





# 75<sup>th</sup> Conference

## 25 - 27 November 2024

### 75 years in the service of plant breeding – From chi-square to genomic selection

## Programme

Conference venue: HBLFA Raumberg-Gumpenstein Raumberg 38, 8952 Irdning

#### Monday, 25 November 2024

- 13:00 14:00 REGISTRATION
- 14:00 14:20 OPENING
- 14:20 14:35 GRAUSGRUBER Heinrich (Tulln, AT) 75 years in review – don't stop the count!
- 14:35 15:00 BÜRSTMAYR Hermann (Wien, AT) Always needed, but never finished - an overview of research on disease resistance in cereals at BOKU
- **15:00 15:25 GOHN** Felix (Wien, AT) Perspectives of Probstdorfer Saatzucht as a mid-size family enterprise

#### 15:25 – 15:55 COFFEE BREAK

- **16:55 16:20 FRAUNDORFER** Josef (Linz, AT) 75 years of plant breeding at Saatbau Linz
- 16:20 16:45MAYER Florian (Korneuburg, AT)Overview of breeding activities of the RWA/Lagerhaus network and future challenges<br/>for cooperative breeding programmes
- 16:45 17:10ZECHNER Elisabeth (Zwettl, AT)Saatzucht Edelhof since 1903: where tradition meets innovation in cereal breeding
- **17:10 17:35 TOMASICH** Josef (Parndorf, AT) Corteva's corn breeding efforts in Austria

19:00 GALA DINNER

#### Tuesday, 26 November 2024

09:00 – 09:20 RIBARITS Alexandra (Wien, AT)

DurdusTools – An online genetic distance calculation tool for efficient variety testing in durum wheat (Triticum turgidum L. subsp. durum (Desf.) Husn.)

- 09:20 09:40 BUXBAUM Michael (Windigsteig, AT) Potato breeding at NÖS and regional production
- 09:40 10:00 MOSER Jakob (Gleisdorf, AT)

Saatzucht Gleisdorf: 1947-now-future: The development into a successful diversified breeding station

10:00 – 10:25 BIRSCHITZKY JOHANN (Probstdorf, AT)

Breeding of cereals and soybeans in Saatzucht Donau 2000 – 2024 – 2036: past – present – future

#### 10:25 – 10:55 COFFEE BREAK

**10:55 – 11:15 MAHILUM** Jedi Joy (Tulln, AT)

The long path to resistance: Breeding progress in durum wheat for Fusarium head blight resistance

11:15 – 11:40 LUNZER Magdalena (Tulln, AT)

From Tillet to Tillecur – important milestones and current challenges in mans race against the black dust

11:40 – 12:00 BERISHA Pranvera (Tulln, AT)

Genome-wide association mapping and genomic prediction of Septoria nodorum blotch resistance in Central European winter wheat (Triticum aestivum L.)

- 12:00 14:00 LUNCH BREAK
- **14:00 14:25 KORZUN** Viktor (KWS, DE)

From Chi-square to genomic selection

14:25 – 14:50 MICHEL Sebastian (Tulln, AT)

Can we teach the machine to select like a plant breeder? A recommender system approach to support early generation selection decisions based on breeder's preferences

- 14:50 15:15FOSSATI Dario (Nyon, CH)Genomic selection for low DON content in winter wheat
- 15:15 15:40VALARIK Miroslav (Olomouc, CZ)Potential of Genome Wide Association Analysis for major and orphan crop improvement

#### 15:40 – 16:10 COFFEE BREAK

- **16:10 16:35** SAFAR Jan (Olomouc, CZ) New insights into structure and function of VRN1 gene in cereals
- **16:35 17:00 TERASAWA** Yohei (Hohenheim, DE) Differences in the yield-related phenotype between winter wheat lines in Japan and Germany
- 17:00 17:25WARTHMANN Norman (Seibersdorf, AT)Mutation breeding and capacity building for enhanced global food security
- 17:25-17:45 NÖHAMMER Florian (Wels, AT) HarvestMaster data collection technologies

#### Wednesday, 27 November 2024

- **08:30 08:55 FUCHS** Martin (Wien, AT) Breeding progress and weather dependency in corn trials: Insights from 30 years of VCU testing
- 08:55 09:20MECHTLER Klemens (Wien, AT)35 years of Austrian VCU testing in soybean: Breeding successes and future challenges
- **09:20 09:45 FLAMM** Clemens (Wien, AT) Development of the Austrian baking quality model of wheat in the last 30 years
- 09:45 10:15 COFFEE BREAK
- **10:15 10:40 D´AMICO** Stefano (Wien, AT) Processability and quality of einkorn from Austria
- **10:40 11:05 STEINWIDDER** Andreas (Irdning-Donnersbach, AT) Research at Raumberg-Gumpenstein
- 11:30 VISIT TO RESEACH AT RAUMBERG-GUMPENSTEIN
- **15.00 EXCURSION TO ADMONT ABBEY** (only with additional registration)

#### MEETING ENDS

#### POSTER PRESENTATIONS (still open for submission)

**Kříž** Martin (Sibřina, CZ) Stupice - 100 years of breeding of spring malting barley

Michel Sebastian (Tulln, AT)

Al meets barley - Machine learning with pedigree and marker data

#### Michel Sebastian (Tulln, AT)

Resistant barley, better beer - Exploring BYDV resistance in winter malting barley germplasm

#### Steiner Barbara (Wien, AT)

Project presentation with Saatzucht Donau: Making Durum Wheat `Climate-Fit`

#### Knapp Samuel (Nyon, CH)

Comparing prediction accuracy of genomic and phenotypic selection

#### Ribarits Alexandra (Wien, AT)

Survey of potato growers' perception of climate change and its impacts on potato production in Germany, Switzerland and Austria

#### Seereiter Jakob (Wien, AT)

Pre-breeding to develop regionally adapted and Wheat Dwarf Virus resistant winter wheat cultivars