

Plant Developmental and Production Biology under Global Climate Change



September 9-11, 2019
Brno, Czech Republic

- MENDELU
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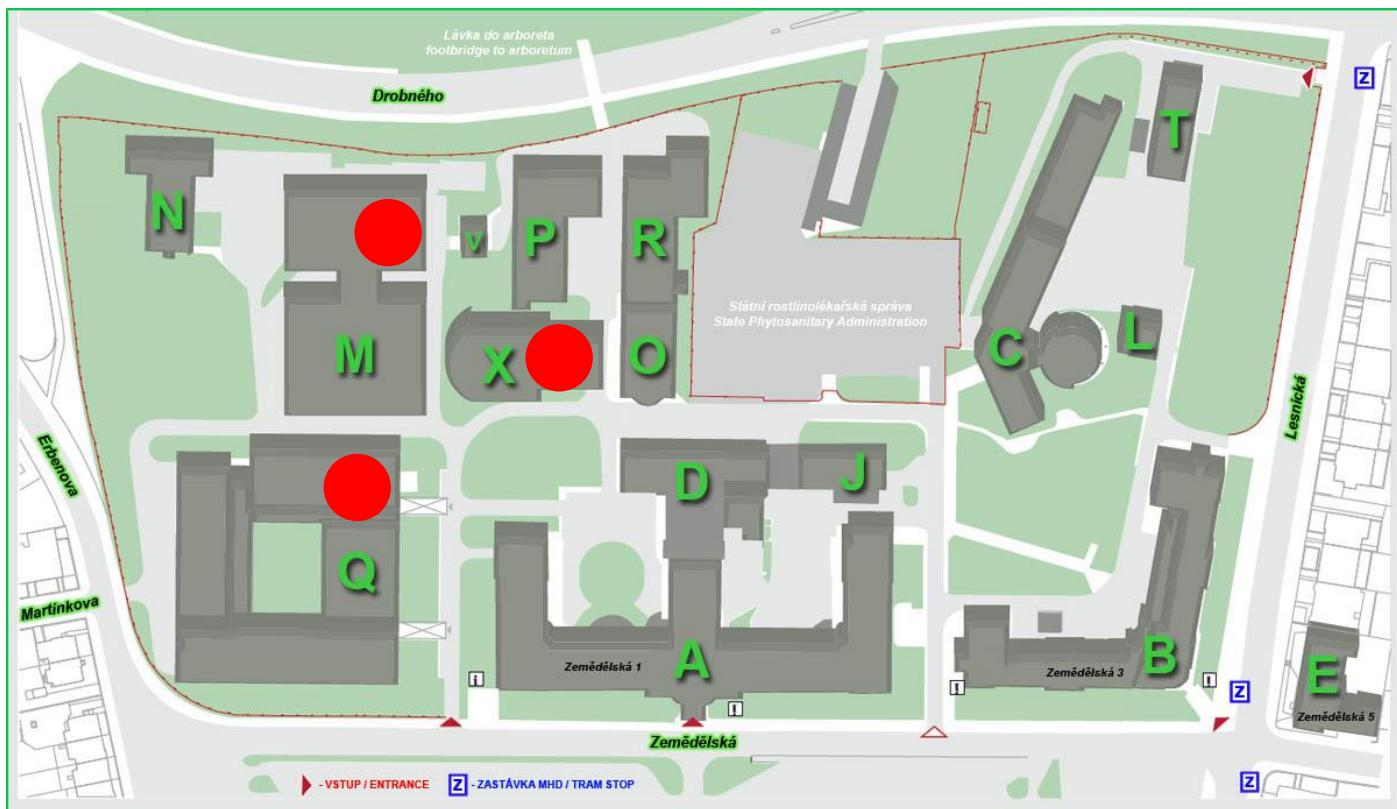
Conference Venue

Mendel University in Brno, campus
Zemědělská 1, Brno

Building Q: Welcome address, Opening Lecture, Keynote Lecture 01

Building M: Registration, Lectures, Poster Session, Coffee Breaks, Welcome Party

Building X: Lunch, Conference Dinner



Transportation

Tram line 9

Destination „Zemědělská“, departs every 10 min

min	Station	
↓	Hlavní nádraží (kolej 1)	100
1	Zelný trh	
3	Náměstí Svobody	
4	Česká (před kostelem)	
5	Moravské náměstí (směr Černá Pole)	
6	Náměstí 28. října	
7-8	Dětská nemocnice	
9-10	Jugoslávská (směr Lesná)	
10-11	Tomanova -o	
11-12	Zemědělská -o	
12-13	Lesnická -o	
13-14	Bieblova -o	
14-15	Fügnerova -o	
15-17	Halasovo náměstí	101
17-19	Lesná, Čertova rokle	

Wi-Fi

Network: mendelu-host

Login: umbr

Password: agro-19

Organizing Committee

Břetislav Brzobohatý (Mendel University in Brno)

Miroslav Berka (Mendel University in Brno)

Martin Černý (Mendel University in Brno)

Šárka Koukalová (Mendel University in Brno)

Markéta Luklová (Mendel University in Brno)

Iñigo Saiz (Mendel University in Brno)

Section Chairs

Susann Auer (Technische Universität Dresden)

Břetislav Brzobohatý (Mendel University in Brno)

Martin Černý (Mendel University in Brno)

Pavel Kerchev (Mendel University in Brno)

Jan Novák (Mendel University in Brno)

Aaron Rashotte (Auburn University)

Iñigo Saiz (Mendel University in Brno)

Programme

Monday, September 9

9:00 - 17:00	Registration
11:00 - 11:15	Welcome address
	Danuše Nerudová Rector, Mendel University in Brno
11:15 - 12:15	Opening Lecture
	Dirk Inzé The pivotal role of Plant Biology in a rapidly changing world
12:15 - 13:15	Keynote Lecture 01
	Philip Wigge Plants in a warming world
13:15 - 14:45	Lunch break & Poster Viewing Sessions
14:45 - 15:15	Talk M01
	George Komis Conditional and developmental rearrangements of the plant cytoskeleton
15:15 - 15:30	Talk M02
	Antonio Pompeiano Photosynthetic and growth responses of <i>Arundo donax</i> L. plantlets under different oxygen deficiency stresses and reoxygenation
15:30 - 15:45	Talk M03
	Iva Pavlović Early response of white cabbage (<i>Brassica oleracea</i> var. <i>capitata</i>) to increased salinity: transcriptomic, hormonal and metabolic status
15:45 - 16:00	Talk M04
	Tereza Dobisová Non-invasive <i>in planta</i> Monitoring of Chlorophyll Biosynthesis
16:00 - 16:30	Coffee break

16:30 - 17:30 Keynote Lecture 02



David Alabadí

Upstream and downstream events in DELLA-regulated growth and development

17:30 - 17:45 Talk M05

Helene Robert Boisivon

Thermomorphogenesis during seed development In *Arabidopsis* and *Brassica napus*

17:45 - 18:00 Talk M06

Sahu Pranav Pankaj

Understanding the response of *Arabidopsis* under climate change scenarios

18:00 - 18:15 Talk M07

Jozef Balla

Auxin flow-mediated competition between axillary buds fine-tuned by other players

18:15 - 20:00 Welcome party, Poster and student talk session

Tuesday, September 10

9:30 - 10:15 Keynote Lecture 03



Peter Hedden

The role of gibberellin signaling in plant responses to abiotic stress

10:15 - 10:45 Talk T01

Jan Hejátko

Cytokinins control xylem development via *NAC SECONDARY WALL THICKENING PROMOTING FACTORS*

10:45 - 11:15 Talk T02

Marie-Theres Hauser

Metal ion sensing in cell walls

11:15 - 11:30 Talk T03

Barbora Pařízková

iP & OEiP – a perfect couple to regulate plant development with high spatial resolution

11:30 - 12:00 Coffee break

12:00 - 13:00 Keynote Lecture 04



Miguel A. Blázquez

An ancestral mechanism for the coordination of transcriptional programs

13:00 - 13:30 Talk T04

Tomáš Werner

Molecular mechanisms controlling cytokinin homeostasis in the endoplasmic reticulum

13:30 - 14:00 Talk T05

Radomíra Vaňková

The role of cytokinins in optimal defense to abiotic and biotic stresses as well as pathogen attack strategy

14:00 - 15:30 Lunch break & Poster Viewing Sessions

15:30 - 16:30 Keynote Lecture 05



Thomas Schmülling

New chapters from cytokinin action in development and stress defense

16:30 - 17:30 Keynote Lecture 06



Karin Ljung

Auxin-cytokinin metabolism, transport and signaling during lateral root development

17:30 - 18:00 Coffee break

18:00 - 19:00 Keynote Lecture 07



Aaron Rashotte

Roles of Cytokinin Response Factors in different environmental stress responses

19:00 - 22:00 Conference dinner

Wednesday, September 11

9:00 - 10:00	Keynote Lecture 08
	Mark Stitt Budgeting carbon in a changing environment: Are plants better than bankers and politicians?
10:00 - 11:00	Keynote Lecture 09
	Ondřej Novák Phytohormone profiling at the cellular and subcellular levels
11:00 - 11:30	Coffee break
11:30 - 11:45	Talk W01
	Hana Leontovyčová Can actin depolymerization induce plant resistance?
11:45 - 12:00	Talk W02
	Parisa Rahimzadeh Karvansara Sulfur metabolism in C4 and C3 plants, Similarities and differences
12:00 - 12:15	Talk W03
	Jan Skalák Exploring natural variability in multistep phosphorelay for enhanced drought tolerance in plants
12:15 - 12:45	Talk W04
	Timothy O. Jobe Plant mineral nutrition under changing environment
12:45 - 13:15	Talk W05
	Jozef Šamaj Advanced microscopy for plant developmental and cell biology
13:15 - 13:45	Talk W06

Miroslav Ovečka

Mitogen-activated protein kinases as developmental and stress-related modulators in plants

14:00 - 15:00 Lunch

15:00 - 16:00 Keynote Lecture 10



Ashverya Laxmi

Carbon control of shade avoidance responses in Arabidopsis

16:00 - 17:00 Keynote Lecture 11



Jutta Ludwig-Müller

Plant hormones in biotic interactions

17:00 Closing remarks

Posters

Poster P01

Venkata Pardha S. Attuluri

Optimizing clearing methods for deeper imaging of fluorescent protein-expressing plant tissues

Poster P02

Kateřina Bělonožníková

The role of organic nitrogen source in plant nutrition

Poster P03

Miroslav Berka

Plant-pathogen interaction – proteomics and metabolomics analyses of Phytophthora infection in poplar

Poster P04

Hana Habánová

Seed quality under changing environmental conditions

Poster P05

Petra Hofmanová

Downregulation of PHOTOTROPIN 1 in *Solanum lycopersicum L.*

Poster P06

Veronika Hýsková

Could heat shock or oomycete *Pythium oligandrum* treatment affect the course of viral infection in plants?

Poster P07

Petra Jiroutová

Hormonal analysis of brassinosteroid biosynthetic mutant plants

Poster P08

Marek Klemš

Comparison of ¹⁴C-activity distribution after ¹⁴C-fluoranthene and ¹⁴C-glycine uptake by young pea plants

Poster P09

Markéta Luklová

A role of plant circadian rhythms as a regulator of plant hormone signaling and ROS signaling

Poster P10

Veronika Malých

Cytokinin modulates biotic interaction between *Acremonium alternatum* and *Arabidopsis thaliana*

Poster P11

Jana Oklešťková

Interactions between steroids in regulation of plant development

Poster P12

Helena Ryšlavá

What is the effect of seed treatment with *Pythium oligandrum* on the metabolism of rape plants?

Poster P13

Iñigo Saiz-Fernández

Metabolomic response of *Quercus variabilis* during *Phytophthora cinnamomi* infection

Poster P14

Eva Nevrtalová

Whole transcriptome profiling of *Silene vulgaris*: molecular background of the copper tolerance in the non-model plant

Poster P15

Tereza Dobisová

Seeding, the bottleneck of plant science

Poster P16

Archna Tiwari

Carbon control of shade avoidance responses in *Arabidopsis*

List of Participants

Alabadí David, KL02
Attuluri Venkata Pardha Saradhi, P01
Auer Susann
Balla Jozef, M07
Bělonožníková Kateřina, P02
Berka Miroslav, P03
Blázquez Miguel, KL04
Brzobohatý Břetislav
Černý Martin
Inzé Dirk, Opening Lecture
Dobisová Tereza, M04, P15
Ebrahimi Naghani Shekoufeh
Gündüz Rabia
Habánová Hana, P04
Hedden Peter, KL03
Hejátko Jan, T01
Hofmanová Petra, P05
Hýsková Anna
Hýsková Veronika, P06
Jiroutová Petra, P07
Jobe Timothy, W04
Kameniarová Michaela
Kerchev Pavel
Klemš Marek, P08
Komis George, M01
Kopecká Romana
Laxmi Ashverya, KL10
Leontovycova Hana, W01
Liberdová Vladěna

Ljung Karin, KL06
Lónová Kamila
Ludwig-Müller Jutta, KL11
Luklová Markéta, P09
Malých Veronika, P10
Malých Gabriela
Hauser Marie-Theres, T02
Mishra Shubhi
Nevrtalova Eva, P14
Novák Ondřej, KL09
Novák Jan
Oklestkova Jana, P11
Ovečka Miroslav, W06
Pan Ling
Pařízková Barbora, T03
Patel Niravkumar Hiteshkumar
Patel Chiragbhai Girishbhai
Pavlovic Iva, M03
Pompeiano Antonio, M02
Procházka Stanislav
Rahimzadeh Parisa Parisa, W02
Rashotte Aaron, KL07
Robert Boisivon Helene, M05
Roignant Jeanne
Ryšlavá Helena, P12
Sahu Pranav Pankaj, M06
Saiz Iñigo, P13
Schmülling Thomas, KL05
Skalák Jan, W03

Stitt Mark, KL08
Strnad Miroslav
Šamaj Jozef, W05
Tiwari Archna, P16
Tubić Ljiljana
Vaňková Radomíra, T05
Werner Tomas, T04
Werner Tomáš
Wigge Philip, KL01
Zouhar Jan

GeneTiCA

Labdeers



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