## **Detailed Program**

| Sunday, 20 <sup>th</sup> June 2004       |  |  |  |  |
|--|--|--|--|--|
| 2.00 pm-6.00 pm                          | Workshops – Genetic Resources – organized by Helmut Knupfer  | Morava Hall                              |  |  |
| 6.00 pm-7.30 pm<br>8.00 pm-10.00 pm      | Welcome Mixer<br>Workshops   | Pavilion A                               |  |  |
| ,  | W1: Germplasm – Collection<br>W2: MAS, QTL Mapping, Phenotyping vs./and Genotyping<br>W3: Technological Quality – Malt, Feed, Food   | Morava Hall<br>Rotunda Hall<br>Brno Hall |  |  |
| Monday, 21 <sup>th</sup> June 2004       |  |  |  |  |
| 8.30 am                                  | <b>Welcome</b> Slavoj Palik, Director, Agricultural Research Institute Kromeriz , Ltd. Jaroslav Spunar, Chairman Local Organizing Committee IBGS   | Rotunda Hall                             |  |  |
| 8.35 am<br>8.40 am<br>8.50 am<br>9.00 am | Bryan Harvey, Chairman IBGS, University of Saskatchewan, Saskatoon, Canad<br>Representative of the Ministry of Agriculture of the Czech Republic<br>Loic Desselas, Director Sladovny Soufflet CR – Platinum Sponsor<br>Jan Vesely, President of EBC, President of Czech Union of Malthouses and Breweries, |  |  |  |
| 9.10 am                                  | INTRODUCTORY SESSION Chair: Jaroslav Spunar  |  |  |  |
| 9.10 am                                  | <b>Brno – City of Gregor Mendel</b> Oldrich Chloupek, Mendel University of Agriculture and Forestry Brno, Czech  | Republic                                 |  |  |
| 9.20 am                                  | <b>IBGS, Their Mission and Position in Barley Genetics History in the Period</b> Jaroslav Spunar, Agricultural Research Institute Kromeriz, Ltd. Robert Nilan, Washington State University, Pullman, USA   | 1963-2003                                |  |  |
| 9.30 am                                  | From One Gene to Thousands of Genes: Perspectives from Another Man's Lit<br>Patrick Hayes, Oregon State University, Corvallis, USA   | fe with Barley                           |  |  |
| 10.00 am<br>10.30 am                     | Coffee break Gallery of Rotund Keys to Success of New Varieties to Satisfy Requirements of All Customers, Farmers, Maltsters and Brewers   |  |  |  |
|  | Giles Fouquin, Malterie Soufflet, Nogent sur Seine, France   | Rotunda Hall                             |  |  |
| 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 Knuepffer, 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 Revea<br>Diagnostic Markers, SSR, AFLP and DNA Assays  | -  |  |  |
| 12.00 am                                 | Jaroslava Ovesna, Research Institute of Crop Production, Prague, Czech Repu<br>Lunch Restaurant  | ublic<br>of Pavilion A                   |  |  |
| 1.30 pm                                  | SESSION 2 – BREEDING METHODOLOGIES I – MAPPING<br>Chair: Jan Dvorak  | Rotunda Hall                             |  |  |
| 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 Ba<br>Steven E. Ullrich, Washington State University, Pullman, USA   | rley                                     |  |  |
| 2.45 pm                                  | A Large Scale Mapping of ESTs on Barley Genome<br>Kazuhiro Sato, Okayama University, Kurashiki, Japan  |  |  |  |

| 3.00 pm                             | Coffee break  | Gallery of Rotunda                            |  |
|-------------------------------------|---|---|--|
| 3.30 pm                             | SESSION 3 – BREEDING METHODOLOGIES II – GENOMICS Chair: Patric Hayes  | Rotunda Hall                                  |  |
| 3.30 pm                             | New Insights into the Organization and Evolution of Genomes<br>Obtained by Comparative EST Mapping  | in the Tribe Triticeae                        |  |
| 4.00 pm                             | Jan Dvorak, University of California, Davis, USA  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<br>5.00 pm                  | •   | Gallery of Rotunda<br>tunda Hall, Morava Hall |  |
| 8.00 pm                             | Workshops W4: Cytogenetics, Genomics, Bio-informatics, Transformation, Transgenic Barley  | Rotunda Hall                                  |  |
|                                     | W5: Fusarium Head Blight<br>W6: Drought and Cold Stress   | Morava Hall<br>Brno Hall                      |  |
| Tuesday, 22 <sup>nd</sup> June 2004 |   |   |  |
| 8.30 am                             | SESSION 4 – BIOCHEMISTRY, CYTOGENETICS, TRANSGENIC BARLI  | EY  |  |
|                                     | 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<br>10.30 am                | Coffee break  SSR Markers in Barley Breeding and Genomics  Peter Langridge, University of Adelaide, Australia   | Gallery of Rotunda<br>Rotunda Hall            |  |
| 11.00 am                            | The Barley Microarray. A Community Vision and Application to Timothy Close, University of California, Riverside, USA  | Abiotic Stress                                |  |
| 11.30 am 12.00 am                   | Transgenic Barley Dieter von Wettstein, Washington State University, Pullman, USA Lunch   | Restaurant of Pavilion A                      |  |
|                                     | SESSION 5 - MALTING AND BREWING - TECHNOLOGICAL PARAM   |   |  |
| 1.15 pm                             | 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 I<br>Karel Kosar, Research Institute of Brewing and Malting Prague, Cze   | ech Republic                                  |  |
| 2.30 pm<br>2.45 pm                  | Are We Any Closer to Predicting How Well a Malt Will Behave in Denise Baxter, Brewing Research International, Lyntel Hall, Nutfiel Distilling Barley – Bringing Certainty to the Future |   |  |
| 3.00 pm                             | James Brosnan, Scotch Whisky Research Institute, Riccarton, Edin<br>Coffee break  | burgh, UK<br>Gallery of Rotunda               |  |
| 3.30 pm                             | SESSION 6 – BARLEY PROTEIN, FEED AND FOOD<br>Chair: Kazuoshi Takeda   | Rotunda Hall                                  |  |
| 3.30 pm                             | Functional Genomics in the Productivity and End-Use Quality of Geoff Fincher, University of Adelaide, Australia   | f Barley                                      |  |

| 4.00 pm<br>4.30 pm<br>5.00 pm      | Barley Foods for Good Nutrition and Health C.Walter Newman, Newman Associates, Inc., Bozeman, USA Genetic Studies of Barley Seed Phosphate and Phytic Acid Victor Raboy, USDA-ARS, Aberdeen, USA Investigation of Barley Proteome Josef Chmelik, Institute of Analytical Chemistry Brno, Czech Republic                    |  |  |
|------------------------------------|--|--|--|
| 7.00 pm                            | Mendel Museum of Genetics, The Old Brno's History Evening Mendel Museum  Dinner in Mendel Museum   |  |  |
|                                    | Wednesday, 23 <sup>rd</sup> June 2004  |  |  |
| 8.00 am<br>8.30 am<br>6.30-7.00 pm | 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. tour 1. Barley Growing, Breeding and Genetics tour 2. Sladovny (malthouse) Soufflet tour 3. Sightseeing tour to UNESCO City Kromeriz 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<br>Antonin Dreiseitl, Agricultural Research Institute Kromeriz Ltd., Czech Republic  |  |  |
| 9.45 am                            | Association Mapping for Yield and Leaf Rust Resistance in Barley Rients Niks, Wageningen University, Laboratory of Plant Breeding, Wageningen, The Netherlands   |  |  |
| 10.00 am<br>10.30 am               | Coffee break Gallery of Rotunda  Genetic Mapping of a Novel Scald Resistance Gene in Barley Rotunda Hall  Guenther Schweizer, Bavarian State Research Centre for Agriculture,  Freising-Weihenstephan, Germany   |  |  |
| 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<br>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 11.45 am                  | Detection of Independent Gene Pools of Barley with the Application of DNA Markers Ahmed Jahoor, Riso National Laboratory, Roskilde, Denmark Tranda in Risoland and Malayslan Variation of Barley Derived by Lang Tayre Breading  |  |  |
| 12.00 am                           | Trends in Biological and Molecular Variation of Barley Derived by Long-Term Breeding Jan Kraic, Research Institute of Plant Production, Piestany, Slovakia Lunch Restaurant of Pavilion A  |  |  |
| 1.30 pm                            | SESSION 8 – DISEASE AND PEST RESISTANCE II – EAR DISEASES, FUSARIUM HEAD BLIGHT, VIROSES Rotunda Hall Chair: Silvia German   |  |  |
| 1.30 pm<br>2.00 pm                 | Breeding Barley for Multiple Disease Resistance in the Upper Midwest Region of the USA Brian Steffenson, University of Minnesota, St. Paul, USA Inheritance of the Scab Disease Resistance in Barley   |  |  |
| 2.00 μπ                            | Vazuvochi Takoda Okavama University Vurachiki Janan  |  |  |

Off-Season Testing of Barley in China for Fusarium Head Blight

Kazuyoshi Takeda, Okayama University, Kurashiki, Japan

Jerry Franckowiak, North Dakota University, Fargo, USA

2.15 pm

| 2.30 pm                            | Variation for Resistance to Fusarium Head Blight in Spring Barley   |  |  |
|------------------------------------|---|--|--|
|                                    | Herrmann Buerstmayr, Institute for Agrobiotechnology, Tulln, Austria  |  |  |
| 2.45 pm                            | Evaluation of Barley Resistance to Fusarium Head Blight Infection and Mycotoxin   |  |  |
|                                    | Contamination of Grain Vaclav Sip, Research Institute of Crop Production, Prague, Czech Republic                            |  |  |
| 3.00 pm                            | Coffee break  Coffee break  Coffee break  |  |  |
| 3.30 pm                            | Breeding for Virus Resistance of Barley: Amalgamation of Classical and Biotechnical   |  |  |
| 5.55 p                             | Approaches Rotunda Hall   |  |  |
|                                    | Wolfgang Friedt, Justus Liebig University Giessen, Germany  |  |  |
| 4.00 pm                            | Status of Russian Wheat Aphid Resistance in U.S. Barley   |  |  |
|                                    | Do W. Mornhinweg, USDA-ARS, Stillwater, USA   |  |  |
| 4.15 pm                            | IBGS Business Meeting   |  |  |
| 5.00 pm                            | Poster Papers – Sessions 7–10 corridor around the Rotunda Hall, Morava Hall   |  |  |
| 7.30 pm                            | Symposium Dinner  |  |  |
| Friday, 25 <sup>th</sup> June 2004 |   |  |  |
|                                    |   |  |  |
| 8.30 am                            | 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 Cerealicoltura, 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  |  |  |
| 9.30 am                            | Victor Shevtsov, Research Institute of Agriculture, Krasnodar, Russia  Versatile Barley Varieties for the Mexican Highlands |  |  |
| 9.50 alli                          | 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 Gallery of Rotunda   |  |  |
| 10.30 am                           | SESSION 10 – BREEDING SUCCESS STORIES Rotunda Hall  |  |  |
| 10.50 am                           | Chair: Victor Shevtsov  |  |  |
|                                    |   |  |  |
| 10.30 am                           | Progress in Malting Barley Breeding in a Family Owned Company   |  |  |
| 44.00                              | 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  |  |  |
| 11.50 um                           | Bryan Harvey, University of Saskatchewan, Saskatoon, Canada   |  |  |
| 12.00 am                           | Lunch Restaurant of Pavilion A  |  |  |
| 1.30 pm                            | Breeding of Malting Barley under the Stress Conditions in South America Rotunda Hall  |  |  |
|                                    | Silvia German, INIA Research Institute, Colonia, Uruguay  |  |  |
| 2.00 pm                            | Barley Breeding Progress in the Czech Republic  |  |  |
| 2.15 pm                            | Ivan Langer, Selgen Co., Plant Breeding Station Stupice, Czech Republic CLOSING SESSION                                     |  |  |
| 2.30 pm                            | MEMORANDUM OF 9 <sup>th</sup> IBGS,   |  |  |
| 2.50 pili                          | Conclusion – President of International Organizing Committee IBGS Prof. Bryan Harvey  |  |  |
| 3.00-6.00 pm                       | Arboretum, Mendel University  Arboretum   |  |  |
| •                                  | Farewell Party, Mendel University   |  |  |
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|                                    |   |  |  |
|                                    |   |  |  |