
CENTRE OF THE REGION HANÁ FOR BIOTECHNOLOGICAL AND AGRICULTURAL RESEARCH

a) Kategorie „Základní výzkum“ (Category “Basic research”)

- **Tomáš Takáč:** Takáč T. et al. (2013) Vesicular trafficking and stress response coupled to PI3K inhibition by LY294002 as revealed by proteomic and cell biological analysis. **J. Proteome Res.** **12**, 4435–4448
- **Ivo Chamrád:** Chamrád I. et al. (2013) A miniaturized chemical proteomic approach for target profiling of clinical kinase inhibitors in tumor biopsies. **J. Proteome Res.** **12**, 4005-4017
- **Tomáš Gucký:** Gucký T. et al. (2013) A novel series of highly potent 2,6,9-trisubstituted purine cyclin-dependent kinase inhibitors. **J. Med. Chem.** **56**, 6234-6247
- **Beáta Petrovská:** Petrovská B. et al. (2013) Overexpressed TPX2 causes ectopic formation of microtubular arrays in the nuclei of acentrosomal plant cells. **J. Exp. Bot.** **64**, 4575-4587
- **David Kopecký:** Kopecký D. et al. (2013) Flow sorting and sequencing meadow fescue chromosome 4F. **Plant Physiol.** **163**, 1323-1337
- **Petr Galuszka:** Mrázová K. et al. (2013) Overexpression of cytokinin dehydrogenase genes in barley (*Hordeum vulgare* cv. Golden Promise) fundamentally affects morphology and fertility. **PLOS ONE** **8**: e79029
- **Roman Kouřil:** Kouřil R. et al. (2013) High-light vs. low-light: Effect of light acclimation on photosystem II composition and organization in *Arabidopsis thaliana*. **Biochim. Biophys. Acta-Bioenerg.** **1827**, 411–419
- **Olga Šamajová and Georgis Komis:** Šamajová O. et al. (2013) Emerging topics in the cell biology of mitogen-activated protein kinases. **Trends Plant Sci.** **18**, 140-148
- **Jana Čížková:** Čížková J. et al. (2013) Molecular analysis and genomic organization of major DNA satellites in banana (*Musa* spp.). **PLoS ONE** **8**: e54808
- **Vojtěch Franc:** Franc V. et al. (2013) Elucidating heterogeneity of IgA1 hinge-region O-glycosylation by use of MALDI-TOF/TOF mass spectrometry: Role of cysteine alkylation during sample processing. **J. Proteomics** **92**, 299–312

b) Kategorie „Aplikovaný výzkum“ (Category “Applied research”)

- **Marek Zatloukal:** Zatloukal M. et al., Substituted 6-(2-hydroxybenzylamino)purine derivatives, their use as medicaments and compositions containing these derivatives, **US patent No. 8,492,391**
- **Petr Ilík:** Ilík P. et al. (2013) Methodology for determination of high-temperature plant stability, **Certified methodology**
- **Karel Dušek:** Dušek K., Dušková E., (2013) A tool for therapy of bees, **Czech utility model No. 24930**

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c) Kategorie „Výsledky v grantových soutěžích“ (Category “Results in research grant competitions”)

- **Mária Šmehilová:** Analysis of the role of cytokinin in regulation of leaf senescence and nitrogen mobilization in transgenic cereals and recombinant substitute lines with improved grain protein content, **7AMB13AR014**.
- **Ludmila Ohnoutková:** Study of the functional characteristics of ABC transporter orthologs in barley (*Hordeum vulgare* L.), **LH12082**.
- **Jan Bartoš:** Chromosomal arm 3DS of common wheat: sequence and function in the allopolyploid genome, **GA13-08786S**.

d) Kategorie „Smluvní výzkum“ (Category “Contracted research”)

- **Jan Šafář:** Preparation of BAC libraries from the wheat chromosomes 2B and 4B, **The Institute of Cytology and Genetics, Novosibirsk, Russia**
- **Hana Šimková:** Preparation of BAC library from the wheat chromosome 5BL, **The Genome Analysis Centre, Norwich, UK**
- **Mária Čudejková:** Genetic modification of *Claviceps purpurea* used to increase the production of ergot alkaloids, **TEVA Czech Industries s.r.o.**
- **Edita Holásková:** Verification of production of antimicrobial peptides in the grain of transgenic barley, **Úsovsko a.s.**
- **Tibor Beres:** Ingenol: investigation of occurrence and development of method for content determination. Ingenol: průzkum výskytu a vývoj metody na stanovení obsahu, **TEVA Czech Industries s.r.o.**