Detailed Program

Sunday, 20th June 2004

2.00 pm–6.00 pm  Workshops – Genetic Resources – organized by Helmut Knupfer  Morava Hall
6.00 pm–7.30 pm  Welcome Mixer  Pavilion A
8.00 pm–10.00 pm  Workshops
W1: Germplasm – Collection  Morava Hall
W2: MAS, QTL Mapping, Phenotyping vs./and Genotyping  Rotunda Hall
W3: Technological Quality – Malt, Feed, Food  Brno Hall

Monday, 21st June 2004

8.30 am  Slavoj Palík, Director, Agricultural Research Institute Kromeriz, Ltd.
Jaroslav Spunar, Chairman Local Organizing Committee IBGS
8.35 am  Bryan Harvey, Chairman IBGS, University of Saskatchewan, Saskatoon, Canada
8.40 am  Representative of the Ministry of Agriculture of the Czech Republic
8.50 am  Loic Desselas, Director Sladovny Soufflet CR – Platinum Sponsor
9.00 am  Jan Vesely, President of EBC, President of Czech Union of Malthouses and Breweries, Czech Republic
9.10 am  INTRODUCTORY SESSION
Chair: Jaroslav Spunar
9.10 am  Brno – City of Gregor Mendel
Oldrich Chloupek, Mendel University of Agriculture and Forestry Brno, Czech Republic
Jaroslav Spunar, Agricultural Research Institute Kromeriz, Ltd.
Robert Nilan, Washington State University, Pullman, USA
9.30 am  From One Gene to Thousands of Genes: Perspectives from Another Man’s Life with Barley
Patrick Hayes, Oregon State University, Corvallis, USA
10.00 am  Coffee break  Gallery of Rotunda
10.30 am  Keys to Success of New Varieties to Satisfy Requirements of All Customers, Farmers, Maltsters and Brewers
Giles Fouquin, Malterie Soufflet, Nogent sur Seine, France
11.00 am  SESSION 1 – GERMPLASM AND GENETIC RESOURCES
Chair: Roland von Bothmer
11.00 am  Genetic Resources and Gene Banks for Research and Breeding
Helmut Knupffer, Institute of Plant Genetics & Crop Plant Research, Gatersleben, Germany
11.30 am  Global Inventory of Barley Genetic Resources
Jan Valkoun, ICARDA Aleppo, Syria
11.45 am  Assessment of Diversity within Czech Spring Barley Germplasm as Revealed by PCR Diagnostic Markers, SSR, AFLP and DNA Assays
Jaroslava Ovesna, Research Institute of Crop Production, Prague, Czech Republic
12.00 am  Lunch  Restaurant of Pavilion A
1.30 pm  SESSION 2 – BREEDING METHODOLOGIES I – MAPPING
Chair: Jan Dvorak
1.30 pm  Molecular Mapping: Shifting from the Structural to the Functional Level
Andreas Graner, Institute of Plant Genetics & Crop Plant Research, Gatersleben, Germany
2.00 pm  QTL for Malting Quality – A 25 Piece Puzzle
Andrew Barr, Australian Grain Technologies, Glen Osmond, Australia
2.30 pm  Experiences with Marker Assisted Selection for Quantitative Traits in Barley
Steven E. Ulrich, Washington State University, Pullman, USA
2.45 pm  A Large Scale Mapping of ESTs on Barley Genome
Kazuhiro Sato, Okayama University, Kurashiki, Japan
### SESSION 3 – BREEDING METHODOLOGIES II – GENOMICS
**Chair:** Patric Hayes

**3.30 pm**
- **New Insights into the Organization and Evolution of Genomes in the Tribe Triticeae Obtained by Comparative EST Mapping**
  - Jan Dvorak, University of California, Davis, USA

**4.00 pm**
- **Current Perspectives in barley genomics**
  - Robie Waugh, Scottish Crop Research Institute, Dundee, UK

**4.30 pm**
- **Map-Based Cloning in barley: Coming of Age**
  - Anders Kleinhofs, Washington State University, Pullman, USA

**5.00 pm**
- **Poster Papers – Sessions 1–6**
  - corridor around the Rotunda Hall, Morava Hall

**5.00 pm**
- **Happy Hour**
  - Gallery of Rotunda

**8.00 pm**
- **Workshops**
  - W4: Cytogenetics, Genomics, Bio-informatics, Transformation, Transgenic barley
  - Rotunda Hall
  - W5: Fusarium Head Blight
  - Morava Hall
  - W6: Drought and Cold Stress
  - Brno Hall

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### Tuesday, 22nd June 2004

**8.30 am**
- **SESSION 4 – BIOCHEMISTRY, CYTOGENETICS, TRANSGENIC BARLEY**
  - **Chair:** Andrew Barr
  - Rotunda Hall

**8.30 am**
- **GM Barley: Improved Technology, Safety Assessment and Future Potential**
  - Wendy Harwood, John Innes Centre, Norwich, UK

**9.00 am**
- **Dissecting Large Genomes of Triticeae by Chromosome Sorting**
  - Jaroslav Dolezel, Institute of Experimental Botany Olomouc, Czech Republic

**9.30 am**
- **Molecular Analysis and Its Utilization in Barley Breeding**
  - Wayne Powell, Scottish Crop Research Institute, Dundee, UK

**10.00 am**
- **Coffee break**
  - Gallery of Rotunda

**10.30 am**
- **SSR Markers in barley breeding and genomics**
  - Peter Langridge, University of Adelaide, Australia

**11.00 am**
- **The Barley Microarray. A Community Vision and Application to Abiotic Stress**
  - Timothy Close, University of California, Riverside, USA

**11.30 am**
- **Transgenic barley**
  - Dieter von Wettstein, Washington State University, Pullman, USA

**12.00 am**
- **Lunch**
  - Restaurant of Pavilion A

**1.15 pm**
- **SESSION 5 – MALTING AND BREWING – TECHNOLOGICAL PARAMETERS**
  - **Chair:** Bryan Harvey
  - Rotunda Hall

**1.15 pm**
- **French Qualification of Malting Barley**
  - Patric Boivin, IFBM, Vandouevre, France

**1.45 pm**
- **Environmental Modulation of Barley Malting Quality**
  - Jose Luis Molina-Cano, Centre UdL-IRTA, Spain

**2.15 pm**
- **Barley Varieties Appropriate for the Production of Czech Type Beer**
  - Karel Kosar, Research Institute of Brewing and Malting Prague, Czech Republic

**2.30 pm**
- **Are We Any Closer to Predicting How Well a Malt Will Behave in the Brewhouse?**
  - Denise Baxter, Brewing Research International, Lyntel Hall, Nutfield, Surrey, UK

**2.45 pm**
- **Distilling barley – Bringing certainty to the future**
  - James Brosnan, Scotch Whisky Research Institute, Riccarton, Edinburgh, UK

**3.00 pm**
- **Coffee break**
  - Gallery of Rotunda

**3.30 pm**
- **SESSION 6 – BARLEY PROTEIN, FEED AND FOOD**
  - **Chair:** Kazuo Takeda
  - Rotunda Hall

**3.30 pm**
- **Functional genomics in the productivity and end-use quality of barley**
  - Geoff Fincher, University of Adelaide, Australia
4.00 pm  Barley Foods for Good Nutrition and Health  

4.30 pm  Genetic Studies of Barley Seed Phosphate and Phytic Acid  
Victor Raboy, USDA-ARS, Aberdeen, USA

5.00 pm  Investigation of Barley Proteome  
Josef Chmelik, Institute of Analytical Chemistry Brno, Czech Republic

7.00 pm  Dinner in Mendel Museum

Wednesday, 23rd June 2004

TECHNICAL TOURS – KROMERIZ  
All tours will depart from outside the Voronez Hotel. Please make sure that you are on time as departure times will be exact.

8.00 am  tour 1. Barley Growing, Breeding and Genetics
8.30 am  tour 2. Sladovny (malthouse) Soufflet
tour 3. Sightseeing tour to UNESCO City Kromeriz
6.30–7.00 pm  expected return to the city

Thursday, 24th June 2004

8.30 am  SESSION 7 – DISEASE AND PEST RESISTANCE I – GENERALLY, LEAF DISEASES  
Chair: Jerry Franckowiak  
Rotunda Hall

8.30 am  Optimizing Breeding Strategies Based on the Evolutionary Potential of Barley Pathogens  
Bruce A. McDonald, Institute of Plant Science, Zurich, Switzerland

9.00 am  The Importance of the Secondary Genepool in Barley Genetics and Breeding  
Richard Pickering, Crop and Food Research, Christchurch, New Zealand

9.30 am  Adaptation of Biotrophic Barley Pathogens to Genetic Resistance in Central Europe  
Antonin Dreiseitl, Agricultural Research Institute Kromeriz Ltd., Czech Republic

9.45 am  Association Mapping for Yield and Leaf Rust Resistance in Barley  
Guenther Schweizer, Bavarian State Research Centre for Agriculture, Freising-Weihenstephan, Germany

10.00 am  Coffee break  
Gallery of Rotunda

10.30 am  Genetic Mapping of a Novel Scald Resistance Gene in Barley  
Rients Niks, Wageningen University, Laboratory of Plant Breeding, Wageningen, The Netherlands

10.45 am  Suitability of a Selected Barley Differential Set for Pyrenophora teres Virulence Screening  
Marja Jalli, Boreal Plant Breeding Ltd., Jokioinen, Finland

11.00 am  Ramularia collo-cygni, World-Wide Evaluation  
Edelgard Sachs, Federal Biological Research Centre for Agriculture, Bergholz-Rehbrücke, Germany

11.15 am  Winter Barley Cultivar Mixtures: Why Isn't Everybody Growing Them?  
Adrian Newton, Scottish Crop Research Institute, Dundee, UK

11.30 am  Detection of Independent Gene Pools of Barley with the Application of DNA Markers  
Ahmed Jahoor, Riso National Laboratory, Roskilde, Denmark

11.45 am  Trends in Biological and Molecular Variation of Barley Derived by Long-Term Breeding  
Jan Kraic, Research Institute of Plant Production, Piestany, Slovakia

12.00 am  Lunch  
Restaurant of Pavilion A

1.30 pm  SESSION 8 – DISEASE AND PEST RESISTANCE II – EAR DISEASES, FUSARIUM HEAD BLIGHT, VIROSES  
Chair: Silvia German  
Rotunda Hall

1.30 pm  Breeding Barley for Multiple Disease Resistance in the Upper Midwest Region of the USA  
Brian Steffenson, University of Minnesota, St. Paul, USA

2.00 pm  Inheritance of the Scab Disease Resistance in Barley  
Kazuyoshi Takeda, Okayama University, Kurashiki, Japan

2.15 pm  Off-Season Testing of Barley in China for Fusarium Head Blight  
Jerry Franckowiak, North Dakota University, Fargo, USA
Variation for Resistance to Fusarium Head Blight in Spring Barley
Herrmann Buerstmayr, Institute for Agrobiotechnology, Tulln, Austria

Evaluation of Barley Resistance to Fusarium Head Blight Infection and Mycotoxin Contamination of Grain
Vaclav Sip, Research Institute of Crop Production, Prague, Czech Republic

Breeding for Virus Resistance of Barley: Amalgamation of Classical and Biotechnical Approaches
Wolfgang Friedt, Justus Liebig University Giessen, Germany

Status of Russian Wheat Aphid Resistance in U.S. Barley
Do W. Mornhinweg, USDA-ARS, Stillwater, USA

Poster Papers – Sessions 7–10

2.30 pm
2.45 pm
3.00 pm
3.30 pm
4.00 pm
4.15 pm
5.00 pm
7.30 pm

Friday, 25th June 2004

SESSION 9 – ABIOTIC STRESS
Rotunda Hall
Chair: Wolfgang Friedt

8.30 am
Genetic Bases of Barley Responses to Abiotic Stresses
Michele Stanca, Istituto Sperimentale per la Cerealcoltura, Fiorenzuola d’Arda, Italy

8.50 am
Drought Tolerance in Barley
Stefania Grando, ICARDA Aleppo, Syria

9.10 am
Freezing Injury and Breeding on the Frost Resistance in Continental Russia
Victor Shevtsov, Research Institute of Agriculture, Krasnodar, Russia

9.30 am
Versatile Barley Varieties for the Mexican Highlands
Flavio Capettini, ICARDA/CIMMYT Latin American Regional Program, Mexico

9.45 am
Screening Barley Germplasm for Waterlogging Tolerance
Meixue Zhou, Tasmanian Institute of Agricultural Research, Tasmania, Australia

10.00 am
Coffee break

10.30 am
SESSION 10 – BREEDING SUCCESS STORIES
Rotunda Hall
Chair: Victor Shevtsov

10.30 am
Progress in Malting Barley Breeding in a Family Owned Company
Martin Breun, Saatzucht Josef Breun Herzogenaurach, Germany

11.00 am
Progress in Malting Barley Breeding in SECOBRA Company
Michel Madre, SECOBRA Maule, France

11.30 am
Breeding Malting Barley for the Canadian Prairies. A Greybeard’s Retrospective
Bryan Harvey, University of Saskatchewan, Saskatoon, Canada

12.00 am
Lunch

1.30 pm
Breeding of Malting Barley under the Stress Conditions in South America
Silvia German, INIA Research Institute, Colonia, Uruguay

2.00 pm
Barley Breeding Progress in the Czech Republic
Ivan Langer, Selgen Co., Plant Breeding Station Stupice, Czech Republic

2.15 pm
CLOSING SESSION

2.30 pm
MEMORANDUM OF 9th IBGS,
Conclusion – President of International Organizing Committee IBGS Prof. Bryan Harvey

3.00–6.00 pm
Arboretum, Mendel University
Farewell Party, Mendel University