

## Abstract Only

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CYTOKININS IN DIFFERENT CELL COMPARTMENTS AFTER TREATMENT WITH [8-<sup>14</sup>C]-KINETINJ. A. Graf, B. Dietz and U. Kull, Biol. Institut, Universität Stuttgart, D-7000 Stuttgart 60, F.R. Germany.

Freshly isolated leaves of *Petunia hybrida* were vacuum-infiltrated (30 min) with [8-<sup>14</sup>C]-kinetin. After homogenization and separation of the chloroplasts fractions of nuclei, mitochondria and microsomes were obtained by density centrifugation in a sucrose gradient according to Schnarrenberger and Fock (1976). The labelling is highest absolutely in the chloroplasts but the specific label (in relation to mg protein) is highest in the nuclei, followed by chloroplasts and microsomes and lowest in the mitochondria. The specific activity in the nuclei does not rise above a distinct level ( $7 \times 10^4$  cpm/mg prot.) by incubation periods up to 3 hrs. The cytokinins were extracted from the different fractions, separated by sephadex LH-20 gel and HPL-chromatography and the labelling measured. After the 30 min incubation period the label of cytokinins in nuclei and microsomes is almost exclusively found in kinetin-riboside. The endogenous cytokinins zeatin, IPA and their ribosides as well as 2 or 3 unidentified more polar cytokinins are not labelled.