

Demonstration of heterogeneities in photosynthetic responses in a tomato leaf induced by Botrytis-infection. The fungus spores were applied via small cuts in the upper surface of the leaf. A light response curve (Light Curve) was measured with 20 s illumination periods at each intensity setting.

Observations:

- 1) The infections has spread heterogeneously over the leaf.
- 2) Infected parts show lowered effective PS II quantum yield (Yield), lowered photochemical quenching (qP) as well as increased nonphotochemical quenching (qN and NPQ). These features are characteristic of a botrytis-induced inhibition of carbondioxide fixation by the Calvin-Benson cycle.
- 3) The Light Curves of AOIs nr. 3, 1 and 5 reveal strong, medium and no inhibition, respectively.