

DIRECTOR'S AWARD FOR EXCELLENCE 2020

SCIENTIFIC PUBLICATION:

1. **Lukáš Spíchal** (Department of Chemical Biology and Genetics) and **Ondřej Plíhal** (Laboratory of Growth Regulators of IEB AS CR)

Kubiasová K, Montesinos JC, Šamajová O, Nisler J, Mik V, Semerádová H, Plíhalová L, Novák O, Marhavý P, Cavallari N, Zalabák D, Berka K, Doležal K, Galuszka P, Šamaj J, Strnad M, Benková E, **Plíhal O, Spíchal L** (2020) Cytokinin fluoroprobe reveals multiple sites of cytokinin perception at plasma membrane and endoplasmic reticulum.

Nature Communications 11; 4285.

IF 12.121; journal ranking 6/71 (Multidisciplinary Sciences) (8 %)

2. **Despina Samakovli** (Department of Cell Biology)

Samakovli D, Tichá T, Vavrdová T, Ovečka M, Luptovčiak I, Zapletalová V, Kuchařová A, Křenek P, Krasnylenko Y, Margaritopoulou T, Roka L, Milioni D, Komis G, Hatzopoulos P, Šamaj J (2020) YODA-HSP90 module regulates phosphorylation-dependent inactivation of SPEECHLESS to control stomatal development under acute heat stress in Arabidopsis.

Molecular Plant 13, 612-633.

IF 12.084; journal ranking 5/234 (Plant Sciences) (2 %)

3. **Michaela Tichá (Škoríková)** (Department of Cell Biology)

Tichá M, Illésová P, Hrbáčková M, Basheer J, Novák D, Hlaváčková K, Šamajová O, Niehaus K, Ovečka M, Šamaj J (2020) Tissue culture, genetic transformation, interaction with beneficial microbes and modern bio-imaging techniques in alfalfa research.

Critical Reviews in Biotechnology 40, 1265-1280.

IF 8.108; journal ranking 11/156 (Biotechnology and Applied Microbiology) (7 %)

4. **Roman Kouřil** (Department of Biophysics)

Kouřil R, Nosek L, Opatíková M, Arshad R, Semchonok DA, Chamrád I, Lenobel R, Boekema EJ, Ilík P (2020) Unique organization of photosystem II supercomplexes and megacomplexes in Norway spruce.

Plant Journal 104, 215-225.

IF 6.141; journal ranking 13/234 (Plant Sciences) (6 %)

5. **Ondřej Kocáb** (Department of Biophysics)

Kocáb O, Jakšová J, Novák O, Petřík I, Lenobel R, Chamrád I, Pavlovič A (2020) Jasmonate-independent regulation of digestive enzyme activity in the carnivorous butterwort *Pinguicula x Tina*. Journal of Experimental Botany 71, 3749-3758.

IF 5.908; journal ranking 14/234 (Plant Sciences) (6 %)

6. Aditya Kumar (Department of Biophysics)

Kumar A, Prasad A, Sedlářová M, Ksas B, Havaux M, Pospíšil P (2020) Interplay between antioxidants in response to photooxidative stress in Arabidopsis.

Free Radical Biology and Medicine 160, 894-907

IF 6.17; journal ranking 41/297 (Biochemistry and Molecular Biology) (14 %)

7. Alžběta Němečková (Centre of Structural and Functional Plant Genomics of IEB AS CR)

Němečková A, Koláčková V, Vrána J, Doležel J, Hřibová E (2020) DNA replication and chromosome positioning throughout the interphase in three-dimensional space of plant nuclei.

Journal of Experimental Botany 71, 6262-6272.

IF 5.908; journal ranking 14/234 (Plant Sciences) (6 %)

8. Anna Nowicka (Centre of Structural and Functional Plant Genomics of IEB AS CR)

Nowicka A, Tokarz B, Zwyrtková J, Tomašítková ED, Procházková K, Ercan U, Finke A, Rozhon W, Poppenberger B, Otmar M, Niezgodzki I, Krečmerová M, Schubert I, Pečinka A (2020) Comparative analysis of epigenetic inhibitors reveals different degrees of interference with transcriptional gene silencing and induction of DNA damage.

Plant Journal 102, 68-84.

IF 6.141; journal ranking 13/234 (Plant Sciences) (6 %)

9. Sanja Cavar Zeljkovic (Department of Phytochemistry)

Zeljkovic SC, Komzakova K, Siskova J, Karalija E, Smekalova K, Tarkowski P (2020) Phytochemical variability of selected basil genotypes.

Industrial Crops and Products 157; 112910.

IF 4.244; journal ranking 8/91 (Agronomy) (9 %)