

5th CiBreed Fall Workshop

October 11-12, 2023

Alfred-Hessel-Saal
 Papendiek 14, 37073 Göttingen

Scientific Program

Wednesday, October 11, 2023

Registration from 11:00

Welcome and Opening	
12:00-12:15	Organizing team, <i>Stefan Scholten</i> (managing director of CiBreed), <i>Dieter Stelling</i> (Deutsche Saatveredelung AG)

SESSION 1		Climate Change (Chair: <i>Antje Schierholt</i> , Georg-August-Universität Göttingen)
12:15-13:15	<i>Henrik Hartmann</i> Julius-Kühn Institut, Quedlinburg & Georg- August-Universität Göttingen	Key note: The fate of forests under climate change - facts, uncertainties and fairy tales
13:15-13:35	<i>Alex Windhorst</i> Georg-August-Universität Göttingen	Winter is coming: Breeding research on winter hardiness in faba bean facing climate change
13:35-13:55	<i>Eva Heinrich</i> Georg-August-Universität Göttingen	Quantitative effects of temperature and day length on flowering time and freezing tolerance of oilseed rape
13:55-14:45	Poster session	

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14:45-15:30 **Coffee break**

SESSION 2 Phenomics (Chair: Andreas von Tiedemann , Georg-August-Universität Göttingen)		
15:30-16:00	<i>Stefan Paulus</i> Institute for sugar beet research (IfZ), Göttingen	Key note: Digital Cameras in plant phenotyping
16:00-16:20	<i>Ines Teichert</i> Georg-August-Universität Göttingen	Analysis of ascospore phenotypes in mutants of the saprotrophic fungus <i>Sordaria macrospora</i>
16:20-16:40	<i>Venkata Sai Vandana Pulusu</i> Georg-August-Universität Göttingen	Effects of environmental signals on fruiting body development of the edible mushroom <i>Coprinopsis cinerea</i>
16:40-17:00	<i>Lukas Rollwage</i> Institute for sugar beet research (IfZ), Göttingen	Virus yellows disease in sugar beet - resistance mechanism for the future
17:00-17:05	Announcement about the BBQ dinner	

19:00 **BBQ event in the new green house facilities at the northern campus**

Thursday, October 12, 2023

SESSION 3 Innovative Technologies (Chair: Johannes Geibel, Friedrich-Loeffler-Institut (FLI))		
09:00-09:30	<i>Elizabeth Ross</i> University of Queensland	Key note: Capturing population level variation using Nanopore sequencing
10:00-10:20	<i>Srinivas Chadaram</i> Thermo Fisher Scientific, Waltham	AgriSeq™ - Fast and Affordable Genotyping by Sequencing Solution for Plant Breeding Programs to maximize sample throughput, validate gene edits and analyze Polyploids & Structural variants
10:20-10:40	<i>Hailin Zhang</i> Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Gatersleben	Improved assembly and annotation of the faba bean reference genome
10:40-11:00	<i>Azadeh Hassanpour</i> Georg-August-Universität Göttingen	Optimizing Resource Allocation in Breeding Programs Using Evolutionary Algorithms (MoBPSopti)
11:00-11:20	<i>Muhammad Jawad</i> South Westphalia University of Applied Sciences, Soest	Unraveling the Genetic Architecture of Mastitis: A Data Fusion Approach Using the 1000 Bull Genomes Project Dataset

11:20-12:30 Lunch

SESSION 4 Forest Genomics and Breeding (Chair: Shanta Subba, Georg-August Universität Göttingen)		
12:30-13:00	<i>Pär Ingvarsson</i> Swedish University of Agricultural Sciences (SLU), Uppsala	Key note: Adaptation to future climates in Norway spruce
13:00-13:20	<i>Helmuth E. Nieves-Orduña</i> Georg-August-Universität Göttingen	Genetic diversity of cacao (<i>Theobroma cacao</i> L.) populations and agronomic traits for breeding
13:20-13:40	<i>Mila Tost</i> Georg-August-Universität Göttingen	Identification of polygenic selection for drought stress in European beech populations
13:40-14:00	<i>Hieu Cao</i> Georg-August-Universität Göttingen	RubraSelect - Genomic Analysis of Growth Traits and Drought Tolerance in Northern Red Oak (<i>Quercus rubra</i> L.) for Sustainable Forestry in Germany
14:00-14:10	Farewell and end of the meeting	

POSTER SESSION		
1	<i>Henri Laugel</i> Georg-August-Universität Göttingen	Identification of QTLs and candidate genes governing anaerobic germination tolerance using early backcross selective introgression populations of rice (<i>Oryza sativa</i> L.)
2	<i>Henri Laugel</i> Georg-August-Universität Göttingen	Identification of a priori inbred individuals in faba bean (<i>Vicia faba</i> L.) populations and prediction of their genetic value for breeding
3	<i>Lisa Brünjes</i> Georg-August-Universität Göttingen	Pollen production, pollen viability and autofertility in faba bean (<i>Vicia faba</i> L.) and their relationship with paternal success of faba bean genotypes
4	<i>Kingsley Ibeabuchi</i> Deutsche Saatzuchtveredlung (DSV), Asendorf	Investigating the Effect of Osmopriming on Early Seedling Vigor in <i>Brassica napus</i> L.
5	<i>Tania Dominguez-Flores</i> Georg-August-Universität Göttingen	Taking advantage of isolated planted populations of <i>Quercus rubra</i> to identify full-sib families for Quantitative Trait Locus Mapping
6	<i>Giang T.H. Vu</i> Georg-August-Universität Göttingen	Genetic and epigenetic effects on Douglas-fir growth
7	<i>Christian Reimer</i> Friedrich-Loeffler-Institut (FLI), Neustadt	The minimal number of inseminations for the reintroduction of a valuable sire in a cryo-based conservation breeding scheme
8	<i>Henry Newton Munroe</i> Georg-August-Universität Göttingen	Fostering the molecular identification of Fabaceae in converted tropical rainforest fragments of Sumatra
9	<i>Kieu Thuy Quynh</i> Georg-August-Universität Göttingen	Effects of above- and belowground plant diversity on soil water infiltration in an oil palm landscape (Sumatra, Indonesia)
10	<i>Johanna-Sophie Schlüter</i> Georg-August-Universität Göttingen	Exploring the potential of metabolites to identify the genetic background of complex traits in maize using machine learning
11	<i>Markus Müller</i> Georg-August-Universität Göttingen	Analysis of genome-wide abiotic genetic adaptation in European beech
12	<i>Victor Chano</i> Georg-August-Universität Göttingen	Genomic and epigenomic markers associated with wood quality and decay resistance in Norway spruce
13	<i>Leke Victor Aiyesa</i> Georg-August-Universität Göttingen	Analysis of individual plants from European maize populations reveals the genetic architecture behind local adaptation
14	<i>Johan Zicola</i> Georg-August-Universität Göttingen	The nucleolus organizer region contributes to heterosis in maize

15	<i>Shanta Subba</i> Georg-August-Universität Göttingen	Understanding the complexity in the fruiting process of <i>Coprinopsis cinerea</i>
16	<i>Jiaqi Guo</i> Georg-August-Universität Göttingen	Detection of alien species in roots in rainforest remnants under conversion pressure using DNA metabarcoding
17	<i>Paolo Lucas Rodrigues-Silva</i> Centro Nacional de Biotecnología, CNB-CSIC, Madrid, Spain	Function of H2BK acetylation in the seed-to-seedling transition, drought tolerance, and as a marker of efficient seed priming in <i>Brassica napus</i> (oilseed rape)
18	<i>Yang Wang</i> Georg-August-Universität Göttingen	Genome-wide association study identifies candidate genes for flowering time in <i>Brassica napus</i> L.
19	<i>Bright Enogieru</i> <i>Osatohanmwon</i> Georg-August-Universität Göttingen	Machine Learning Combined with Locus-Specific Weighted Dominance Effect for Genomic Prediction of Maize Yield.
20	<i>Ourania Grigoriadou-Zormpa</i> Georg-August-Universität Göttingen	Do we need high coverage whole-genome sequencing data to assess genetic variation and differentiation? A case study in <i>Fagus sylvatica</i>

Workshop Organizing Team

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