PROGRAMME OF 15TH CONFERENCE OF THE CZECH SOCIETY OF EXPERIMENTAL PLANT BIOLOGY, **PLANT BIOLOGY CS 2019** ČESKÉ BUDĚJOVICE AUGUST 27-30, 2019

TUESDAY, AUGUST 27

SESSION 1: PLANT-ATMOSPHERE INTERACTIONS

CHAIRPERSON: J. ŠANTRŮČEK, D. VRÁBL

TIME	SPEAKER	TOPIC	HALL
<mark>9:45-10:25</mark>	D. Tholen	THE FUNCTIONAL ANATOMY OF THE PLANT LEAF	B2
10:25-10:40	M. Hronková	STOMATAL DEVELOPMENT IS TIGHTLY CONNECTED WITH SYNTHESIS OF THE EPICUTICULAR WAXES IN MODEL PLANT ARABIDOPSIS THALIANA	B2
10:40-10:55	J. Neuwirthová	EFFECT OF THE LIGHT-INDUCED CHANGES IN LEAF ANATOMY ON INTERCELLULAR AND CELLULAR COMPONENTS OF MESOPHYLL RESISTANCE IN FAGUS SYLVATICA	B2
10:55-11:10	M. Vráblová	WATER PERMEABILITY OF ISOLATED LEAF CUTICLES MEASURED BY SURFACE PLASMON RESONANCE	B2
11:10-11:25	R. Ryplová	PLANT — ATMOSPHERE INTERACTIONS - GENERAL ILLITERACY OF CZECH YOUNG GENERATION	B2
FLASH TALKS	(~5 min each)		
	M. Barboričová	PHENOMIC APPROACHES FOR THE IDENTIFICATION OF GENETIC SOURCES OF WHEAT TOLERANT TO CLIMATIC EXTREMES	B2
	E. CHOVANČEK	HEAT WAVE AFFECTS PHOTOSYNTHETIC PARAMETERS OF DIFFERENT VARIETIES OF WHEAT DIFFERENTLY	B2
	D. VRÁBL	HOW ABSCISIC ACID MODULATES RIBUSLOSE-1-5- BISPHOSPHATE CARBOXYLASE/OXYGENASE ACTIVITY	B2

SESSION 2: CELL BIOLOGY AND CELL CYCLE

CHAIRPERSON: V. ŽÁRSKÝ, K. BIŠOVÁ

<mark>9:45-10:25</mark>	Z. Magyar	THE GREEN RETINOBLASTOMA-E2F PATHWAY: RE- EVALUATING THEIR FUNCTIONS IN THE REGULATION OF PLANT CELL CYCLE AND DEVELOPMENT	C2
10:25-10:40	K. Bišová	COORDINATION BETWEEN GROWTH AND CELL CYCLE — CP RELATED GENES AND PROTEINS	C2
10:40-10:55	V. ŽÁRSKÝ	3 SUBFAMILIES OF PLANT EXO70 EXOCYST SUBUNITS: FUNCTIONS IN EXOCYTOSIS, AUTOPHAGY, CELL WALL BIOGENESIS, SECONDARY METABOLISM AND DEFENCE	C2
10:55-11:10	V. DЕМКО	CONSTRUCTION OF THE GENE REGULATORY MAP OF PHYSCOMITRELLA PATENS LIFE CYCLE REVEALS KEY COMPONENTS OF THE DEVELOPMENTAL TRANSITIONS	C2

		AFFECTED BY MEMBRANE-ANCHORED CALPAIN DEFECTIVE KERNEL 1	
11:10-11:25	M. MARTINKA	MODIFICATION OF CELL WALL COMPOSITION AND ARCHITECTURE BY SILICON IN PLANTS	C2
FLASH TALKS	(~5 min each)		
	V. BIALEVICH	COMMITMENT POINT RELATED GENES AND THE CELL CYCLE PROGRESSION	C2
	M. Slavková	PRODUCTION OF CHLAMYDOMONAS REINHARDTII MUTANTS GROWING IN HIGH DEUTERATED WATER	C2
	I. IVANOV	Enhancing starch production of the green microalga Chlamydomonas reinhardtii through sub-lethal temperature treatment	C2

SESSION 3: PHOTOSYNTHESIS

CHAIRPERSON: R. SOBOTKA

<mark>14:15-14:55</mark>	M. P. JOHNSON	REGULATION AND FUNCTION OF DYNAMIC THYLAKOID STACKING	B2
14:55-15:10	R. Kaňa	PIGMENT-PROTEIN COMPLEXES FORM STABLE MICRODOMAINS IN CYANOBACTERIAL THYLAKOIDS	B2
15:10-15:25	B. REITER	THE ROLE OF ATCGL20 IN LATE PLASTID RIBOSOME BIOGENESIS AND ITS IMPACT ON PHOTOSYNTHESIS	B2
15:25-15:40	E. KOBERCOVÁ	UNCOVERING THE ROLE OF PLASTIDIC GLUTAMINE SYNTHETASE GS2 IN ARABIDOPSIS THALIANA	B2
15:40-15:55	M. Durchan	SPECTROSCOPIC PROPERTIES OF A CAROTENOID TRIPLET STATE IN LHCII ARE INDEPENDENT OF CAROTENOID COMPOSITION	B2
15:55-16:10	E. KUTHANOVÁ Trsková	Antenna sensitivity to protons determines photosynthetic light harvesting strategy	B2

SESSION 4: PLANT NUTRITION AND VASCULAR TRANSPORT

CHAIRPERSON: V. GLOSER, L. PLAVCOVÁ

<mark>14:15-14:45</mark>	S. Rosner	THE CONIFER CURVE: FAST PREDICTION OF HYDRAULIC CONDUCTIVITY LOSS AND VULNERABILITY TO CAVITATION	C2
14:45-15:15	C. M. GEILFUS	THE APOPLASTIC LEAF PH: SIGNAL WITH FUNCTIONAL IMPACT UNDER CHLORINE SALINITY	C2
15:15-15:30	L. Plavcová	PHYSIOLOGICAL RESPONSE OF APPLE TREES TO DROUGHT	C2
15:30-15:45	R. Jupa	TREE ACCLIMATION TO LIMITED WATER AVAILABILITY: LINKING INTERVESSEL LATERAL CONTACT AND VULNERABILITY TO EMBOLISM	C2
15:45-16:00	V. GLOSER	CAN NITRATE MODULATE EARLY PLANT RESPONSE TO DROUGHT?	C2
FLASH TALKS	(~5 min each)		
	M. HALKA	COMPARISON OF IODINE BIOFORTIFICATION OF SOLANUM LYCOPERSICIUM L. USING KI AND KIO3 AS WELL AS	C2

ORGANIC FORMS AS IODOSALICYLATES AND
IODOBENZOATES

B. BOKOR IDENTIFICATION OF GENES RESPONSIBLE FOR SILICON C2
TRANSPORT AND ACCUMULATION IN COCONUT PALM
PLANTS

I. RAIMANOVÁ COMPARISON OF NITRATE UPTAKE AND UTILIZATION IN C2
TRITICUM AESTIVUM L. AND TRITICUM DICOCCUM
SCHRANK

SESSION 5: GLOBAL CHANGE, LEAF & SHOOT ADAPTATIONS

CHAIRPERSON: J. ALBRECHTOVÁ

<mark>16:45-17:25</mark>	<mark>A. Ač</mark>		<mark>B2</mark>
17:25-17:55	R. PLICHTA	BEECH SEEDLINGS ARE HIGHLY RESISTANT TO DROUGHT	B2
		STRESS, BUT THEIR ADAPTABILITY VARIES OVER THE	
		GROWING SEASON	
17:55-18:10	Z. LHOTÁKOVÁ	What is the best practice for taking ground truth	B2
		FOR HYPERSPECTRAL AIRBORNE REMOTE SENSING IN	
		CONIFERS WITH LONG-LIVING NEEDLES? THE OF NORWAY	
		SPRUCE DOMINATED GEOMON WATERSHEDS	
FLASH TALKS	(~5 min each)		B2
	E. Mašírová	INTERSEXUAL DIFFERENCES IN STINGING NETTLE (URTICA	B2
		dioica L.)	
	Z. Kubínová	VIRTUAL REALITY APPROACH FOR CHLOROPLAST DENSITY	B2
		ESTIMATION FROM CONFOCAL MICROSCOPIC 3D IMAGES	
	R. GEBAUER	PREDICTION OF LENGTH OF TREE SURVIVAL DURING	B2
		DROUGHT STRESS: A CRITICAL ASSESMENT OF METHODS	
	E. NEUWIRTHOVÁ	RELATION OF LEAF STRUCTURAL TRAITS TO LEAF SPECULAR	B2
		AND TOTAL REFLECTANCE IN HIERACIUM GENUS SPECIES	
	J. Šantrůček	ACCLIMATION OF INTRINSIC WATER USE EFFICIENCY, CI/CA	B2
		RATIO AND STOMATAL CONDUCTANCE IN NORWAY SPRUCE	
		IN RESPONSE TO CENTURY-LONG GRADUAL CO2 ELEVATION	

SESSION 6: MOLECULAR PLANT EVOLUTION

CHAIRPERSON: H. ŠTORCHOVÁ, C. LAFON PLACETTE

16:45-17:25	L. YANT	THE PERVASIVE ADAPTIVE CONSEQUENCES OF GENOME DUPLICATION	C2
17:25-17:45	M. ZÁVODNÍK	NEW INSIGHTS INTO TELOMERE MAINTENANCE IN A. THALIANA	C2
17:45-18:05	H. ŠTORCHOVÁ	THE EVOLUTION OF THE MULTICHROMOSOMAL MITOCHONDRIAL GENOME IN SILENE VULGARIS	C2
18:05-18:25	C. LAFON PLACETTE	GENETICS AND EVOLUTION OF HYBRIDIZATION BARRIERS IN ARABIDOPSIS SPP.	C2
FLASH TALKS	(~5 min each)		
	K. Raabe	From nothing to 3D models: conservation of eIF3 subunit A in plants	C2

POSTER SESSION I

18:45-19:45 **TOPICS 1-10**

WEDNESDAY, AUGUST 28

SESSION 7: STRESS BIOLOGY, SECONDARY METABOLITES

CHAIRPERSON: R. VAŇKOVÁ

TIME	SPEAKER	TOPIC	HALL
9:45-10:30	G. GALIBA	REGULATION, SIGNALING AND METABOLIC BACKGROUND OF LIGHT INDUCED COLD ACCLIMATION IN CEREALS	<mark>B2</mark>
10:30-10:50	P. PAĽOVE-BALANG	CHANGES OF ISOFLAVONOID BIOSYNTHESIS ON ABIOTIC STRESS IN MODEL PLANTS LOTUS JAPONICUS.	B2
10:50-11:10	I. Pavlović	Stress Physiology of Brassica Crops upon Drought and Salinity: Hormonal Cross-talk and Defense Response	B2
11:10-11:25	P. VÍTÁMVÁS	DEHYDRIN ACCUMULATION IN CEREAL RESPONSE TO ABIOTIC STRESSES	B2
11:25-11:45	S. Přerostová	THE IMPACT OF ACCLIMATION ON HORMONAL RESPONSES TO FREEZING STRESS IN LOLIUM PERENNE	B2

SESSION 14: PLANT REPRODUCTION

CHAIRPERSON: D. HONYS, H. ROBERT BOISIVON

<mark>9:45-10:15</mark>	L. LEPINIEC	FUNCTION AND REGULATION OF THE LAFL GENE REGULATORY NETWORK IN SEED DEVELOPMENT AND MATURATION	C2
10:15-10:30	J. FÍLA	REVEALING THE ROLE OF BETA SUBUNIT OF NASCENT POLYPEPTIDE-ASSOCIATED COMPLEX DURING FLOWER AND MALE GAMETOPHYTE DEVELOPMENT OF ARABIDOPSIS THALIANA	C2
10:30-10:45	H. ROBERT BOISIVON	A ROLE FOR LEAFY COTYLEDON 1 TRANSCRIPTION FACTOR IN FLORAL ORGAN PATTERNING	C2
10:45-11:00	P. SMÝKAL	LEGUME SEED DORMANCY FROM ADAPTIVE AND DOMESTICATION PERSPECTIVES.	C2
11:00-11:15	D. Honys	PLANT REPRODUCTION SUCCESS: A TALE OF THREE -OMES	C2
11:15-11:30	V. KUMAR	THE ROLE OF EIF3 TRANSLATION INITIATION SUBUNITS IN MRNA STORAGE AND FAST TRANSLATION IN POLLEN TUBES	C2
FLASH TALKS	(~5 min each)		
	S. A. OH	ISOLATION AND ANALYSIS OF GPM1 MUTANT REVEALS A MALE GAMETOPHYTE-SPECIFIC R2R3 MYB TRANSCRIPTION FACTOR THAT IS ESSENTIAL FOR POLLEN MITOSIS I IN ARABIDOPSIS.	C2
	Z. A. KAHRIZI	THE ROLE OF EUKARYOTIC TRANSLATION INITIATION FACTOR 3-SUBUNIT M IN THE MECHANISM OF MALE GAMETOPHYTE MRNA STORAGE AND TRANSLATION	C2

A. J. WIESE	INVESTIGATING THE ROLE OF TRANSCRIPTION FACTORS IN	C2
	MALE GAMETOPHYTE DEVELOPMENT.	

SESSION 9: EPIGENETICS -MECHANISMS AND IMPLICATIONS

CHAIRPERSON: A. PEČINKA, I. MOZGOVÁ

<mark>14:15-14:55</mark>	D. SCHUBERT	POLYCOMB-LINKED CHROMATIN REGULATION AT THE NUCLEAR ENVELOPE	B2
14:55-15:15	I. Mozgová	THE FUNCTION OF POLYCOMB REPRESSIVE COMPLEX 2 IN SEEDLING ESTABLISHMENT IN ARABIDOPSIS THALIANA	B2
15:15-15:35	A. PEČINKA	STRUCTURAL MAINTENANCE OF CHROMOSOMES 5/6 COMPLEX IS ESSENTIAL FOR PLANT GENOME STABILITY A REPRODUCTIVE DEVELOPMENT.	B2
15:35-15:55	V. ČERMÁK	UNEXPECTED DIFFERENCES IN POSTTRANSCRIPTIONAL SILENCING INDUCED BY VARIOUSLY PRODUCED DSRNAS IN TOBACCO BY-2 CELLS	B2
15:55-16:15	E. DVORAK TOMASTIKOVA	COMPARATIVE ANALYSES OF EPIGENETIC INHIBITORS AND THEIR EFFECTS ON TRANSCRIPTIONAL GENE SILENCING AND GENOME STABILITY	B2

SESSION 10: PLANT-PATHOGEN INTERACTIONS

CHAIRPERSON: M. JANDA, O. VALENTOVÁ

<mark>14:15-14:50</mark>	<mark>A. Weiberg</mark>	PATHOGEN SMALL RNAS AS HOST IMMUNE SUPPRESSORS	<mark>C2</mark>
14:50-15:10	M. JANDA	FUNCTIONS OF EXTRACELLULAR VESICLES IN BACTERIAL	C2
		Infection of Plants	
15:10-15:30	T. KALACHOVA	ACTIN CYTOSKELETON AND PHOSPHOLIPIDS: A TIGHT COOPERATION UNDER SALICYLIC ACID CONTROL	C2
15:30-15:45	M. BATHÓOVÁ	THE ROLE OF SILICON IN SORGHUM ROOTS INFECTED WITH	C2
13.30-13.43	IVI. BATHOOVA		CZ
		ALTERNARIA ALTERNATA	
15:45-16:00	B. JINDŘICHOVÁ	FUNGAL INFECTION MODIFIES OILSEED RAPE ATTRACTION	C2
		TO HERBIVORES	
FLASH TALKS	(~5 min each)		
	P. Kaštier	SURVIVAL STRATEGIES OF HOLOPARASITIC DODDER PLANTS	C2
	E. BLATNIK	CONTRIBUTION OF RPI-SMIRA/R8 GENE TO LATE BLIGHT	C2
		RESISTANCE IN POTATO DIFFERENTIAL PLANTS	
	J. Špak	IDENTIFICATION AND RT-PCR DETECTION OF RIBES	C2
		INFECTING VIRUSES	

SESSION 11: METABOLOMICS

CHAIRPERSON: O. NOVÁK, M. ČERNÝ

<mark>16:45-17:20</mark>	<mark>A. S</mark> vatoš	LATERALLY RESOLVED METABOLOMICS	<mark>B2</mark>
17:20-17:40	M. ČERNÝ	OMICS IN PLANT-PATHOGEN INTERACTION ANALYSES	B2

17:40-18:00	O. Novák	ORGAN, CELLULAR AND SUBCELLULAR PHYTOHORMONE MAPPING IN ARABIDOPSIS	B2
18:00-18:20	M. Karady	SIMULTANEOUS PROFILING OF 1-AMINOCYCLOPROPANE-1-CARBOXYLIC ACID (ACC) AND OTHER ACIDIC PHYTOHORMONES IN PLANT TISSUES USING ULTRA-PERFORMANCE LIQUID CHROMATOGRAPHY — TANDEM MASS SPECTROMETRY	B2
FLASH TALKS	(~5 min each)		
	M. Berka	PLANT-PATHOGEN INTERACTION — PROTEOMICS AND METABOLOMICS ANALYSES OF PHYTOPHTHORA INFECTION IN POPLAR.	B2
	V. MALÝCH	CYTOKININ MODULATES BIOTIC INTERACTION BETWEEN ACREMONIUM ALTERNATUM AND ARABIDOPSIS THALIANA	B2
	M. Luklová	A ROLE OF PLANT CIRCADIAN RHYTHMS AS A REGULATOR OF PLANT HORMONE SIGNALING AND ROS SIGNALING	B2

SESSION 12: CARNIVOROUS & AQUATIC PLANTS

CHAIRPERSON: A. PAVLOVIČ, L. ADAMEC

<mark>16:45-17:25</mark>	S. Poppinga	BIOMECHANICS, FUNCTIONAL MORPHOLOGY, AND DIVERSITY OF UTRICULARIA SUCTION TRAPS	C2
17:25-17:50	A. PAVLOVIČ	THE VENUS FLYTRAP — THE PLANT WITH NEURON-LIKE ACTIVITY	C2
17:50-18:15	M. BACOVCINOVA	REGULATION OF ENZYME ACTIVITIES IN CARNIVOROUS PITCHER PLANTS OF THE GENUS NEPENTHES	C2
18:15-18:40	I. Matušíková	DEFENSIVE HYDROLASES RE-FOCUSED TO GAIN NUTRIENTS FROM INSECT PREY	C2

THURSDAY, AUGUST 29

SESSION 13: PHYTOHORMONES AND PLANT DEVELOPMENT

CHAIRPERSON: J. HEJÁTKO, J. PETRÁŠEK

TIME	SPEAKER	TOPIC	HALL
<mark>9:45-10:25</mark>	D. Van Der Straeten	A TALE OF TWO HORMONES: ETHYLENE AND AUXIN IN	<mark>B2</mark>
		ELONGATION GROWTH	
10:25-10:55	<mark>J. Friml</mark>	PIN AUXIN TRANSPORTERS IN EVOLUTION OF ROOT	<mark>B2</mark>
		GRAVITROPISM AND FLOWERING DURING CONQUEST OF	
		LAND BY PLANTS	
10:55-11:10	K. Retzer	DISSECTING DIFFERENTIAL CONTROL OF PIN2 TURNOVER	B2
		DURING TROPIC RESPONSES	
11:10-11:25	A. YAMOUNE	CYTOKININS CONTROL CELL DIVISION AND	B2
		DIFFERENTIATION IN THE ARABIDOPSIS ROOT VIA CELL	
		Type-Specific Regulation of Ethylene Biosynthesis	
FLASH TALKS	(~5 min each)		
	M. S. SOH	IDENTIFICATION OF A FAMILY OF ACC TRANSPORTERS IN	B2
		ARABIDOPSIS THALIANA	

A. Starodubtseva	THE MUTATIONS OF PHOSPHATIDYLINOSITOL-4-KINASES &1 AND &2 AFFECT CELL DIVISION AND SENSITIVITY TO AUXINS IN ARABIDOPSIS ROOTS	B2
A. STELATE	DOES CYTOSKELETON PLAY ROLE IN AUXIN CARRIERS DYNAMICS?	B2
Y. W. SEIFU	INITIAL INSIGHTS INTO THE TOPOLOGY OF ENDOPLASMIC RETICULUM LOCALIZED PINS IN ARABIDOPSIS THALIANA	B2

SESSION 8: PLANT-BIOTA INTERACTIONS

CHAIRPERSON: J. JERSÁKOVÁ, P. KOHOUT

9:45-10:15	E. HANNULA	INTERACTIONS BETWEEN PLANTS AND ABOVE- AND	C2
		BELOWGROUND BIOTA	
10:15-10:35	Р. Коноит	I'LL SCRATCH YOUR BACK AND YOU SCRATCH MINE: CO-	C2
		INTRODUCED ECTOMYCORRHIZAL FUNGI AS GLOBAL	
		DRIVERS OF WOODY PLANT NATURALIZATION	
10:35-10:55	J. Jersáková	UNTANGLING BIOTIC AND ABIOTIC FACTORS UNDERLYING	C2
		DISTRIBUTION OF FOREST ORCHIDS	
10:55-11:15	S. MENNICKEN	STRUCTURE OF ORCHID-FUNGUS BIPARTITE NETWORKS IN	C2
		TWO CLIMATICALLY DIFFERENT REGIONS	
11:15-11:30	J. KONEČNÝ	CORRELATIVE EVIDENCE FOR CO-REGULATION OF	C2
		PHOSPHORUS AND CARBON EXCHANGES WITH SYMBIOTIC	
		FUNGUS IN THE ARBUSCULAR MYCORRHIZAL MEDICAGO	
		TRUNCATULA	
FLASH TALKS	(~5 min each)		
	E. BALTRĖNAITĖ-	METHOD OF DYNAMIC FACTORS FOR ASSESSING THE	C2
	GEDIENĖ	TRANSFER OF CHEMICAL ELEMENTS IN THE SOIL-PLANT	
		SYSTEM — EXAMPLES OF PRACTICAL APPLICATIONS	
	N. Rubil	INDUCER OF RESISTANCE IN DEFENCE AGAINST	C2
		ARTHROPODS IN BRASSICA NAPUS PLANTS	
	E. LABANCOVÁ	THE EFFECTS OF PAPILIOTREMA TERRESTRIS ON MAIZE	C2
		CULTIVATED IN VITRO IN DIFFERENT CONDITIONS	

POSTER SESSION II

13:15-14:15 TOPICS 11-20

SESSION 15: PROTEOMICS

CHAIRPERSON: M. ŠEBELA, Z. ZDRÁHAL

14:15-14:55	T. TAKÁČ	PROTEOMIC INSIGHTS INTO MITOGEN ACTIVATED PROTEIN KINASE SIGNALING	B2
14:55-15:25	U. URQUIZA	LINKING SEQUENCE INFORMATION TO CIRCADIAN DYNAMICS IN ARABIDOPSIS USING BIOPHYSICS AND ABSOLUTE UNITS	B2
15:25-15:45	K. Kosová	PROTEOMICS ANALYSIS OF CROP RESPONSE TO ENVIRONMENTAL STRESSES	B2

15:45-16:05	H. HABÁNOVÁ	SEED QUALITY UNDER CHANGING ENVIRONMENTAL CONDITIONS	B2
FLASH TALKS	(~5 min each)		
	T. BLÁHOVÁ	PROTEOMIC ANALYSIS OF PLANT RESPONSE TO ABIOTIC	B2
		STRESS, ESPECIALLY TO DROUGHT	
	M. ŠEBELA	MALDI-TOF MASS SPECTROMETRY OF INHIBITOR-	B2
		TREATED CYANOBACTERIA	

SESSION 16: BRYOPHYTES AND LICHENS

CHAIRPERSON: T. HÁJEK, M. BAČKOR

14:15-15:00	J. DUCKETT	BRYOPHYTES: NEW DIMENSIONS TO UNDERSTANDING THE KEY INNOVATIONS OF LAND PLANTS	C2
15:00-15:20	M. GOGA	LICHENS AS MODEL SYSTEMS FOR EXPERIMENTAL BIOLOGY	C2
15:20-15:40	J. Kubásek	BRYOPHYTE STOMATA ARE IMPORTANT FOR CARBON GAIN	C2
		BUT NOT RESPONSIVE TO LIGHT AND CO2 CONCENTRATION	
15:40-16:00	E. VICHEROVÁ	BRYOPHYTE COMMUNICATION: RECOGNIZING	C2
		COMPETITORS THROUGH VOLATILE ORGANIC COMPOUNDS	

SESSION 17: CROP GENOMICS CHAIRPERSON: J. DOLEŽEL, V. ČURN

<mark>16:45-17:30</mark>	I. BANCROFT	NATURAL AND INDUCED GENOME STRUCTURAL VARIATION IN OILSEED RAPE	<mark>B2</mark>
17:30-17:50	P. CÁPAI		B2
17:30-17:50	P. CAPAL	CURRENT APPLICATION OF FLOW-SORTED CHROMOSOMES IN GENOMICS	ΒZ
17:50-18:10	L. HAVLICKOVA	Use of Associative Tanscriptomics to understand	B2
		THE GENETIC ARCHITECTURE OF TRAIT VARIATION IN	
		Brassica napus	
FLASH TALKS	(~5 min each)		
	M. SAID	UNCOVERING MACROSYNTENIC RELATIONSHIPS BETWEEN	B2
		TETRAPLOID AGROPYRON CRISTATUM AND BREAD WHEAT	
		GENOMES USING COS MARKERS	
	J. Balarynová	DYNAMICS OF PEA (PISUM SATIVUM L.) SEED COAT GENE	B2
		EXPRESSION DURING THE DEVELOPMENT AND IN RELATION	
		TO DOMESTICATION	
	O. TRNENY	NATIONAL COMPETENCE CENTRE JOINS CZECH BREEDERS	B2
		AND RESEARCH INSTITUTES TO EXPLOIT THE POWER OF	
		GENETIC INFORMATION	
	A. Zounková	THE ROLE OF STBEL11 TRANSCRIPTION FACTOR IN POTATO	B2
		(SOLANUM TUBEROSUM) TUBER INDUCTION	

SESSION 18: ROOT AND SHOOT DEVELOPMENT

CHAIRPERSON: A. LUX, M. MARTINKA

16:45-17:25	I. LICHTSCHEIDL	ROOT HAIR DEVELOPMENT AND ITS INFLUENCE BY ABIOTIC	C2
		<mark>STRESS</mark>	

17:25-17:45	A. Lux	SILICIFICATION OF ROOT TISSUES DURING THEIR DEVELOPMENT	C2
17:45-18:05	J. Kováč	PERI-ENDODERMAL THICKENINGS IN NOCCAEA CAERULESCENS ROOTS AS A SPECIAL TYPE OF PHI THICKENINGS	C2
18:05-18:25	Z. Blascheová	VARIABILITY AND MECHANISMS OF EXODERMIS DIFFERENTIATION IN PLANT ROOTS	C2
FLASH TALKS	(~5 min each)		
	S. Thula	INVOLVEMENT OF MIRNAS IN STRIGOLACTONE MEDIATED DEVELOPMENTAL EVENTS IN ARABIDOPSIS	C2
	J. Kohanová	THE EFFECT OF SILICON ON DROUGHT RESISTANCE OF WHEAT	C2
	V. N. VASSILEVA	DEVELOPMENTAL ROLE OF NUDC GENE FAMILY IN	C2
		Arabidopsis	

FRIDAY, AUGUST 30

SESSION 19: PLANT BIOTECHNOLOGY – PERSPECTIVES AND CHALLENGES CHAIRPERSON: R. HOBZA, J. ŠAFÁŘ, T. MORAVEC

TIME	SPEAKER	TOPIC	HALL
9:45-10:25	<mark>T. Čermák</mark>	On the verge of a new era in agriculture:	<mark>B2</mark>
		ADVANCING GENE EDITING TO CREATE THE WORLD'S FIRST	
		Seed Foundry™	
10:25-10:45	A. Přibylová	Investigating the effect of the epigenome on CRISPR/Cas9 activity	B2
10:45-11:05	Z. Kubát	GENETIC MODIFICATIONS IN NON-MODEL PLANT SPECIES	B2
11:05-11:25	P. HROUZEK	USE OF A COUNTERCURRENT CHROMATOGRAPHY FOR	B2
		OBTAINING HIGH-VALUE CAROTENOIDS FROM THE BIOMASS	
		OF MICROALGAE	
FLASH TALKS	(~5 min each)		
	Ľ. Slováková	SCREENING OF THE SUITABILITY OF LOW TEMPERATURE	B2
		PLASMA (LTP) FOR PRE-TREATMENT OF SELECTED SEEDS OF	
		AGRICULTURALLY IMPORTANT CROPS	
	R. Švubová	The effect of low temperature plasma (LTP) on	B2
		ENZYMES IMPORTANT IN SEED GERMINATION OF SELECTED	
		CROP SPECIES	
	J. Sedivá	CONSEQUENCES OF MITOTIC CHROMOSOME DOUBLING IN	B2
	- × ′	ANEMONE SYLVESTRIS L.	
	D. Šutá	THE SYSTEM FOR CAMELNA SATIVA TRANFORMATION AND SELECTION	B2

SESSION 20: METALS IN PLANTS, PHYTOREMEDIATION

CHAIRPERSON: H. KÜPPER, M. VACULÍK

<mark>9:45-10:15</mark>	M. MENCH	PHYTOMANAGEMENT OF METAL(LOID)-CONTAMINATED	C2
		SOILS: OUTCOMES FROM LONG-TERM FIELD TRIALS	

10:15-10:30	H. KÜPPER	MECHANISMS OF SUBLETHAL METAL(LOID) TOXICITY IN CONTRASTING PHOTOSYNTHETIC ORGANISMS.	C2			
10:30-10:45	F. MORINA	METAL AVAILABILITY AND PATHOGEN SENSITIVITY IN ROOTS AND LEAVES OF CROP PLANTS	C2			
10:45-11:00	M. VACULÍK	ANTIMONY IN PLANTS AND ENVIRONMENT	C2			
11:00-11:15	S. SMOLEŃ	UPTAKE OF IODINE IN THE FORM OF KIO3 AND IODOSALICYLATES DEPENDING ON THE VANADIUM APPLICATION — SELECTED ASPECTS OF IODINE METABOLISM IN LETTUCE PLANTS CULTIVATED IN THE NFT HYDROPONIC SYSTEM	C2			
11:15-11:30	J. AUGUSTYNOWICZ	PHYTOREMEDIATION OF CR-POLLUTED WATERS BY CALLITRICHE: FROM THE LABORATORY TO THE ENVIRONMENT	C2			
11:30-11:45	A. MIJOVILOVICH	CHEMICAL SPECIATION AND LOCALIZATION OF METALS IN PLANTS: FROM X-RAY SYNCHROTRON MICROTOMOGRAPHY TO BENCHTOP XRF	C2			
CLOSING REMARKS						
11:45-12:15		CLOSING REMARKS	C2			