



**Centre of the Region Haná
for Biotechnological and Agricultural Research**
cordially invites you to attend the

Olomouc Biotech 2013 Plant Biotechnology: Green for Good II

June 17 - 21, 2013, Olomouc, Czech Republic

Scope of the conference

The conference aims to cover a wide range of topics including cell biology, physiology, genetics as well as biophysics, and provide an overview of current trends in plant biotechnology. The conference is organized under the auspices of the European Federation of Biotechnology and Biotechnological Society of the Czech Republic.

Venue

Centre of the Region Haná for Biotechnological and Agricultural Research (www.cr-hana.eu)
Biological Campus of the Faculty of Science, Palacký University, Olomouc-Holice
Oral presentations and other events - room SE501, poster session – room SE507

Symposium language: English

Forms of presentations:

- Selected oral presentations (on invitation)
- Poster presentations, Student poster contest
- Industrial and commercial presentations
- Workshop on industry-academia relationships

PROGRAM OF THE CONFERENCE

Monday

June 17, 2013

- 10:00 – 14:00 Formal opening of C.R. Haná and a press conference
- 14:00 – 16:00 Registration, poster mounting
- 16:00 – 17:00 Opening of the conference
Jan Káš, President of the Biotechnology Society of the Czech Republic, ICT Prague, Czech Republic
Ivo Frébort, Executive Director of C. R. Haná, Olomouc, Czech Republic
Jaroslav Doležel, Scientific Director of C.R. Haná, Olomouc, Czech Republic
- 17:00 – 18:30 Keynote lecture
Marc van Montagu, President of EFB, University of Gent, Belgium
30 years of transgenic plants
- 19:00 – 21:00 Welcome reception

Tuesday

June 18, 2013

SESSION I – Crop improvement (Chair Ivo Frébort)

- 09:00 – 09:30 **Rodomiro Ortiz**, Swedish University of Agricultural Sciences, Alnarp, Sweden
From crossbreeding to biotechnology-facilitated improvement of banana and plantain
- 09:30 – 10:00 **Kristin D. Bilyeu**, USDA, Columbia, MO, USA
A conventional success story for improving the functionality of soybean oil
- 10:00 – 10:30 **Jaroslav Doležel**, C. R. Haná, Olomouc, Czech Republic
Advances in plant chromosome genomics
- 10:30 – 11:00 Coffee break
- 11:00 – 11:30 **Ivo Frébort**, C. R. Haná, Olomouc, Czech Republic
GM barley with modulated cytokinin level: aiming at improved yield and stress tolerance
- 11:30 – 11:50 **Takashi R. Endo**, Kyoto University, Japan
Promotion of homoelogenous paring by the rye B chromosomal segments in common wheat
- 11:50 – 12:10 **Michael Abrouk**, C. R. Haná, Olomouc, Czech Republic
Evolution of Triticae genomes
- 12:10 – 13:30 Lunch break
- 13:30 – 15:30 **Guided excursion to the research facilities and experimental fields of C. R. Haná**
- 15:30 – 16:00 Coffee break, poster viewing

SESSION I – Crop improvement (Chair Jaroslav Doležel)

- 16:00 – 16:30 **Francisco Pérez-Alfocea**, CEBAS-CSIC, Murcia, Spain
Regulation of source-sink relations to improve crop salt-tolerance: a role for root-to-shoot signalling
- 16:30 – 17:00 **Karel Doležal**, C. R. Haná, Olomouc, Czech Republic
New cytokinin derivatives for plant biotechnology and agriculture
- 17:00 – 17:20 **Hans Motte**, University College Ghent, Belgium
A chemical screen identifies a cytokinin degradation inhibitor as a strong promoter of shoot regeneration in plant tissue culture
- 17:20 – 17:40 **Helena Hanosová**, C. R. Haná, Olomouc, Czech Republic
Claviceps purpurea as a factory producing ergot alkaloids

Wednesday **June 19, 2013**

SESSION II – BIO-TECHNO: Industry meets academia (Chair Marc Van Montagu)

- 09:00 – 09:30 **Silvia Travella**, Plants for the Future, European Technology Platform, Brussels, Belgium
European Technology Platform ‘Plants for the Future’ – European Partnership for Research and Innovation
- 09:30 – 10:00 **Fabio Fiorani**, Jülich Plant Phenotyping Centre, Germany
Traits and technologies for plant phenotyping
- 10:00 – 10:30 **Katsuyuki Tanizawa**, Osaka University, Japan
Development of versatile bionanocapsules displaying immunoglobulin-binding domains for application to immunoisensors
- 10:30 – 11:00 Coffee break
- 11:00 – 11:30 **Ralph Hückelhoven**, Technische Universität München, Freising, Germany
Disease susceptibility as a target of biotechnology for durable resistance?
- 11:30 – 12:00 **Tony Bacic**, University of Melbourne, Australia
The role of non-starchy polysaccharides (soluble dietary fibre), in particular (1,3;1,4)- β -glucans and arabinoxylans in promoting bowel health
- 12:00 – 12:30 **M. Tufan Öz**, C. R. Haná, Olomouc, Czech Republic
Antimicrobial peptide expression in barley endosperm
- 12:30 – 14:00 Lunch break
- 14:00 – 14:30 **Yuri Gleba**, Nomad Bioscience and Icon Genetics, Munich, Germany
Plant biotechnology Based on Transient Agrobacterium Delivery
- 14:30 – 15:00 **Martin Trtílek**, Photon Systems Instruments, Brno, Czech Republic
PlantScan – New tool in high throughput Phenotyping
- 15:00 – 17:30 Poster session
- 17:30 – 18:00 Awards of student poster contest (Marc Van Montagu and Jaroslav Doležal)

Thursday **June 20, 2013**

SESSION III – Plant stress responses and tolerance (Chair Jozef Šamaj)

- 09:00 – 09:30 **Heribert Hirt**, EPSO and URGV Plant Genomics, Evry, France
New insights into plant-microbe signalling
- 09:30 – 10:00 **Claus Wasternack**, University of Halle, Germany
Action of jasmonates in stress responses and development – advanced aspects
- 10:00 – 10:30 **Marek Šebela**, C. R. Haná, Olomouc, Czech Republic
MALDI mass spectrometry of intact fungal microorganisms
- 10:30 – 11:00 Coffee break
- 11:00 – 11:30 **Tibor Pechan**, Mississippi State University, USA
Maize defense against insect and fungus attacks
- 11:30 – 11:50 **Roman Hobza**, C. R. Haná, Olomouc, Czech Republic
Heavy metal stress in plants – from weeds to crops
- 11:50 – 12:10 **Pavel Vítámvás**, Crop Research Institute, Prague, Czech Republic
Cereals proteome changes under cold stress
- 12:10 – 12:30 **Palmiro Poltronieri**, CNR-ISPA, Lecce, Italy
Exploiting specific isoforms of lipoxygenase, allene oxide synthase genes in the jasmonic acid biosynthesis pathway and specific classes of small RNAs in roots, to select varieties and hybrids better tolerating abiotic stresses in legumes
- 12:30 – 14:00 Lunch break

SESSION III – Plant stress responses and tolerance (Chair Marek Šebela)

- 14:00 – 14:30 **Thierry Gaudé**, École Normale Supérieure de Lyon, France
Nutrient deprivation in Arabidopsis reveals a function for the retromer complex in autophagy
- 14:30 – 15:00 **Irene Lichtscheidl**, University of Vienna, Austria
Support of plant growth by soil microbes for phytoremediation of heavy metal soil
- 15:00 – 15:30 **Jozef Šamaj**, C. R. Haná, Olomouc, Czech Republic
Abiotic stress signalling by MAPKs in Arabidopsis thaliana
- 15:30 – 16:00 Coffee break
- 16:00 – 16:30 **Anastasios Melis**, University of California, Berkeley, CA, USA
Photosynthesis-to-fuels: maximizing solar-to-product efficiencies
- 16:30 – 16:50 **Jens D. Berger**, CSIRO Plant Industry, Australia
Mediterranean adaptive strategies: Phenology, productivity and water relations in wild and domesticated Lupinus luteus L. from habitats with contrasting terminal drought

16:50 – 17:10 **A. Umut Tüyel**, Marmara University, Istanbul, Turkey
Determination of morphological and molecular characteristics of Colchicum L. species in the Turkish flora

18:30 – 21:00 Meeting of the Scientific Board of C. R. Haná and guests

Friday **June 21, 2013**

SESSION IV – Plant bioenergetics (Chair Jan Nauš and Petr Ilík)

09:00 – 09:30 **Roman Kouřil**, C. R. Haná, Olomouc, Czech Republic

Towards the structures of protein complexes involved in plant bioenergetics using single particle electron microscopy

09:30 – 10:00 **Javier Pozueta-Romero**, Universidad Pública de Navarra, Nafarroa, Spain

Starch metabolism, its regulation and biotechnological approaches to improve yields

10:00 – 10:30 **Evelyn Lawrenz**, Institute of Microbiology AS CR, Třeboň, Czech Republic

Ocean bioenergetics

10:30 – 11:00 Coffee break

11:00 – 11:20 **Sandeep Kumar Verma**, Marmara University, Istanbul, Turkey

Sequencing of chloroplast trn-T-L-F intron for phylogenetic analysis of Colchidum genus from flora of Turkey

11:20 – 11:40 **Andrej Pavlovič**, C. R. Haná, Olomouc, Czech Republic

Rapid changes of chlorophyll a fluorescence and photosynthesis in response to action potentials generated by touch in carnivorous plant Dionaea muscipula Ellis.

12:00 – 12:00 Closing remarks

Marc van Montagu, President of European Federation of Biotechnology, University of Gent, Belgium

Ivo Frébort, C. R. Haná, Olomouc, Czech Republic

SCIENTIFIC COMMITTEE

Jaroslav Doležal, Scientific Director of C.R. Haná, Olomouc, Czech Republic

Marc van Montagu, President of European Federation of Biotechnology, University of Gent, Belgium

Heribert Hirt, President of European Plant Science Organization, URGV, Evry, France

Jan Káš, President of the Biotechnology Society of the Czech Republic, ICT, Prague, Czech Republic

Ivo Frébort, Executive Director of C. R. Haná, Olomouc, Czech Republic

Jozef Šamaj, C. R. Haná, Olomouc, Czech Republic

Karel Doležal, C. R. Haná, Olomouc, Czech Republic

Marek Šebela, C. R. Haná, Olomouc, Czech Republic

Petr Ilík, C. R. Haná, Olomouc, Czech Republic

