

ONLINE International Conference on BREEDING AND SEED SECTOR INNOVATIONS FOR ORGANIC FOOD SYSTEMS

by EUCARPIA

Section Organic and Low Input Agriculture
jointly with LIVESEED, BRESOV, ECOBREED,
FLPP projects and ECO-PB

08-10 March 2021
online from Latvia



CONFERENCE PROGRAM

MONDAY, MARCH 8TH 2021

- 08:30 Open access
08:50 Technical instruction
09:00 **Welcome addresses** (Linda Legzdina – AREI, FLPP, Andreas Börner – EUCARPIA, Bram Moeskops – LIVESEED, Vladimir Meglič – ECOBREED, Ferdinando Branca – BRESOV, Monika Messmer – ECO-PB)
09:30 **L. LUTTIKHOLT – Transforming food systems, transforming breeding**

Session 1 EXPLORING UNDERUTILIZED GENETIC RESOURCES (moderated by Vladimir Meglič)

- 10:00 S. GORITSCHNIG – EVA - European evaluation networks harnessing crop genetic diversity present in European genebanks
10:20 E. FLIPON – Mobilising diversity for minor cereals in western France
10:35 D. JANOVSÁ – Exploring buckwheat genetic resources for organic breeding
10:50 A. KRONBERGA – Domestication potential of Latvian local medicinal and aromatic plants genetic resources
11:05 *Coffee break*
11:20 J. PROHENS – Characterization under low N conditions of advanced backcrosses of eggplant (*S.melongena*) with introgressions from *S.elaeagnifolium*
11:35 C. ARNCKEN – Pre-breeding of white lupin for anthracnose tolerance
11:50 F. BRANCA – Response of different genotypes of *Brassica oleracea* var. *Gongylodes l.* to drought stress
12:05 General discussion

BREAKOUT POSTER SESSIONS

- 12:30 **Breakout Room 1** | **Breakout Room 2**
Posters, Topic 1 – **Exploring underutilized genetic resources** (moderated by Ferdinando Branca) | Posters, Topic 3 – **Breeding for culinary and nutritional quality** (moderated by Edith Lammerts van Bueren)
13:15 *Lunch*

Session 2 BREEDING FOR DIVERSITY (moderated by Edwin Nuijten)

- 14:15 P. MENDES MOREIRA – LIVESEED: Enhancing resilience at systems level through breeding for diverse cropping systems
14:35 D. DESCLAUX, Y. CHIFFOLEAU – Why is it so difficult to breed for sustainable organic food system? Some examples on cereals

14:50 G. VAN FRANK – Participatory on-farm breeding for diverse and adapted wheat mixtures
 15:05 E. FLIPON – Comparing two selection strategies of bread wheat diversified populations adapted to organic farming
 15:20 I. LOČMELE – Assessment of spring barley variety mixtures and populations in comparison to homogenous varieties
 15:35 N. MOUTIER – Breeding for wheat-pea mixtures: are the traits of pea varieties in sole crop predictive of their behaviour in mixture?
 15:50 M. PETITTI – Evolutionary participatory tomato breeding in Italy for organic agriculture
 16:05 General discussion
 16:30 *Coffee break*

Session 3 BREEDING FOR CULINARY AND NUTRITIONAL QUALITY (moderated by Edith Lammerts van Bueren)

16:45 J. DAWSON – Scaling up participation in breeding for flavor: engaging farmers, gardeners, culinary professionals and consumers
 17:10 E. NUIJTEN – Breeding for quality: lessons learned on three vegetable crops
 17:25 J. ZYSTRO – A case study in efficient methods for evaluating and selecting for flavor in organic sweet corn breeding programs
 17:40 General discussion
 18:00 *Coffee break*

BREAKOUT SESSIONS

18:15 – 19:15	Breakout Room 1	Breakout Room 2	Breakout Room 3
	Posters, Topic 2 – Breeding for Diversity (moderated by Pedro Mendes Moreira) Access open till next day	Contribution of genetic resources for breeding for diversity (moderated by Ferdinando Branca and Vladimir Meglič)	Discussion on impact of new breeding techniques (moderated by Monika Messmer)

TUESDAY, MARCH 9TH 2021

08:50 Technical instruction

Session 4 LIVING SOIL - PLANT INTERACTION (moderated by Pierre Hohmann)

09:00 G. BERG – Sowing the right seeds for sustainable agriculture
 09:25 A. WOLFGANG – Bacterial seed communities in sugar beet are influenced by propagation site and genotype
 09:40 F. TROGNITZ – Seed endophytes isolated from soybean and their application for biocontrol and plant growth stimulation
 09:55 P. KUSSTATSCHER – Pumpkin breeding shapes the seed microbiome
 10:10 M. BIGET – The drivers of vine-plant root microbiota endosphere composition include both abiotic and plant-specific factors
 10:25 General discussion
 10:55 *Coffee break*

Session 5 ORGANIC PRODUCTION OF HIGH QUALITY & HEALTHY SEED (moderated by Ambrogio Costanzo)

11:15 F. REY – Improving cultivar testing, seed multiplication & health for high quality seeds for the organic sector: overview of LIVESEED outcomes
 11:35 M. COLLEY – State of organic seed production in the United States
 11:55 S. KLAEDTKE – From seed to plant health – a broader picture
 12:10 A. BORGEN – Seed treatments to control common bunt
 12:25 S.P.C. GROOT – Carrot seed vigour, field emergence and tolerance to the damping-off pathogen *Alternaria radicina*
 12:40 H. CARDOSO – Calorespirometry – a promising phenotyping tool to assess seed viability based on respiratory parameters
 12:55 General discussion
 13:15 *Lunch*

BREAKOUT POSTER SESSIONS

14:15	Breakout Room 1	Breakout Room 2
	Posters, Topic 4 – Living soil - plant interaction (moderated by Gabriele Berg)	Posters, Topic 5 – Organic production of high quality & healthy seed (moderated by Frederic Rey)

Session 6 MULTI-ACTOR & PARTICIPATORY APPROACHES (moderated by Veronique Chable and Bernd Horneburg)

- 15:00 N. ENJALBERT – Simplify collaboration, amplify results: facilitating a diverse seed system with a collaborative digital platform
- 15:20 F. REY – Frugal, multi-actor and decentralised cultivar evaluation models for organic agriculture: methods, tools and guidelines
- 15:35 M. COLLEY – The ripple effect of participatory plant breeding: a case study in US organic sweet corn
- 15:50 *Coffee break*
- 16:05 A. RODRIGUEZ-BURRUEZO – Participatory breeding in tomato in southern Europe in the frame of organic farming: approaches, plant populations, results and lessons learned
- 16:20 P. ANNICCHIARICO – Genome-enabled, farmer-participatory selection: making edges meet
- 16:35 K. ISAACS – A network approach for large-scale participatory variety-by-context testing: results from sorghum variety trials in Mali
- 16:50 General discussion
- 17:20 *Coffee break*

BREAKOUT SESSIONS

17:35 – 18:35	Breakout Room 1	Breakout Room 2	Breakout Room 3
	Posters, Topic 6 – Multi-actor & participatory approaches (moderated by Veronique Chable)	Demonstration of Seedlinked (moderated by Nicolas Enjalbert)	Potential of participatory breeding (moderated by Micaela Colley)
	Access open till next day		

WEDNESDAY, MARCH 10TH 2021

- 08:50 Technical instruction
- Session 7&8 SOCIO-ECONOMIC, MARKET AND CONSUMER ASPECTS OF SEED SYSTEMS (moderated by Raffaele Zanolì)**
- 09:00 S. PADEL – Organic seeds and varieties: can the market deliver?
- 09:25 E. WINTER – Assessment of policies aiming at boosting organic seed use
- 09:40 S. ORSINI – Appraisal and usage of organic seed in Europe from organic farmers’ perspective
- 09:55 J. KOTSCHI – Funding organic plant breeding and the potential impact of open source seed systems
- 10:10 *Coffee break*
- 10:25 E. CUBERO DUDINSKAYA – European organic consumers’ attitudes and acceptance of new plant breeding techniques for crops
- 10:40 H. WOLTER – Consumer perceptions and evaluations of the Open Source Seeds License
- 10:55 C. MEIER – Consumer preferences for healthy minor cereals
- 11:10 General discussion
- 11:40 *Coffee break*
- 11:55 **Video excursion to Latvian organic farms**
Promotion video on organic breeding
 Announcements regarding next events

BREAKOUT POSTER SESSION

12:30	Breakout Room 1	Breakout Room 2
	Posters, Topic 7&8 Socio-economic, market and consumer aspects of seed systems (moderated by Stefano Orsini), Posters, Topic 10 Sustainability (moderated by Giuseppe Timpanaro)	Selection of best posters by participants

13:00 *Lunch*

Session 9 REGULATORY AND POLICY OPPORTUNITIES (moderated by Bram Moeskops)

- 14:00 E. GALL – New rules on seeds in the new EU Organic Regulation
- 14:20 K. MEYER – Collecting commitment in 10 EU member states – the organic seed declaration
- 14:35 M. RAAIJMAKERS – The need for national roadmaps to come to 100% organic seed

14:50 L. FONTAINE – Assessing varieties for organic farming: what contribution from evaluation in conventional farming?

15:05 General discussion

15:25 *Coffee break*

Session 10 SUSTAINABILITY (moderated by Monika Messmer)

15:40 A. RIAR – Participatory organic cotton breeding approach to achieve sustainable development goals

16:00 E. NUIJTEN – Implementing the systems-based breeding concept

16:15 M. CAMMARATA – Sustainability assessment of broccoli (*Brassica oleracea* var. *Italica*) production with deficit irrigation system in Sicily

16:30 R. LEITÃO – Successional agroforestry systems for Europe: the Portuguese example

16:45 General discussion

17:00 **Winners of the poster contest and quiz**

17:10 **Closing of the conference**

17:40 *Break*

17:45 – **EUCARPIA Organic & Low-input section members meeting** (Linda Legzdina)

18:10 **Breakout Room 1**

Access open till 20:00