THE INFLUENCE OF STRIGOLACTONE ON AUXIN TRANSPORT EXPRESSION OF ELIPS AT DIFFERENT LIGHT CONDITIONS IN *ARABIDOPSIS THALIANA* WITH ELEVATED CYTOKININ LEVELS

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ABSTRACT

Cytokinins (CKs) are plant hormones that play important roles during plant growth and development. In particular, they influence chloroplast development, nutrient mobilization, cell cycle and senescence. Light quality and intensity are important factors that affect a range of plant processes. Early light induced proteins (ELIPs) belong to the superfamily of Chlorophyll *a*-binding proteins (CABs). They are expressed and accumulated during early phase of deetiolation and stress conditions. It is assumed that ELIPs play a photoprotective function under high light intensity. Some effects of CKs and light are identical. This fact led us to set up our experiments, whose aim is to identify changes at ELIP protein level in plants with elevated CK levels grown under different light intensities (100 and 330 µmol m^{-2} s^{-1}). In our work we revealed positive effect of CKs on ELIPs accumulation in light dependent manner. ELIPs accumulation was elevated in CK treated plants under used light conditions. We suppose, CKs and light action is additive.

Key words: cytokinins, ELIPs, western blot.

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