



Genetics of Plant Mineral Nutrition

Understanding physiological mechanisms,
targeting genes and breeding for nutrient
efficiency, toxic mineral element resistance and
enhancing nutritional quality

30th of September to 2nd of October 2010

The registration fee is **50 EURO (30 EURO** for students) and has to be paid in cash on **30th of September 2010** during registration. Registration for attending and contributing to the Symposium is necessary. Please register as early as possible to facilitate the organization.

Using the following link you can sign in for the Symposium:

www.ipe.uni-hannover.de/en/symposium/

Please first register name and address. Then you have access to registration as participant for the symposium.

Poster presentations in the context of the Symposium topic, but also in the entire area of Plant Nutrition, are highly welcome. The abstracts of the presentations should be submitted not later than **1st of July 2010**. The abstract template can be downloaded from the following link:

www.ipe.uni-hannover.de/en/symposium/

Symposium office:

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We have an option (ends **1st of July 2010**) for hotel rooms in the following hotels:

ETAP Hannover City

single room

94 Euro for two nights incl. breakfast

Homepage:

<http://www.accorhotels.com/de/hotel-3518-etap-hotel-etap-hotel-hannover-city/index.shtml>

IBIS Hannover City

single room

130 Euro for two nights incl. breakfast

Homepage:

<http://www.accorhotels.com/de/hotel-3365-ibis-hannover-city/index.shtml>

Suitehotel Hannover City

single or double occupancy

138 Euro for two nights + 26 Euro breakfast p.P.

Homepage:

<http://www.suitehotel.com/de/hotel-3755-suitehotel-hannover/index.shtml>

Designhotel Wienecke XI.

1 pers. 158 Euro for two nights incl. breakfast

2 pers. 198 Euro for two nights incl. breakfast

Homepage:

<http://www.congresscentrum-wienecke.de/>

Please contact the hotel by yourself. The code for our option will be: **Plant Nutrition**

Please book as early as possible directly at the hotel.

Thursday 30.09.2010

Opening 13.00 Dean, Horst, W.J.

Micronutrient density

13.15 Cakmak, I.
Agronomic versus genetic approaches to increase micronutrient density in seeds of crops

13.45 Pfeiffer, W.
HarvestPlus: Breeding Crops for Better Nutrition - Mineral-Density

14.15 Waters, B.
Micronutrient transport into seeds

14.45 Gruissem, W.
Rice iron biofortification-synergistic action of genes to increase endosperm iron content

15.15 Discussion

15.30 Coffee break

Al toxicity

16.00 Ryan, P.
Aluminium resistance in cereals: past, present and future

16.30 Magalhaes, J.
The path between genomics and applied breeding programs for abiotic stress tolerance: the case of AltSB, a major aluminum tolerance gene in sorghum

17.00 Eticha, D., Horst, W.J.
Physiology and molecular biology of aluminium resistance in common bean

17.20 Discussion

17.30 Poster viewing

Friday 01.10.2010**Heavy metals**

08.30 Kochian, L.
Molecular analysis of Zn transport and homeostasis using a metal hyperaccumulating plant species.

09.00 Verbruggen, N.
Integrated approaches to understanding cadmium hyperaccumulation

09.30 Führs, H., Horst, W.J.
A systems biology approach to understand Mn sensitivity and Mn tolerance in Vigna unguiculata L

09.50 Peiter, E.
Moving Manganese - The role of Cation Diffusion Facilitators in plant manganese homeostasis

10.10 Discussion

10.30 Coffee break

Si

11.00 Ma, J.F.
Transporters of silicon and arsenic in plants

Fe

11.30 Roemheld, V.; Nikolic, M.
Uptake, Translocation and Distribution of Iron in Strategy I Plants: Review with Prospects

12.00 Nishizawa, N.
Regulation of iron uptake and translocation in Strategy II plants

12.30 Discussion

12.45 Lunch

P efficiency

14.15 Lambers, H.
Phosphorus nutrition of plants in the world's most nutrient-impooverished environments - lessons to be learned for crop improvement?

14.45 Wissuwa, M.
Improving P efficiency in rice: A comprehensive approach via pyramiding of tolerance components.

15.15 Schenk, M.K., Bremer, M.
Transcriptome analysis in Brassica carinata genotypes differently responding in root hair growth to P starvation

15.35 Coffee break

16.00 Hong Liao
Genetic improvement of phosphorus efficiency in soybean through root architecture modification.

16.30 Hawkesford, M.
Molecular and applied aspects of sulfur uptake and utilization in crops

17.00 Discussion

17.15 Poster viewing

19.15 Dinner

Saturday, 02.10.2010**N efficiency**

08.30 Hirel, B.
Improving nitrogen use efficiency in cereals: from basic research to practical applications

09.00 Atlin, G.
Breeding maize for severely N-depleted soils: the CIMMYT experience

09.30 Schulte auf'm Erley, G., Horst, W.J.
Genotypic differences in nitrogen efficiency of oilseed rape

09.50 von Wiren, N.
Genotypical differences in the phytohormonal response of wheat to nitrogen fertilization

10.10 Discussion

10.30 Coffee break

Salt

11.00 Flowers, T.
How to make salt-tolerant crops

11.30 Schmidhalter, U.
Increasing salt tolerance - should we choose the avenue or the cobbled way?

11.50 Schubert, S.
Improvement of crop performance under salinity stress: tolerance versus avoidance

12.10 Discussion

12.20 Horst, W.J.

Closing