysanthemum



From: J-H Lee, E. Heuvelink & L. Ortega, unpublished

Total dry weight (g m⁻²) = plant dry weight (g plant⁻¹) * plant density (plants m⁻²)