

73rd Conference

21 - 23 November 2022

Topics:

- New plant breeding techniques: myths, facts and reality
- Results from the ECOBREED project
- Free Topics

Preliminary Programme

Conference venue:

HBLFA Raumberg-Gumpenstein
Raumberg 38, 8952 Irdning

co-hosted by



ecobreed
IMPROVING CROPS



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 **HBLFA**
Raumberg-Gumpenstein
Landwirtschaft

Monday, 21 November 2022

13:00 – 14:00 **REGISTRATION**

14:00 – 14:20 **OPENING**

14:20 – 14:50 **JORASCH** Petra (Brussels, BE)

Will the EU benefit from plant breeding innovations?

14:50 – 15:15 **RIBARITS** Alexandra (Wien, AT)

Traceability of genome-edited plants and products: opportunities and challenges

15:15 – 15:40 **KAPUSI** Eszter (Wien, AT)

CRISPR/Cas9 mediated genome editing in barley and wheat

15:40 – 16:10 **COFFEE BREAK**

16:10 – 16:35 **KAWELKE** Steffen (Bonn, DE)

Fungal tolerance of wheat by new breeding methods (Project PILTON)

16:35 – 17:00 **HACKAUF** Bernd (Groß-Lüsewitz, DE)

Development of plant breeding innovations based on natural diversity – Mission impossible?

17:00 – 17:25 **MALYSHEVA-OTTO** Lyudmyla (Gatersleben, DE)

Input of the new breeding technologies to the dissection of plant traits genetics and the development of new varieties

18:00 **GALA DINNER**

Tuesday, 22 November 2022

09:00 – 09:25 **LILLEMO** Morten (Ås, NO)

WheatSustain – an example of a fruitful transnational collaboration between academia and industry to develop genomics-based breeding tools for practical application in wheat breeding

09:25 – 09:50 **NANNURU** Vinay K.R. (Ås, NO)

Effect on prediction ability of single-trait and multi-trait genomic prediction models by incorporating genome-wide association study results to improve Fusarium disease resistance

- 09:50 – 10:20** **MIEDANER** Thomas (Hohenheim, DE) & **FLATH** Kerstin (Kleinmachnow, DE)
Looking ahead: Races and resistances to stem rust in European winter wheat and triticale
- 10:20 – 10:50** **COFFEE BREAK**
- 10:50 – 11:15** **BÜRSTMAYR** Hermann (Tulln, AT)
Mapping of a major QTL conferring resistance to wheat dwarf virus
- 11:15 – 11:40** **EHN** Magdalena (Tulln, AT)
How long does it take to develop high-performing and common bunt resistant winter wheat lines using organics-compliant methods?
- 11:40 – 12:05** **WINDHORST** Alex (Göttingen, DE)
Improving overwintering in times of climate change - A GWAS for late-frost tolerance of winter faba beans
- 12:05 – 14:00** **LUNCH BREAK**
- 14:00 – 14:25** **LAIDIG** Friedrich (Hohenheim, DE)
Improving baking quality of wheat varieties by higher protein use efficiency and stability
- 14:25 – 14:45** **GRAUSGRUBER** Heinrich (Tulln, AT)
*Effect of the high grain protein gene *Gpc-B1* in organic wheat*
- 14:45 – 15:05** **HEIDEN** Caroline (Wien, AT)
Baking quality of organic heterogeneous material of wheat
- 15:05 – 15:30** **EL HASSOUNI** Khaoula (Hohenheim, DE)
Characterization of wheat flour proteome and identification of genomic regions associated with gluten and allergenic proteins
- 15:30 – 16:00** **COFFEE BREAK**
- 16:00 – 16:25** **CALL** Lisa (Tulln, AT) & **KRISAI** Andrea (Wien, AT)
Exploration of the immunogenic properties of amylase-trypsin inhibitors in wheat
- 16:25 – 16:50** **AFZAL** Muhammad (Hohenheim, DE)
Qualitative and agronomic characterization of large panels of emmer and einkorn cultivars

- 16:50 – 17:10** **MÜLLER** Karl-Josef (Neu Darchau, DE)
Desirable characters of triticale and winter pea for organic mixed cropping
- 17:10 – 17:30** **HUEMER** Thomas (Großraming, AT)
Naked oats in organic agriculture

Wednesday, 23 November 2022

- 08:30 – 08:50** **KINZ** Gudrun (Tulln, AT)
First steps towards resistance phenotyping using drone images
- 08:50 – 09:10** **KOPPENSTEINER** Lukas (Edelhof, AT)
Estimation of canopy parameters in wheat using radiative transfer model inversion based on an artificial neural network
- 09:10 – 09:30** **FREITAG** Stephan (Tulln, AT)
Infrared spectroscopy for rapid mycotoxin screening
- 09:30 – 09:50** **DIEHL** Svenja (Ried, AT)
Digital solutions for plant breeding
- 09:50 – 10:10** **HUBER** Johann (Freising, DE)
Pests and fungal diseases — how to save legume seed quality in times of climate change
- 10:10 – 10:40** **COFFEE BREAK**
- 10:40 – 11:00** **BOMERS** Svenja (Wien, AT)
*Towards heat tolerant runner bean (*Phaseolus coccineus* L.) by utilizing plant genetic resources*
- 11:00 – 11:20** **VOGL** Silvia (Linz, AT)
Conserving crop wild relatives as new breeding resources
- 11:20 – 11:40** **GAIER** Lukas (Irdning-Donnersbachtal, AT)
Enhancement of cocksfoot seed production
- 11:40** **CLOSING WORDS**

MEETING ENDS

POSTER PRESENTATIONS (still open for submission)

LEBESMÜHLBACHER Jordan (Tulln, AT)

Mycorrhization of rye cultivars under conventional and organic agriculture

MAYR Christiane (Tulln, AT)

Variability of non-starch polysaccharides, enzyme activity and rheological properties in a rye diversity panel

NANNURU Vinay K.R. (Ås, NO)

Comparison of alternative breeding scenarios for Fusarium head blight resistance in wheat using stochastic simulations

RIBARITS Alexandra (Wien, AT)

Austrian variety trials in the ADAPT project: Aims and approaches

VAZIRITABAR Yazdan (Neu Darchau, DE)

Suitability of micro baking test to select for quality of organic einkorn in comparison to different parameters over three years