

Invited speakers:

Javier Abadia (CSIC Zaragoza, Spain)
 Jean-Francois Briat (CNRS, Montpellier, France)
 Ismail Cakmak (Sabanci University, Turkey)
 Catherine Curie (BPMP Montpellier, France)
 László Erdei (University of Szeged, Hungary)
 Michael Grusak (USDA/ARS CNRC, USA)
 Mary Lou Guerinot (Dartmouth College, USA)
 Von D. Jolley (Brigham Young University, USA)
 Hong-Qing Ling (Chinese Academy of Sciences, Chian)
 Jian Feng Ma (Okayama University, Japan)
 Naoko K. Nishizawa (The University of Tokyo, Japan)
 Roberto Pinton (University of Udine, Italy)
 Volker Römheld (University of Hohenheim, Germany)
 Elsbeth Walker (University of Massachusetts, USA)
 Nicolaus von Wirén (Leibniz-Institute for Plant Genetics and Crop Plant Research, Germany)
 Graziano Zocchi (University of Milan, Italy)

The schedule of the symposium:

	Saturday	Sunday	Monday	Tuesday	Wednesday
09:00-10:30		Session 2	Session 4	Session 6	Session 7
10:30-11:00	Registration Poster mounting	Coffee break	Coffee break	Coffee break	Coffee break
11:00-13:30		Session 3	Session 5	Session 6 Poster viewing 6, 7	Session 7 Concluding remarks Poster dismounting
13:30-14:30	Lunch	Lunch	Lunch	Lunch	Lunch
14:30-16:30	Opening Session 1	Poster Viewing 1, 2, 3	Poster viewing 4, 5	Excursion	
16:30-17:00	Coffee break	Coffee break	Coffee break		
17:00-19:00	Session 1 Session 2	Session 3	Session 5		
19:00-	Welcome reception			Banquet	

The program of the symposium:

SATURDAY, 26 June 2010

10:30-13:00 Registration and poster mounting

13:00-14:30 Lunch

Welcome address

14:30-14:50 Ferenc Fodor (Eötvös University, Hungary)
Ferenc Hudecz (Rector of the Eötvös University, Hungary)

Opening lecture

14:50-15:50 Mary Lou Guerinot (Dartmouth College, USA)
The Ins, Outs, Ups and Downs of Iron Homeostasis in Plants

15:50-16:10 Coffee break

Session 1: Iron dynamics in the rhizosphere

16:10-16:40 Roberto Pinton (University of Udine, Italy)
Organic substances in the rhizosphere: consequences for iron mobilization and plant acquisition

16:40-17:00 Seher Bahar Aciksoz (Sabanci University, Turkey)
Effect of nitrogen nutrition on phytosiderophore secretion in iron-deficient durum wheat

17:00-17:20 Antonio Delgado (University of Seville, Spain)
Effect of trichoderma asperellum strain T34 on iron nutrition of plants with different acquisition strategy (white lupin and wheat)

17:20-17:40 Carmen Del Campillo (University of Cordoba, Spain)
Microbial reduction increases available Fe in calcareous soils

17:40 18:00 Alia Dellagi (AgroParisTech, France)
Iron-deficiency and immunity responses triggered by bacterial siderophores in arabidopsis

Session 2: Diagnosis and correction of iron deficiency Dedicated to the memory of Arthur Wallace

18:00 18:40 Von D. Jolley (Brigham Young University, USA)
Building on the legacy of Arthur Wallace: Practical aspects of iron nutrition in plants

Welcome party

18:45-

SUNDAY, 27 June 2010

**Session 2: Diagnosis and correction of iron deficiency
Dedicated to the memory of Arthur Wallace**

- 9:00- 9:30 Javier Abadía (CSIC, Zaragoza, Spain)
Towards a knowledge-based correction of iron chlorosis
- 9:30- 9:50 Juan J. Lucena (Autonomous University of Madrid, Spain)
HBED/Fe³⁺ remediates iron chlorosis
- 9:50-10:10 Marta Fuentes (CIPAV TimacAGRO International-Roullier Group, Spain)
A new class of hetero-molecular natural iron-chelates as efficient correctors of iron deficiency in fruit trees cultivated in alkaline and calcareous soils
- 10:10-10:30 Hamdi El Jendoubi (CSIC, Zaragoza, Spain)
Do's and do not's when assessing the efficacy of iron fertilizers
- 10:30-10:50 Patricia Rodriguez-Lucena
Evaluation of the foliar application of ⁵⁷Fe-LS complexes to cucumber chlorotic plants
- 10:50-11:10 Coffee break

Session 3: Plant iron uptake, transport and distribution within plants

- 11:10-11:40 Nicolaus von Wirén (Leibniz-Institute for Plant Genetics and Crop Plant Research, Germany)
Morphological responses of Arabidopsis roots to localized iron supply
- 11:40-12:10 Naoko Nishizawa (University of Tokyo, Japan)
The regulation of iron transport and homeostasis in Strategy II plants
- 12:10-12:35 Elsbeth Walker (University of Massachusetts, USA)
The Yellow Stripe1 Like (YSL) transporters: distinctive roles in grains and grasses, weeds and seeds
- 12:35- 13:00 Jian Feng Ma (Okayama University, Japan)
Isolation and functional characterization of YSL genes in barley
- 13:00-14:00 Lunch
- 14:00-15:30 Poster viewing Sessions 1, 2, 3
- 15:30-15:55 Hong-Qing Ling (Chinese Academy of Sciences, China)
New insights into the understanding the molecular regulation mechanisms of iron uptake in strategy I plants
- 15:55-16:20 Catherine Curie (BPMP Montpellier, France)
The citrate efflux transporter frd3 is required for iron-dependent pollen development
- 16:20-16:50 Coffee break
- 16:50-17:10 Mara Schuler (Saarland University, Germany)
The interaction of NAS genes and FRD3 in the long-distance transport of iron in arabidopsis thaliana

17:10-17:30 Thomas Buckhout (Humboldt University Berlin, Germany)
A small family of nodulin-like genes is down-regulated in response to iron deficiency and may play a role in iron and/or metal ion homeostasis in shoots and roots of *arabidopsis thaliana*

17:30-17:50 Volker Römheld
Is Fe retranslocated out of leaves of trees before leaf fall in autumn?

17:50- Free evening

MONDAY, 29 June 2010

Session 4: Iron and plant metabolism

9:00- 9:30 Graziano Zocchi (University of Milan, Italy)
Metabolic and Bioenergetic Advances in Strategy I Plants

9:30- 9:50 Ruben Rellan (CSIC, Zaragoza, Spain)
Delving into iron deficiency metabolomics

9:50-10:10 Marta Dell'Orto (University of Milano, Italy)
The role of vacuolar H⁺ pumps in cytosolic pH homeostasis of Fe deficient roots

10:10-10:30 Kyoko Higuchi (Tokyo University of Agriculture, Japan)
The mechanisms of adaptation to iron deficiency in barley shoots

10:30-11:00 Coffee break

Session 5: Iron homeostasis in plant cells and its regulation

11:00-11:30 Jean-Francois Briat (CNRS, Montpellier, France)
Integration of iron homeostasis with light and oxidative stress signalings

11:30-11:50 Hannetz Roschttardt (BPMP Montpellier, France)
Highly sensitive histochemical staining of iron: towards an atlas of Fe localization in *arabidopsis* cells

11:50-12:10 Wolfgang Schmidt (Academia Sinica, Taiwan)
Arabidopsis ferromics: parallel interrogation of changes in the quantitative (phospho-) proteome and transcriptome of *Arabidopsis* roots upon Fe deficiency using iTRAQ and mRNaseQ

12:10-12:30 Shao Jian Zheng (Zhejiang University, China)
Fe-deficiency-induced response and its regulation in strategy I plants

12:30-12:50 Katrin Philipp (Ludwig Maximilians University München, Germany)
Homeostasis and transport of iron in chloroplasts

12:50-13:00 Group photos

13:00-14:00 Lunch

14:00-16:00 Poster viewing: Sessions 4, 5 14:00- Steering committee meeting

16:00-16:30 Coffee break

16:30-16:50 Gregory Vert (CNRS Montpellier)
Control of iron homeostasis in *arabidopsis* root epidermal cells : the on and off of the IRT1 root iron transporter

- 16:50-17:10 Sabine Lüthje (University of Hamburg, Germany)
Regulation of the plasma membrane redox proteome by iron
- 17:10-17:30 Francisco J. Romera (University of Córdoba, Spain)
Ethylene and nitric oxide are involved on the expression of key genes involved in Fe acquisition and homeostasis of arabidopsis plants
- 17:30- Free evening

TUESDAY, 29 June 2010

Session 6: HarvestPlus - Iron biofortification and human nutrition

- 9:00- 9:30 Michael Grusak (USDA/ARS CNRC, USA)
Status and Future Developments in Plant Iron for Animal and Human Nutrition
- 9:30- 9:50 Hiroshi Masuda (Ishikawa Prefectural University, Japan)
Iron biofortification of rice grains with combination of various transgenic approaches and field trial
- 9:50-10:10 Bianca Kyriacou (The Australian Centre for Plant Functional Genomics, Australia)
Increased iron loading in rice endosperm as a result of OsNAS overexpression
- 10:10-10:30 Cristina Cvitanich (Aarhus University, Denmark)
Is ferritin the major iron storing protein in legumes?
- 10:30-10:50 Chunquin Zou (China Agricultural University, China)
Influence of nitrogen nutrition on retranslocation of iron in barley
- 10:50-11:10 Behrooz Darbani (Aarhus University, Denmark)
Iron biofortification of grain of modern cultivar wheat
- 11:10-11:40 Coffee break
- 11:40-12:05 Wolfgang Pfeiffer
- 12:05-12:30 Erick Boy
- 12:30-13:30 Poster viewing: Session 6, 7
- 13:30-14:30 Lunch
- 14:30 Excursion
- 20:00 Banquet

WEDNESDAY, 30 June 2010

Session 7: Interaction of iron with other elements and phytoremediation

- 9:00- 9:30 Ismail Cakmak (Sabanci University, Turkey)
Nitrogen in Uptake, Translocation and Seed Deposition of Iron
- 9:30- 9:55 László Erdei (University of Szeged, Hungary)
Food chain safety and phytoremediation
- 9:55-10:15 Mark Aarts (Wageningen University, Netherlands)
Two *Arabidopsis thaliana* transcription factors regulate the adaptation to zinc deficiency

