

PHOSPHOPROTEOME DYNAMICS IN RESPONSE TO CYTOKININ TREATMENT IN *ARABIDOPSIS*

Divířková E., Brzobohatý B.

Department of Molecular Biology and Radiobiology, Faculty of Agronomy, Mendel University of Agriculture and Forestry in Brno, Zemedelska 1, 613 00 Brno, Czech Republic

E-mail: eva.diviskova@mendelu.cz

ABSTRACT

Cytokinins have been implicated in many developmental processes and environmental responses of plants, including the regulation of cell division, chloroplast development, apical dominance, anthocyanin production, leaf senescence and others. To ensure appropriate responses to stimuli, organisms have evolved signaling networks, and signal transduction often relies on posttranslational modifications of their protein components. One of the most abundant posttranslational modifications is phosphorylation of proteins and peptides. Phosphorylation is a crucial importance in regulatory mechanisms and signaling pathways.

Key words: cytokinin, phosphorylation, posttranslational modification

Acknowledgments: This work is supported by LC06034 and 1M06030.