

Centrum regionu Haná pro zemědělský a biotechnologický výzkum

## CENA ŘEDITELE CRH ZA VÝSLEDKY VÝZKUMNÉ ČINNOSTI ZA ROK 2016

### KATEGORIE „VĚDECKÁ PUBLIKACE“ (SCIENTIFIC PAPERS)

#### 1. Lukáš Nosek

**Nosek L**, Semchonok D, Boekema EJ, Ilík P, Kouřil R (2016) Structural variability of plant photosystem II megacomplexes in thylakoid membranes. *Plant Journal*, in press, DOI: 10.1111/tpj.13325.

IF = 5,468; journal ranking 13/209 (6 %)

#### 2. Barbora Baránková

**Baránková B**, Lazár D, Nauš J (2016) Analysis of the effect of chloroplast arrangement on optical properties of green tobacco leaves. *Remote Sensing of Environment* 174, 181-196.

IF = 5,881; journal ranking 10/225 (4 %) Environmental Sciences, 1/28 Remote Sensing

#### 3. Roman Kouřil

**Kouřil R**, Nosek L, Bartoš J, Boekema EJ, Ilík P (2016) Evolutionary loss of light-harvesting proteins LhcB6 and LhcB3 in major land plant groups – break-up of current dogma. *New Phytologist* 210, 808-814.

IF = 7,210; journal ranking 5/209 (2 %)

#### 4. Nuria De Diego

Sánchez-López AM\*, Baslam M\*, **De Diego N\***, Muñoz FJ, Bahaji A, Almagro G, Ricarte-Bermejo A, García-Gómez P, Li J, Humplík JF, Novák O, Spíchal L, Doležal K, Baroja-Fernández E, Pozueta-Romero J (2016) Volatile compounds emitted by diverse phytopathogenic microorganisms promote plant growth and flowering through cytokinin action. *Plant, Cell and Environment*, in press, DOI: 10.1111/pce.12759.

IF = 6,169; journal ranking 10/209 (5 %)

Sánchez-López AM\*, Bahaji A\*, **De Diego N\***, et al. (2016) Plant response to fungal volatiles is triggering by mechanisms independent of plastid phosphoglucose isomerase. *Plant Physiology*, in press, DOI:10.1104/pp.16.00945.

IF = 6,28; journal ranking 8/209 (4 %)

\* shared first authorship

#### 5. Mária Šmehilová

**Šmehilová M**, Dobrůšková J, Novák O, Takáč T, Galuszka P (2016) Cytokinin-specific glycosyltransferases possess different roles in cytokinin homeostasis maintenance. *Frontiers in Plant Science* 7, Article Number: 1264.

IF = 4,495; journal ranking 15/209 (7 %)

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**6. Tomáš Takáč**

Takáč T, Vadovič P, Pechan T, Luptovčiak I, Šamajová O, Šamaj J (2016) Comparative proteomic study of *Arabidopsis* mutants *mpk4* and *mpk6*. *Scientific Reports* 6, 28306.

IF = 5,228; journal ranking 7/62 (11 %)

**7. Dominik Novák, Anna Kuchařová, Miroslav Ovečka**

Novák D\*, Kuchařová A\*, Ovečka M\*, Komis G, Šamaj J (2016) Developmental nuclear localization and quantification of GFP-tagged EB1c in *Arabidopsis* root using light-sheet microscopy. *Frontiers in Plant Science* 6, Article Number: 1187.

IF = 4,495; journal ranking 15/209 (7 %)

\* shared first authorship

**8. Helena Toegelová (roz. Staňková)**

Staňková H, Hastie AR, Chan S, Vrána J, Tulfová Z, Kubaláková M, Visendi P, Hayashi S, Luo M, Batley J, Edwards D, Doležel J, Šimková H (2016) BioNano genome mapping of individual chromosomes supports physical mapping and sequence assembly in complex plant genomes. *Plant Biotechnology Journal* 14, 1523-1531.

IF 6,090; journal ranking 11/209 (5 %)

**9. Štěpán Stočes**

Stočes Š, Ruttink T, Bartoš J, Studer B, Yates S, Zwierzykowski Z, Abrouk M, Roldán-Ruiz I, Książczyk T, Rey E, Doležel J, Kopecký D (2016) Orthology guided transcriptome assembly of Italian ryegrass and meadow fescue for single-nucleotide polymorphism discovery. *Plant Genome* 9, 1-14.

IF 3,509; journal ranking 29/209 (14 %)

**10. Eva Komíneková**

Komíneková E, Dreiseitl A, Malečková E, Doležel J, Valárik M (2016) Genetic diversity of *Blumeria graminis* f. sp. *hordei* in central Europe and its comparison with Australian population. *PLoS ONE* (accepted).

IF 3,057; journal ranking 11/63 (17 %)

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**KATEGORIE „ZÍSKÁNÍ VĚDECKÉHO PROJEKTU“ (GRANTS)**

**1. Andrej Pavlovič**

projekt GA ČR, GJ16-07366Y: Regulation of enzyme activities in carnivorous plants (2016 - 2018)

**2. Petr Galuszka**

projekt GA ČR, GA16-10602S: The influence of phytohormones produced by Hypocreales fungi on the plant pathogenesis process (2016 - 2018)

**3. Georgios Komis**

projekt GA ČR, GA16-24313S: Revisiting microtubule organization during plant cell division, growth and morphogenesis by superresolution microscopy (2016–2018)

**4. Jan Vrána**

projekt GA ČR, GA16-16992S: Chromosome genomics of *Agropyron cristatum*, a wild relative of wheat (2016 – 2018)

**5. Michael Abrouk**

projekt GA ČR, GJ16-07155Y: Characterization of meiotic recombination regions in bread wheat (2016–2018)

**KATEGORIE „REALIZACE SMLUVNÍHO VÝZKUMU“ (CONTRACTUAL RESEARCH)**

**1. Ankush Prasad**

**Ankush Prasad**, Pavel Pospíšil (2016) Specialised analyses based on developed and published method, foreign company, 2 contracts