



EUCARPIA

Provisional Programme EAPR – EUCARPIA CONGRESS
Potato Breeding after completion of the DNA Sequence of the Potato
Genome
27-30 June 2010, Wageningen, the Netherlands

Sunday June 27

19.45h Registration
20.30h Welcome reception

Monday June 28

8.30h Coffee and registration

9.00h Opening

Session I: Keynote lectures

9.15 h *PGSC: "The potato genome sequence"*

Glenn Bryan, Scottish Crop Research Institute, Dundee, United Kingdom

10.00h *SOLCAP: Translational genomics for potato breeding: integrating phenotypic and genotypic data*

David Douches, Michigan State University, East Lansing, United States of America

10.45h Coffee break and registration

Session II: New trait development and the production of industrial components

11.15h *Identification of genes that impact on potato tuber colour, flavour and texture using transcriptomic and transgenic approach*

Mark Taylor, Scottish Crop Research Institute, Dundee, United Kingdom

11.35h *Identification of alternative oxidase marker alleles associated with reducing sugar content in diploid potato tubers*

Dominika Czyzewska, Plant Breeding and Acclimatization Institute, Młochów, Poland

11.55h To be confirmed

12.15h Lunch

Session III: PGSC: further details

13.30h *Traveling two roads towards one destination: anchoring and comparative analysis of the homozygous DM and heterozygous RH genome sequences.*

Erwin Datema, Plant Research International, WUR, Wageningen, the Netherlands

13.50h *Gene expression analysis to identify those genes important for making the potato out of the potato*

Kåre Lehmann Nielsen, Aalborg University, Aalborg, Denmark

14.10h To be confirmed

14.30h *The integrated cytogenetic, physical, genetic and sequence map of potato chromosome 5*

Jan de Boer, Plant Breeding, Wageningen University, Wageningen, the Netherlands

14.50h *The concept of K-mer tables and practical applications*

Theo Borm, Plant Breeding, Wageningen University, Wageningen, the Netherlands

15.10h Tea break

15.30h To be confirmed

15.50h Discussion session

What is next and how to translate sequence information into potato breeding

Session IV: Transgenics

16.15h *Field selection of GMO potatoes with late blight resistance that show true to type agronomical performance*

Ronald Hutten, Plant Breeding, Wageningen University, Wageningen, the Netherlands

16.35h *T-DNA minicircles for Agrobacterium-mediated delivery of potato genes without vector backbone sequences*

Jeanne Jacobs, The New Zealand Institute for Plant & Food Research
Christchurch, New Zealand

16.55h To be confirmed

17.15h Aperitif and Poster session

19.00h Dinner

Session V: Molecular studies and Genomics

20.30h *Precision breeding' in tetraploid potato: Where are we and where do we want to go?*

Christiane Gebhardt, Max Planck Institute for Plant Breeding Research, Cologne, Germany

21.00h *Potato X-omics*

Bjorn Kloosterman, Plant Breeding, Wageningen University, Wageningen, the Netherlands

21.20h *A genome wide analysis of the distribution of NBS-LRR pathogen resistance gene homologs in potato*

Erin Bakker, Nematology, Wageningen University, Wageningen, the Netherlands

21.40h Coffee break

21.55h *Interpreting and exploiting genome data based on suitable integrated bioinformatics platforms*

Maria Luisa Chiusano, University Federico II of Naples, Naples, Italy

22.15h *QTL analysis and linking QTLs to Tomato and Potato genomes at SGN Database*

Isaak Tecle, Boyce Thompson Institute for Plant Research, Cornell University, Unites States of America

22.35h Closure

Tuesday June 29

Session VI: Late blight

- 8.30h *Durable deployment of late blight resistance genes from an epidemiological perspective*
Geert Kessel, Plant Research International, WUR, Wageningen, Netherlands
- 8.50h *Effector Genomics - Discovery and interaction of potato R-genes and Phytophthora infestance Avirulence Genes*
Vivianne Vleeshouwers, Plant Breeding, Wageningen University, Wageningen, the Netherlands
- 9.10h *Molecular interactions determining Rpi-blb1 mediated late blight resistance*
Dennis Halterman, University of Wisconsin, Madison, United States of America
- 9.30h To be confirmed
- 9.50h To be confirmed
- 10.10h Coffee break
- 11.30h Excursion
- 19.00h Conference Dinner

Wednesday June 30

Session VII: Abiotic stress and low input efficiency / Genetic Resources

- 8.30h *QTL analysis of drought tolerance*
Gerard van der Linden, Plant Research International, WUR, Wageningen,
the Netherlands
- 8.50h To be confirmed
- 9.10h To be confirmed
- 9.30h To be confirmed
- 9.50h Section Meeting
- 10.20h Coffee break and Poster Session

Session VIII: Quality traits

- 11.00h *Mapping and validation of QTL for after-cooking darkening.*
David De Koeyer, **Potato Research Centre**, Fredericton, NB, Canada
- 11.20h *A comprehensive approach to study quantitative traits using After-Cooking Darkening as a model*
Gefu Wang-Pruski, Nova Scotia Agricultural College, Truro, NS, Canada
- 11.40h *Potato Tuber Bruising: Some are more hurt than others*
Claude Urbany, Max Planck Institute for Plant Breeding Research, Cologne, Germany
- 12.00h Lunch

Session IX: Pathogen resistance

- 13.15h *Exploring intragenic approaches towards disease resistance in potatoes*
Sathiyamoorthy Meiyalaghan, The New Zealand Institute for Plant & Food
Research Christchurch, New Zealand
- 13.35h *Interaction between potato and PVY and PVA; insight in the phenotypically observed symptoms in the field and resistance mechanisms at the molecular level*
Jari Valkonen, University of Helsinki, Helsinki, Finland
- 13.55h *Breeding research for main virus resistance in potato*
Ewa Zimnoch-Guzowska, Plant Breeding and Acclimatization Institute,
Młochów, Poland
- 14.15h *Physical map and comparative genomics of the potato cyst nematode resistance locus H1 at three haplotypes in potato*
Anna Finkers-Tomczak, Nematology, Wageningen University, Wageningen,
the Netherlands
- 14.35h To be confirmed
- 14.55h Tea break

Session X: Marker development and Varietal assessment

- 15.25h *Marker assisted breeding at a major vegetable breeding company – cost effective technologies and MAB strategic considerations*
Jan Draaistra, Enza zaden, Enkhuizen, the Netherlands
- 15.55h *Analysis of tetraploid cultivars with GoldenGate markers: Identification of 5 genotypic classes and trait associations*
Roeland Voorrips, Plant Research International, WUR, Wageningen, the Netherlands
- 16.15h *Haplotype analysis of tetraploid potato cultivars*
Jan Uitdewilligen, Plant Breeding, Wageningen University, Wageningen, the Netherlands
- 16.35h *Developing molecular marker capacity to enhance potato breeding in Australia*
Tony Slater, Victorian Department of Primary Industries, Victoria, Australia
- 16.55h *Exploiting Genetic Variation for Elevated Mineral Concentrations in Potatoes*
Nithya Subramanian, Scottish Crop Research Institute, Dundee, United Kingdom
- 17.15h Closure