

ECO-PB Newsletter (January 2021)

WEBSITE UPDATES

Training & teaching material

The COVID-19 pandemic has created the largest disruption of education systems in history, affecting nearly 1.6 billion learners in more than 190 countries and all continents (United Nations, 2020). To counteract this, we set up a new section on the ECO-PB website is dedicated to **training & teaching materials** targeting students, young breeders & seed producers.

To get a sneak peak, take a look at the online courses on organic fruit and berry breeding, organised as part of the LIVESEED German-Swiss cross-visit:

- Traditional and innovative fruit production in Baden-Württemberg
- Technical aspects of apple breeding with Poma Culta
- Research activities in fruit and berry cultivation technique at FiBL

AND learn about novel models for breeding and post-registration cultivar testing:

- Experimental designs and statistical methods and tools relevant for decentralised on-farm breeding
- How citizen sciences can be applied for cost-efficient organic variety testing in Europe
- The SeedLinked tool and initiative

The section "training & teaching materials" is a work in progress. If you took part in an interesting online event and/or you are involved in teaching activities that could be relevant for a wider audience of students, please do not hesitate and drop us a line at kaja.gutzen@fibl.org.

Cultivars

According to the new organic regulation (EU) 2018/848, organic varieties suitable for organic production should stem from organic breeding activities in which all generations are managed under certified organic conditions. Without an adequate support of organic plant breeding activities, farmers are confronted with a restricted variety assortment. To provide practitioners with information in this regard, a new website section is dedicated to cultivars suited for organic agriculture.

PARTICIPATORY PLANT BREEDING & RESILIENT SEED SYSTEMS: Options for stakeholder engagement and benefits sharing

This **postgraduate course** serves professionals who seek longer-term solutions for sustainable, agro-ecological agriculture and answers to the question: How can food systems be moved forward in the South and the North?

Resilient seed systems play a central role in sustainable food systems that are robust, dynamic, equitable, diverse, healthy and interconnected. Developing and strengthening these systems offers vital entry points for responding to critical global challenges of climate change, agricultural biodiversity, and sustainable development. Training in

participatory breeding and seed system concepts, issues and approaches will support engaged professionals and graduate students to contribute to resilient seed system development.

Picture: Postgraduate course - Participatory Plant Breeding & Resilient Seed Systems





ENGAGEMENT BIOBREEDING

One major bottleneck to reach the aim of the European Commissions' Farm to Fork Strategy of 25% organic farming area in the EU by 2030 is tackling the chronic underfunding of organic breeding initiatives. Engagement.Biobreeding promotes novel financial concepts and fair value chain partnerships in different regions of Europe. Click through the interactive map of organic breeding initiatives in Europe for an overview of present breeding activities and to discover where breeding gaps are present. Learn about how organic breeding adds value to the food chain by browsing through the material of the online course. Picture: Engagement.Biobreeding

SEED & PLANT BREEDING AT FIBL

The impact of crises like COVID-19 and climate change makes the vulnerability of our food system more apparent. With its research on seed & plant breeding, FiBL makes a crucial contribution to the ecological and economic efficiency of sustainable organic farming. Discover the research thematic Seed & Plant Breeding at FiBL and browse through background information, projects, publications and news.





FUN FACTS

Christmas trees

What is more eco-friendly: a real or fake Christmas tree? Real trees are normally burned after Christmas. Nevertheless, a two-metre artificial tree has a carbon footprint of more than ten times that of a real tree. In other words, you would need to re-use an artificial tree 10 times to negate its carbon footprint. Even though 2021 has just started, it is worthwhile to rethink how we spent our next Christmas. Read more about the Christmas tree

Picture: Soil Association

Potatoes

Do you know why true potato seeds are not planted directly in the field? After germination, roots and stolons form just below the leaves of the plant. This is where later the tubers will develop. By transplanting seedlings into the field, a deeper planting depth can be reached, allowing the potatoes to be fully covered by the soil. Learn more about potato breeding by following Jan Boer's YouTube channel. With very instructive and down-to-earth videos, Jan Boer takes you on a journey from crossing of parent plants to harvesting and assessment of candidate cultivars *Picture: Jan Boer*



Seeds

Organic farming should ideally be based on the use of organically produced seed. In reality, non-organic seeds are still used in organic farming. Do you know the 4 main factors that influence organic seed use?

- Geographical influence: Farms in Northern/Central Europe use a higher proportion of organic seed than those in Southern/Eastern Europe.
- 2. **Farms' orientation:** Fruit-producing farms use a lower share of organic planting material than vegetable, arable and forage farms.
- Marketing channels: Farmers who sell their crops directly to consumers or to organic shops use a higher rate of organic seed than those who use other channels.
- 4. **Size:** Small farms are more likely to use organic seed than large farms.

Want to learn more? Check out the LIVESEED booklet "Creating incentives for farmers to use organic seed".

Picture: LIVESEED



Seed systems

What is the difference between formal and informal seed systems? A formal seed system is a pipeline in which breeding research leads to new varieties and finally multiplication and marketing of the seed. In an informal seed system, there is a circular approach: Farmers carry out the selection in their fields to produce their own seeds. The seed circulates within the farming community through exchange or trade.

Learn more about seed systems or other concepts like local variety, participatory plant breeding or farmers' rights by following the DYNAVERSITY YouTube channel.

Picture: DYNAVERSITY



EVENTS

We are all craving for a new normality in 2021. Here are some events to look forward to:

1. Breeding and seed sector innovations for organic food systems (8-10 March 2021, online): Conference organised by EUCARPIA Section Organic and Low Input

Agriculture, LIVESEED, ECOBREED, BRESOV, FLPP projects and ECO-PB.

Abstract submission: 10 December 2020 End of registration: 28 February 2021

2. Rye Breeding & Genetics (20-23 June 2021, Wernigerode/Germany): International symposium organised by the Rye Working group of the Cereals Section of EUCARPIA.

Abstract submission: 15 March 2021 End of registration: 15 March 2021

- 3. Ensuring diversity for food and agriculture (21-24 June 2021, Troia Peninsula/ Portugal): International conference organised by Farmer's Pride, EUCARPIA Section Genetic Resources and the European Cooperative Programme for Plant Genetic resources.
- 4. Breeding the key to innovative solutions (22-27 August 2021, Rotterdam/the Netherlands): EUCARPIA General Congress
- 5. Organic World Congress 2021 (6-10 September 2021, Rennes/France & online) and pre-conference Seed Ambassadors: Building an International Network to Advance Organic Seed Systems (6-7 September 2021, Rennes/ France) organised by ECO-PB and Organic Seed Alliance (USA) with an apéro to celebrate the 20th anniversary of ECO-PB.

ECO-PB wishes you all the best for 2021. Stay healthy and take care!

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