

# 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 Topic 1 – **Exploring underutilized genetic resources** (moderated by Ferdinando Branca)  
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 – 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, V. CHABLE – 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 | Posters, Topic 2 – <b>Breeding for Diversity</b> (moderated by Pedro Mendes Moreira) | <b>Contribution of genetic resources for breeding for diversity</b> (moderated by Ferdinando Branca and Vladimir Meglič) | <b>Discussion on impact of new breeding techniques</b> (moderated by Monika Messmer) |
|---------------|--|--|--|

Access open till next day

## TUESDAY, MARCH 9TH 2021

- 08:30 Open access
- 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 – Spatio-temporal heterogeneity in the root-microbiota of grape vine: a microbial terroir in vineyards
- 10:25 T. TAKÁCS – Physiological and growth responses of pea intercropped wheat cultivars
- 10:40 General discussion
- 11:00 *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 | Topic 4 – <b>Living soil - plant interaction</b> (moderated by Gabriele Berg) | Topic 5 – <b>Organic production of high quality &amp; healthy seed</b> (moderated by Federic Rey) |
|-------|---|---|

## Session 6 MULTI-ACTOR & PARTICIPATORY APPROACHES (moderated by Veronique Chable)

- 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 | Posters, Topic 6 – <b>Multi-actor &amp; participatory approaches</b> (moderated by Bernd Horneburg) | <b>Demonstration of Seedlinked</b> (moderated by Nicolas Enjalbert) | <b>Potential of participatory breeding</b> (moderated by Micaela Colley) |
|---------------|---|---|--|

Access open till next day

## WEDNESDAY, MARCH 10TH 2021

- 08:30 Open access
- 08:50 Technical instruction
- ### Session 7&8 SOCIO-ECONOMIC, MARKET AND CONSUMER ASPECTS OF SEED SYSTEMS (moderated by Raffaele Zanoli)
- 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 and L. KLIEM – 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 | Topic 7&8 <b>Socio-economic, market and consumer aspects of seed systems</b> (moderated by Stefano Orsini),<br>Topic 10 <b>Sustainability</b> (moderated by Giuseppe Timpanaro) | <b>Selection of best posters by participants</b> |
|-------|---|--|
- 13:00 *Lunch*

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

- 14:00 E. GALL, M. SOMMER – 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 M.H. BERNICOT – 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 A. SCUDERI – 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

Access open till 20:00