

Ildikó Valkai



WORKPLACE

Arabidopsis Molecular Genetics Group, Biological Research Centre, Institute of Plant Biology

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EDUCATION

- 2019 PhD, Doctoral School of Biology, Faculty of Science and Informatics, University of Szeged, Szeged (Hungary)
- 2001 M.Sc. in Horticulture (speciality: Genetics and Plant Breeding), University of Horticulture and Food Industry, Budapest (Hungary)

CURRENT POSITION

- 2022- Arabidopsis Molecular Genetics Group, Biological Research Centre, Institute of Plant Biology, Szeged (Hungary)
- Position: research fellow

PREVIOUS POSITIONS

- 2019-2022 Laboratory of Water and Food Microbiology, Department of Public Health, Laboratory Division, Governmental Office of Csongrád-Csanád County, Szeged (Hungary)
- Position: head of laboratory
- 2014-2019 Arabidopsis Molecular Genetics Group, Institute of Plant Biology, Szeged Biological Research Centre, Szeged (Hungary)
- position: research fellow
- 2009-2014 Regulation of Plant Morphogenesis Group, Institute of Plant Biology, Szeged Biological Research Centre, Szeged (Hungary)
- position: research fellow
- 2004-2006 Plant Photo- and Chronobiology Group, Institute of Plant Biology, Szeged Biological Research Centre, Szeged (Hungary)
- position: research fellow

2001-2004 Plant Photo- and Chronobiology Group, Institute of Plant Biology, Szeged
Biological Research Centre, Szeged (Hungary)

position: Ph.D. student

PUBLICATIONS:

Kenesi E., Kolbert Zs., Kaszler N., Klement E., Ménesi D, Molnár Á., **Valkai I.**, Feigl G., Rigó G., Cséplő Á., Lindermayr, C., Fehér A.: The ROP2 GTPase Participates in Nitric Oxide (NO)-Induced Root Shortening in Arabidopsis. *Plants* 12 (4), 750-752, 2023

Valkai I., Kénesi E., Domonkos I., Ayaydin F., Tarkowská D., Strnad, M., Faragó A., Bodai L., Fehér A.: The Arabidopsis RLCK VI_A2 kinase controls seedling and plant growth in parallel with gibberellin. *International Journal of Molecular Sciences* 21 (19), 7266-7269, 2020

Bernula D., Benkő P., Kaszler N., Domonkos I., **Valkai I.**, Szóllósi R., Ferenc G., Ayaydin, F., Fehér A., Gémes K.: Timely removal of exogenous cytokinin and the prevention of auxin transport from the shoot to the root affect the regeneration potential of Arabidopsis roots. *Plant Cell, Tissue and Organ Culture (PCTOC)* 140 (2), 327-339, 2020

Baba, Al., **Valkai I.**, Labhane, NM., Koczka L., Andrásí N., Klement E., Darula Z., Medzihradzsky KF., Szabados L., Fehér A., Rigó G., Cséplő Á.: CRK5 Protein Kinase Contributes to the Progression of Embryogenesis of Arabidopsis thaliana. *International Journal of Molecular Sciences* 20 (24), 6120-6125, 2019

Baba, Al., Andrásí N., **Valkai I.**, Gorcsa T., Koczka L., Darula Z., Medzihradzsky KF., Szabados L., Fehér A., Rigó G., Cséplő A.: AtCRK5 protein kinase exhibits a regulatory role in hypocotyl hook development during skotomorphogenesis. *International Journal of Molecular Sciences* 20 (14), 3432-3439, 2019

Baba, Al., Rigó G., Ayaydin, F., Rehman, AU., Andrásí N., Zsigmond L., **Valkai I.**, Urbancsok J., Vass I., Pasternak, T., Palme, K., Cséplő A.: Functional Analysis of the Arabidopsis thaliana CDPK-Related Kinase Family: AtCRK1 Regulates Responses to Continuous Light. *International Journal of Molecular Sciences* 19 (5), 1282, 29p. 2018

Lajkó DB., **Valkai I.**, Domoki M., Ménesi D., Ferenc G., Ayaydin, F., Fehér A.: In silico identification and experimental validation of amino acid motifs required for the Rho-of-plants GTPase-mediated activation of receptor-like cytoplasmic kinases. *Plant cell reports* 37, 627-639, 2018

Faragó D., Sass L., **Valkai I.**, Andrásí N., Szabados L.: PlantSize Offers an Affordable, Non-destructive Method to Measure Plant Size and Color in Vitro. *Frontiers in Plant Science* 9, 21912p., 2018

Rigó G. & **Valkai I.**, Faragó D., Kiss E., Houdt, SV., Steene, NV., Hannah, MA., Szabados L.: Gene mining in halophytes: functional identification of stress tolerance genes in *Lepidium crassifolium*. *Plant, Cell & Environment* 39 (9), 2074-2084, 2016

LANGUAGE

English (fluent)