

Abstract Only

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**PYRIDAZINONE/CYTOKININ ANTAGONISM REGULATES ENERGY DISTRIBUTION**

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As we have shown in other investigations by means of room and low temperature fluorescence kinetics, the pyridazinone (BASF 13-338-SAN 9785) acts on photosynthetic membranes (GRAF et al. 1984 *Advances in Photosynthesis Research IV*, 37, C. Sybesma ed.; GRAF et al. 1984, *Plant Physiol.* 75, 51, Suppl.). The present study indicates, that cytokinins can modify pyridazinone effects on photosynthetic membranes in an antagonistic way. A preincubation of kinetin (46.5  $\mu\text{M}$  2 d) can abolish herbicide effects. Such effects are evident for energy distribution (trapping T, grouping G, spillover S, dissipation D), state-1 state-2 change and LHC-phosphorylation. The data compiled in a synergetic way show the energy distribution constellation in thylakoids after 6 d herbicide treatment of *Petunia hybrida* plants.

