

FINAL PROGRAM OF CBB6 / Virtual conference / 3-5 November 2021

CET (GMT+1)	Wednesday, 3 November 2021		
09:00-09:20	Opening remarks <i>Andreas Börner</i> (Germany) (EUCARPIA) <i>János Pauk</i> (Hungary) <i>Gábor Galiba</i> (Hungary)		
09:20-10:00	Congress Opening Lecture <i>Cristobal Uauy</i> (UK) Unlocking the polyploid potential of wheat through genomics		
	Session I	Chair: Andreas Börner	Natural Diversity for Genetic Improvement
10:00-10:30	Plenary talk	<i>Elena Khlestkina</i> (Russia)	The lessons from Vavilov's law for next generation breeding: emphasis on cereals
10:30-11:00	Plenary talk	<i>Luigi Cattivalli</i> (Italy)	Gene duplications and copy number variants: a new level of genetic diversity in barley
11:00-11:30	Coffee Break		
11:30-11:50		<i>Uğur Sesiz</i> (Turkey)	A novel genetic map provides insight into the genetic basis of grain size and shape-related traits in einkorn wheat
11:50-12:10		<i>Eszter Gaál</i> (Hungary)	Widening the gene pool of bread wheat by dissection of added <i>Agropyron cristatum</i> chromosomes 5P and 6P using gametocidal system
12:10-12:30		<i>Yeorgia Argirou</i> (UK)	Novel genetic diversity from synthetic-hexaploids and tetraploid-hexaploids in hybrid wheat
12:30-12:50		<i>Svetlana Misheva</i> (Bulgaria)	Phenotypic variation for grain protein content and marker-trait associations in a worldwide collection of bread wheat
12:50-14:00	Lunch Break		
14:00-14:20		<i>Ana López Malvar</i> (Spain)	Study of the interrelation of cell wall components and its role in the maize exploitation
14:20-14:40		<i>Salvatore Esposito</i> (Italy)	Multi-locus GWAS as a powerful approach to dissect complex traits in durum wheat
14:40-15:00		<i>Michał Kwiatek</i> (Poland)	Development of tetraploid triticale (einkorn wheat × rye) pre-breeding germplasm with loci for steam rust resistance
	Session II	Chair: János Pauk	Environmental Adaptation
15:00-15:30	Plenary talk	<i>Ildikó Karsai</i> (Hungary)	Environmental driven genetic regulation of plant development in cereals
15:30-15:50		<i>Mohamed Ahres</i> (Hungary)	The temperature dependent impact of modulated white light on hormonal responses, lipid composition and frost tolerance of barley plantlets at different age
15:50-16:10		<i>Yuzhou Lan</i> (Sweden)	Drought stress and genotypic variability - effects on early vigour, final yield and protein composition
16:10-16:30		<i>Alexander Simonov</i> (Russia)	Influence of an introgression from <i>Triticum timopheevii</i> into chromosome 5A of bread wheat cultivars on diverse biological parameters under contrasting irrigation conditions
16:30-16:50	Coffee Break		
	Session III	Chair: Ildikó Karsai	Biotic Stress Response
16:50-17:20	Plenary talk	<i>Brandt Wulff</i> (Saudi Arabia)	Sustainable control of disease resistance – the case for GM wheat
17:20-17:40		<i>Ahmed Fawzy Elkot</i> (Egypt/UK)	Exploring the genetic diversity in the Watkins wheat land race collection for wheat disease resistance in Egypt
17:40-18:00		<i>Agnieszka Tomkowiak</i> (Poland)	Analysis of miRNA expression associated with gene <i>Lr34</i> responsible for resistance mechanisms to leaf rust of wheat
18:00-19:00	Poster Session - Elevator Pitch		Sessions I-III

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18:00-18:55	Chair: Andreas Börner		
	Poster Session - Elevator Pitch		
	Session I		
	Natural Diversity for Genetic Improvement		
	18:00-18:05	<i>Matias Schierenbeck</i> (Argentina)	Genetic dissection of grain architecture related traits in a winter wheat population
	18:05-18:10	<i>Matilde López Fernández</i> (Spain)	GWAS Analysis in a Collection of Spanish Bread Wheat Landraces for Agromorphological and Quality Traits
	18:10-18:15	<i>Helga Ochagavía</i> (Spain)	Phenotypic and genetic diversity in a Spanish barley landrace
	18:15-18:20	<i>María D. Requena Ramírez</i> (Spain)	Durum wheat (<i>Triticum durum</i> L.) landraces reveal potential for the biofortification of carotenoid esters in grain.
	18:20-18:25	<i>Petra Kis</i> (Hungary)	Molecular marker analysis of gene bank tetraploid wheat accessions
	18:25-18:30	<i>Noemi Gesteiro</i> (Spain)	Genomics of maize resistance to kernel contamination with fumonisins using a Multiparental Advanced Generation InterCross population (MAGIC)
	Session II		
	Environmental Adaptation		
	18:30-18:35	<i>Emmanuel A. Jampoh</i> (Hungary)	Evaluating the impact of heat and drought co-stress on the chlorophyll content and gas exchange of two barley (<i>Hordeum vulgare</i> L.) genotypes
	18:35-18:40	<i>Francesc Montardit-Tarda</i> (Spain)	Meta-analysis of agronomic-genotypic associations in a European field trial network of spring barley
18:40-18:45	<i>Rita Armoniene</i> (Lithuania)	Transcriptome profiling of short-term low temperature-treated winter wheat	
Session III			
Biotic Stress Response			
18:45-18:50	<i>Katalin Jäger</i> (Hungary)	Effect of heat and drought co-stress on functionality of generative organs and cells in wheat	
18:50-18:55	<i>Valérie Cadot</i> (France)	RustWatch : European rust surveillance supported by rust trap nurseries in wheat VCU trials	

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CET (GMT+1)	Thursday, 4 November 2021		
	Session IV	Chair: Kerstin Neumann	Quality for Food and Industrial Use
9:00-9:30	Plenary talk	<i>Katharina Scherf</i> (Germany)	WHEATSCAN – Fingerprinting of wheat varieties from 1891 to 2010 to study changes in protein composition
9:30-9:50		<i>Sabrina Geisslitz</i> (Germany)	Influence of wheat species, breeding and environmental conditions on amylase/trypsin-inhibitors as triggers of wheat sensitivity
9:50-10:10		<i>Sbatie Lama</i> (Sweden)	Striving for stable mixing qualities of dough from Swedish wheat in a varying climate: To breed or not to breed?
10:10-10:30		<i>Uzzal Ahmed Liton</i> (Canada)	Genetic analysis reveals a major 4A QTL and a novel 1D QTL for pre-harvest sprouting resistance in red spring wheat
10:30-10:50		<i>Tatyana Pshenichnikova</i> (Russia)	Genetic resources of bread wheat and relative species for the different end-use of grain and flour
10:50-11:20	Coffee Break		
	Session V	Chair: Gábor Galiba	Bioinformatics and Genomic Selection
11:20-11:50	Plenary talk	<i>Gilles Charmet</i> (France)	Genomic prediction of agronomic and malting quality traits in six-rowed winter barley
11:50-12:10		<i>Abdulqader Jighly</i> (Australia)	Doubling the prediction accuracy for non-reference unrelated genotypes and deviated environments
12:10-12:30		<i>Pauline Robert</i> (France)	Identification of factors influencing predictive ability of phenomic selection and comparison to genomic selection in wheat breeding programs
12:30-12:50		<i>Artem Pronozin</i> (Russia)	Prediction, classification and annotation of long noncoding RNAs
12:50-13:10	Industry talk	<i>Nick Jordan</i> (FLUIDIGM)	Extensive QTL Analysis of Rice Grain Size Using a Convenient And Flexible Microfluidics Platform
13:10-14:00	Lunch Break		
	Session VI	Chair: Viktor Korzun	Genomic and Genetic Manipulation
14:00-14:30	Plenary talk	<i>Jochen Kumlehn</i> (Germany)	Site-directed genetic engineering in cereals - principles and applications
14:30-15:00	Plenary talk	<i>István Molnár</i> (Hungary)	Chromosome genomics of <i>Aegilops</i> supports marker development and introgression breeding of wheat
15:00-15:20		<i>Pooja Satpathy</i> (Germany)	Generation of haploidy inducers for Cas endonuclease-mediated mutagenesis in barley
15:20-15:40		<i>Christian Hertig</i> (Germany)	Engineering of cereal spike architecture by site-directed mutagenesis
15:40-16:00		<i>Diaaeldin Daghma</i> (Germany)	Towards rye genome editing - establishment of adventitious shoot formation <i>in vitro</i> and a genetic engineering platform
16:00-16:30	Coffee Break		
16:30-16:50		<i>Joanna Melonek</i> (Australia)	Developing strong restorer-of-fertility genes for hybrid breeding in wheat
16:50-17:10		<i>Eleanor Brant</i> (USA)	CRISPR/Cas9 mediated targeted mutagenesis of <i>Liguleless1</i> in sorghum provides a rapidly scorable phenotype
17:10-18:05	Poster Session - Elevator Pitch		Sessions IV-VIII

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17:10-17:55	Chair: Andreas Börner		
	Poster Session - Elevator Pitch		
	Session IV		
	Quality for Food and Industrial Use		
	17:10-17:15	<i>Hermann G. Dallinger</i> (Austria)	Phs-A1 confers pre-harvest sprouting resistance independent of phenology in European winter wheat and multiple genomes reveal structural variation
	17:15-17:20	<i>Ramanpreet Ramanpreet</i> (Canada)	Genome-wide association mapping of preharvest sprouting resistance in spring wheat (<i>Triticum aestivum</i> L.)
	17:20-17:25	<i>Maria Chiara Piro</i> (Belgium)	A Wheat-Rye-Triticale Crossing Platform to Increase Wheat White Flour Arabinoxylan Content
	Session V		
	Bioinformatics and Genomic Selection		
	17:25-17:30	<i>Ivana Plavšić</i> (Croatia)	The prediction accuracy of genetic values is affected by imputation method within a wheat biparental population
	Session VI		
	Genomic and Genetic Manipulation		
	17:30-17:35	<i>Sara Miller</i> (Denmark)	Establishing new tools for genetic studies in cereals
	Session VII		
Phenotyping Technologies			
17:35-17:40	<i>Svetlana P. Misheva</i> (Bulgaria)	Automated screening of wheat in environments, varying in nitrogen and water supply	
17:40-17:45	<i>Alejandra Cabeza</i> (Spain)	Diversity of root traits in seedlings of a barley RIL population	
Session VIII			
Future Challenges and Innovations			
17:45-17:50	<i>Michał Nowak</i> (Poland)	Identification of the genome regions associated with heterosis in hexaploid winter triticale	
17:50-17:55	<i>Stanislav Ježek</i> (Czech Republic)	Improving the phytosanitary efficiency of Gliding Arc plasma seed treatment by adding nitrogenous solutions to the process	

FINAL PROGRAM OF CBB6 / Virtual conference / 3-5 November 2021

CET (GMT+1)	Friday, 5 November 2021		
	Session VII	Chair: Katharina Scherf	Phenotyping Technologies
9:00-9:30	Plenary talk	<i>Kerstin Neumann</i> (Germany)	Phenomic infrastructure at IPK and applications
9:30-9:50		<i>Madita Lauterberg</i> (Germany)	Precision phenotyping for shoot development under contrasting water regimes to further characterize wild emmer (<i>Triticum turgidum</i> ssp. <i>dicoccoides</i>) QTL that improve grain yield under drought in durum (<i>T.turgidum</i> ssp. <i>durum</i>) and bread wheat (<i>T.aestivum</i>)
9:50-10:10		<i>Dmitry Afonnikov</i> (Russia)	Wheat spike morphometric characteristics analysis using 2D image processing
10:10-10:30		<i>Danuta Kurasiak-Popowska</i> (Poland)	Estimation of stem-solidness in spring wheat genotypes: 50 varieties and hybrids of F1 and F2 generations
10:30-10:50		<i>Wannes De Man</i> (Belgium)	Advances in the structural characterization of wheat flour arabinoxylan by high-resolution NMR technologies
10:50-11:10		<i>Sara Petit-Jean</i> (Belgium)	A simple and cost-effective method to estimate arabinoxylan contents in wheat, rye and triticale flours
11:10-11:40	Coffee Break		
	Session VIII	Chair: Andreas Börner	Future Challenges and Innovations
11:40-12:10	Plenary talk	<i>Victor Korzun</i> (Germany)	Future challenges and innovations
12:10-12:40	Plenary talk	<i>Renáta Sándor</i> (Hungary)	Combined effect of ploughing, minimal tillage and green manure managements in a temperate agro-ecosyste
12:40-13:00		<i>Irene S. Breider</i> (UK)	A multipart breeding strategy for introgression of exotic germplasm in elite breeding programs using genomic selection
13:00-13:20		<i>Liina Jakobson</i> (Estonia)	Comparative study of powdery mildew resistance breeding strategies in barley
13:20-13:40		<i>Ioannis Tokatlidis</i> (Greece)	Resilience to environmental uncertainty relies on crop spacing via improved plant yield efficiency
13:40-14:00		Closing Remarks <i>Andreas Börner</i> (Germany) (EUCARPIA) <i>János Pauk</i> (Hungary) <i>Gábor Galiba</i> (Hungary)	