**EWAC**

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**EWAC – The European Cereals**

**Genetics Co-operative**

**EUCARPIA Cereals Section**

Novi Sad, Serbia, May 2011

### PROGRAMME

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| **November 7** | **Arrival Day** |  |
| 14.00 – 19.30 | **Registration Desk Open**  |  |
| 19.30 – 22.00 | **Welcome Buffet Supper** |  |
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| **November 8** |  |  |
| **SESSION 1** | **Chair Person: John Snape** | **Genetic stocks and alien introgressions**  |
|  9.00 - 9.30 | B. Kobiljski, A. Börner | Opening/Introduction |
|  9.30 - 9.50 | A. Börner, E.K. Khlestkina, T.A. Pshenichnikova, K. Neumann, B. Kobiljski, U. Lohwasser, V. Korzun, M.S. Röder | Cereal genetic stocks – examples of successful co-operation |
|  9.50 - 10.10 | T.A. Pshenichnikova, E.K. Khlestkina, L.V. Shchukina, A.V. Simonov, A.K. Chistyakova, E.V. Morozova, S. Landjeva, T. Karceva, A. Börner | Exploitation of Saratovskaya 29 / Janetzkis Probat 4D\*7A substitution and derivate lines for comprehensive phenotyping and molecular mapping of quantitative traits loci (QTL) |
| 10.10 - 10.30 | E.K. Khlestkina, O.Yu. Tereshchenko, V.S. Arbuzova, A. Börner, L.A. Pershina, E.A. Salina | A new range of wheat precise genetic stocks application: insights into gene function |
| 10.30 - 11.00 |  | ***COFFEE BREAK*** |
| 11.00 - 11.20 | M. Nowak, M. Zapalska, J. Leśniowska-Nowak, K. Kowalczyk | Analysis of GA 2-oxidase gene transcription in isogenic lines of common wheat cv. Bezostaya with different *Rht* genes |
| 11.20 - 11.40 | M. Molnár-Láng, E. Szakács, K. Kruppa, A. Cseh, G. Linc, M. Rakszegi, A. Farkas, B. Hoffmann, É.Darkó, S. Dulai | Evaluation of morphological and agronomic traits of wheat/barley introgression lines developed in Martonvásár |
| 11.40 – 12.00 | S. Landjeva, K. Kocheva, V. Nenova, A. Sepsi, I. Molnár, A. Schneider, T. Karceva, G. Ganeva, G. Georgiev, M. Molnár-Láng | *Aegilops geniculata* chromosome introgressions into bread wheat and their effects on plant physiological responses to abiotic stress |
| 12.00 – 12.20 | I. Molnár, H. Šimková, M. Kubaláková, M. Leverington-Waite, R. Goram, A. Cseh, A. Farkas, M. Molnár-Láng, S. Griffiths, J. Doležel | Flow-cytometric dissection the U and M genomes facilitate the physical mapping of *Aegilops* species  |
| 12.20 – 12.40 | L. Kuzmanović, A. Gennaro, S. Benedettelli, G. Lattanzi, S.A. Quarrie, C. Ceoloni | Effects on yield-related traits from introgression of *Thinopyrum ponticum* chromosomal segments onto the 7AL arm of durum wheat |
| 12.40 - 14.00  |  | ***LUNCH*** |
| **SESSION 2** | **Chair Person: Tatyana Pshenichnikova**  | **Molecular gene mapping and breeding in wheat** |
| 14.00 - 14.20 | B. Kobiljski, A. Kondić-Špika, L. Brbaklić, D. Trkulja, S. Treskić | QTL mapping and mining candidate genes affecting important agronomical traits in NS wheat breeding program |
| 14.20 - 14.40 | K. Neumann, B. Kobiljski, S. Denčić, R.K. Varshney, A. Börner | Genome wide association mapping of agronomic traits in bread wheat  |
| 14.40 - 15.00 | F. Longin, J. Reif, T. Würschum, T. Miedaner, H.P. Maurer, E. Ebmeyer, V. Korzun, R. Bothe, Chr. Pietsch | Association mapping in soft winter wheat for FHB, quality traits, heading time and yield |
| 15.00 – 15.20 | K. Kowalczyk, S. Okoń, M. Nowak, J. Leśniowska-Nowak | Using of DNA markers for selection of common wheat in Polish breeding programmes |
| 15.30 - 16.00 |  | ***COFFEE BREAK***  |
| 16.00 - 17.00  |  | Poster session  |
| **November 9** |  |  |
| **Cont. SESSION 2** | **Chair Person: Borislav Kobiljski** | **Molecular gene mapping and breeding in wheat** |
|  9.00 - 9.20 | G.A. Chebotar, S.V. Chebotar, I.I. Motsnyy, Yu.M. Sivolap | The *Rht* and *Ppd-D1* genes in Ukrainian winter bread wheats: effects and distribution |
|  9.20 – 9.40 | S. Okoń , J. Leśniowska-Nowak, M. Nowak, M. Zapalska, K. Kowalczyk | Identification of leaf rust resistance gene *Lr19* in wheat genetic stock from South Eastern Europe |
|  9.40 - 10.00 | A.B. Shcherban, T.T. Efremova, E.K.Khlestkina, E.A. Salina | A new *Vrn-B1* allele of wheat, *T.aestivum*: gene structure, transcription and geographical distribution  |
| 10.00 - 10.20 | O.Yu. Tereshchenko, E.K. Khlestkina, E.I. Gordeeva, V.S. Arbuzova, E.A. Salina | Relationship between anthocyanin biosynthesis and abiotic stress in wheat |
| 10.20 - 11.00 |  | ***COFFEE BREAK*** |
| 11.00 - 11.20 | P. Titan, V. Meglič | Derivatives of oxanilic acid as potential chemical hybridizing agents for common wheat (*Triticum aestivum* L. emend. Fiori et Paol.)  |
| 11.20 - 11.40 | G. Laidò, D. Marone, A. Gadaleta, P. Colasuonno, G. Angelica, S. Giove, P. De Vita, A. Blanco, L. Cattivelli, R. Papa, A.M. Mastrangelo | Development of a high-density consensus map in durum wheat |
| 11.40 – 12.00 | G. Laidò, F. Taranto, D. Marone, G. Mangini, A.M. Mastrangelo, L. Cattivelli, P. De Vita, A. Blanco, R. Papa | Linkage disequilibrium and population structure in tetraploid wheat |
| **SESSION 3** | **Chair Person: Viktor Korzun** | **Molecular gene mapping and breeding in barley and oat** |
| 12.00 - 12.20 | D. Perovic, J. König, D. Kopahnke, B.J. Steffenson, J. Förster, B. Kilian, J.Plieske,G. Durstewitz, F. Ordon | MBR1012 x Scarlett: A new DH population for genetic dissection of resistance to different pathogens in barley |
| 12.20 - 12.40 | T.M. Choo, R.A. Martin, M.E. Savard, A.G.Xue | Breeding barley for resistance to Fusarium Head Blight for Eastern Canada |
| 12.40 - 14.00  |  | ***LUNCH*** |
| 14.00 - 14.20 | A. Visioni, P. Muñoz, A. Tondelli, E. Francia, N. Pecchioni, A. Pswarayi, M. Malosetti, A.M. Stanca, I. Romagosa, J. Comadran | Genome wide association analysis for cold resistance in barley reveals a new QTL on chromosome 3H |
| 14.20 - 14.40 | E. Hagmann, L. von Post, R. von Post, M. Eklund, C.-T. Larsson, S. Tuvesson, A. Ceplitis | QTL mapping of powdery mildew resistance in oats using DArT markers |
| 14.40 - 15.00 | P. Vallenback, A.-Chr. Rönnberg-Wästljung, A. Ceplitis | Genetic variation, population structure and linkage disequilibrium in a global sample of cultivated oats (*Avena sativa*) using DArT markers |
| 15.00 - 15.30 |  | ***COFFEE BREAK***  |
| **WORKSHOP****15.30 – 17.00** | **Chair persons: Luigi Guarino and Hannes Dempewolf****Global Crop Diversity Trust** | **Adapting agriculture to climate change: collecting, protecting and preparing crop wild relatives** |
| 17.00 – 18.00 |  | Poster session |

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| **November 10** |  |  |
| 09.00 | Depart Hotel for Excursion | **See your information sheet for Excursion Programme** |
| 19.15 | Arrive back at the Hotel  |  |
| 20.00 |  | **Conference dinner** |
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| **November 11** |  |  |
| **SESSION 4** | **Chair Person: Andreas Börner** | **New strategies/technologies for breeding and research** |
|  9.00 - 9.30 | V. Korzun | Molecular and classical breeding in cereals: competition or complement?  |
|  9.30 - 10.00 | M. Ernst, A. Walter, U. Schurr | Identification of key parameters of barley root growth under drought stress |
| 10.00 - 10.30 | K. Eversole | The International Wheat Genome Sequencing Consortium (IWGSC): building the foundation for a paradigm shift in wheat breeding |
| 10.30 - 11.00 |  | ***COFFEE BREAK*** |
| 11.00 - 11.30 | M. E. Sorrells | Genomic selection strategies for wheat improvement |
| 11.30 - 12.00 | E. Storlie, G. Charmet | Implementation of genome-wide selection in wheat |
| 12.00 - 12.30 |  | Business Meeting - Ongoing and future cooperation within EWAC |
| 12.30 - 14.00  |  | ***LUNCH***  |
|  |  | **Departure of delegates** |

**POSTERS**

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| M. Ashfaq, A. Salam Khan | Association of various physiomorphological traits with yield and genetic divergence in rice (*Oryza sativa* L.)  |
| I.A. Belan, L.P. Rosseeva, V.M. Rosseev, A.I. Morgounov, Y. I. Zelenskiy, E.I. Gultyaeva, O.A. Baranova, E.D. Badaeva, L.A. Pershina | Using of alien genetic material in the breeding of spring bread wheat |
| L. Brbaklić, D. Trkulja, A. Kondić-Špika, B. Kobiljski, S. Denčić, N. Mladenov, N. Hristov | Detection of QTLs for important agronomic traits in wheat using association analysis |
| S. Chebotar, G. Chebotar, D. Babenko, I. Motsnyy, Yu. Sivolap | Alleles of *Ppd-D1* gene in *Aegilops tauschii* accessions |
| Yu.V. Chesnokov, E.A.Goncharova, M.N.Sitnikov, N.B. Pochepnya, N.V.Kocherina, U.Lohwasser, A.Börner | Mapping of agronomically important QTLs in soft spring wheat (*Triticum aestivum* L.) in dose gradient of Nitrogen nutrition |
| M. Ciucă, I. Guinea | Rye chromatin involved in wheat resistance to bunt |
| C. Dimaki, M. Jansen, K. A. Nagel, F. Fiorani, U. Schurr | Automated, non-invasive phenotyping research in cereals at the Jülich Plant Phenotyping Centre (JPPC) |
| O. Dobrovolskaya, P. Martinek, L.I. Laikova, V.S. Arbuzova, J. Salse, A. Börner, E.A. Salina | Identification and characterization of genes that are involved in regulation of the cereal inflorescence development in bread wheat (*T. aestivum L.*) and its close relatives |
| T.T. Efremova, V.S. Arbuzova, N.V. Trubacheeva, L.A. Pershina | Substitution of homoeologous group 7 wheat chromosomes by barley *H. marinum* subsp. *gussoneanum* chromosome 7H1Lmar  |
| M.V. Emtseva, T.T. Efremova | The study of developmental stages of near-isogenic wheat lines of winter cultivar Bezostaya 1 with dominant genes *Vrn-A1* and *Vrn-B1* |
| E. Filip, S. M. Rogalska | STS-PCR characteristics of genes coding HMW-GS in old cultivars of wheat *(Triticum aesitvum spp vulgare* L). |
| T. Karceva, S. Landjeva, A. Börner | Effects of wheat *Rht-B1b*, *Rht-B1c* and *Rht-D1b* genes on plant height and yield potential under the climatic conditions of Bulgaria  |
| E.K. Khlestkina, U. Kumar, M.S. Röder | Cloning and mapping of the *Kao* genes in wheat |
| K. Kowalczyk, A. Börner, J. Leśniowska-Nowak, M. Nowak, S. Okoń | Analysis of selected quantitative traits in *Triticum aestivum/Aegilops squarrosa* introgressive lines |
| K. Kowalczyk, A. Börner, M. Nowak, J. Leśniowska-Nowak, M. Zapalska | Characterization of quantitative traits of Steptoe × Morex barley (*Hordeum vulgare*  L.) population |
| M. Kulbida, G. Chebotar, I. Motsnyy, S. Chebotar | Evaluation of physiological stress in ontogenesis of wheat analogue-lines differing by alleles *Rht8*, *Rht-B1*, *Rht-D1*, *Ppd-D1* genes with using biometrical characteristics  |
| L.I. Laikova,I.A. Belan, L.P. Rosseeva, V.M. Rosseev, O.M. Popova, S.N. Sibikeev, L.A. Pershina | Introgressive hybridization for production of the spring bread wheat variety Pamyati Maystrenko and new promising lines |
| J. Leśniowska-Nowak, S. Okoń, M. Nowak, K. Kowalczyk | Identification of *Lr19* gene in Polish common wheat (*Triticum aestivum* L.) breeding lines |
| U. Lohwasser, M.A. Rehman Arif, A. Börner  | Comparative mapping of loci determining pre-harvest sprouting and dormancy in wheat and barley |
| L. Maphosa, P. Langridge, A. Okada, S. Jefferies, H. Kuchel, K. Chalmers, H. Taylor, L. Emebiri, D. Mather  | Genetic control of yield, yield components and grain characteristics in a bread wheat mapping population  |

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| M. Nagel, I.O. Daniel, M. Gäbler, R.K. Pasam, M.A. Rehman Arif, B. Kilian, N. Stein, A. Börner | Seed longevity in cereal collections - variation and gene identification |
| K. Neumann, N. Stein, A. Graner, Chr. Klukas, A. Entzian, B. Kilian | Non-destructive phenotyping using the high-throughput LemnaTec-Scanalyzer 3D platform to investigate drought tolerance in barley |
| M. Nowak, J. Leśniowska-Nowak, K. Kowalczyk | Characterization of mitochondrial manganese superoxide dismutase (MnSOD) gene transcript level changes during activity of low temperature in wheat (*Triticum aestivum* L.) |
| L.V. Obukhova, E.B. Budashkina, V.K. Shumny | Biochemical Marker-assisted Development of New Common Wheat Line with HMW-glutenin Genes from *Triticum timopheevii* Zhuk. |
| S.V. Osipova, A.V. Permyakov, M.D. Permyakova, T.A. Pshenichnikova, A. Börner | Genetic variability of detoxification enzymes activity in leaves of inter-varietal substitution lines of bread wheat with different tolerance to water deficit |
| K. Pánková, Z. Milec, J. Šafář, M. Valárik, I.T. Prášil, J.W. Snape | New flowering time genes and alleles in wheat; the study of their effects  |
| M.D. Permyakova, E.Z. Voronina, A.V. Permyakov, S. Osipova, T.A. Pshenichnikova | Lipoxygenase isozymes activity in bread wheat: inheritance and relationship to drought tolerance |
| S. Petrovic, I Karsai, S. Marić, T. Čupić | Genetic Diversity of Winter Wheat Germplasm |
| T.A. Pshenichnikova, L.V. Shchukina, A.V. Simonov, A.K. Chistyakova, E.V. Morozova | The use of monosomic lines of bread wheat for verification of quantitative trait loci (QTL) |
| M.A. Rehman Arif, M.Nagel, K.Neumann, B. Kobiljski, U. Lohwasser, A. Börner | Genome-wide association mapping of seed longevity, dormancy and pre-harvest sprouting in bread wheat (*Triticum aestivum* L.) |
| **K.F.M. Salem,  M.S. Röder, A.  Börner** | **Evaluation of genetic diversity among Egyptian bread wheat (*Triticum aestivum* L.) varieties during the period 1947-2004 using microsatellite** |
| M. Scholz, C. Balko. | Characterization and exploitation of barley-genetic resources for resistance to frost  |
| A.V. Simonov, M.F. Ermakova, A.K. Chistyakova, L.V. Shchukina, E.V. Morozova, T.A. Pshenichnikova | Effect of the grain softness locus *Ha-Sp* introgressed from *Aegilops speltoides* Tausch. on the phenotype of endosperm of soft-grain and hard-grain bread wheat cultivars  |
| L. Skuza, S.M. Rogalska | The change of the structure of *atp1* mitochondrial gene are connected with presence of additional heterochromatin in 2R chromosomes in *Secale vavilovii* Grossh. lines |
| N.V. Trubacheeva, T.T. Efremova, E.P. Devyatkina, L.A. Pershina | Mitochondrial and chloroplast DNA variability during the development of euploid and aneuploid lines produced using barley-wheat hybrids *H. marinum* subsp. *gussoneanum* Hudson х *T. aestivum* L. |