



Organic from the Start

Bringing organic plant varieties to your farm

The concept of organic plant breeding and organic varieties

Running an organic farm means to work based on living ecological systems and cycles. As far as available, organically produced seed is used. But still most varieties used on organic farms have been developed under conventional breeding programmes and are thus not always well adapted for organic farming conditions.

The concept of organic plant breeding and organic varieties have been developed since the 1950ies by several gardeners, farmers and breeders around the world who were searching for varieties that suit the specific needs of organic farmers. In 2014, an organic plant breeding standard has been laid down in chapter 4.8 of the IFOAM organic standard. The new European Organic Regulation, which will be in force from 2021, includes provisions on organic breeding. If a variety is organically bred will then be declared within the organic seed databases.

Best practice example 1: Baking wheat in Germany

In the German state of Baden-Württemberg, more than 70% of the organic baking wheat produced is from organic varieties. A supply of well adapted varieties, involvement of farm advisors and processors as well as the chance for farmers to observe how the varieties are performing in regional variety trials delivered arguments to choose organic plant varieties.

Best practice example 2: Liveseed project

The LIVESEED project forms an EU-wide network which aims to improve conditions for organic seed production and organic plant breeding. It is based on the concept that cultivars adapted to organic systems are key for realising the full potential of organic agriculture in Europe. LIVESEED is a research project under the EU programme Horizon 2020. www.liveseed.eu



Organic plant varieties – what benefits for my farm?

In organic breeding, all steps of development from crossing to selection and establishment of the variety happen under organic farming conditions. Therefore, organic varieties are well adapted to organic farming. This means they can usually cope better with periods of undersupply of nutrients or water because of their strong root system. They are usually more robust to diseases and pests - because organic breeding focusses on these aspects while they are often not targeted in conventional breeding where pesticides are used.

Organic breeding aims for plants that quickly cover the ground, so that the period when unwanted weed could grow is kept as short as possible. Organic plant breeding is moreover a strategy to re-gain independence from multinational seed companies. It abstains from using gene-technologies and claim patents - seed from organic varieties can be saved and re-used on the farm. Customers like the genuine, good taste of organic varieties.

A label for organic plant varieties



The label Bioverita has been created to increase the awareness about organically bred varieties. It can be used on seed or on products derived from organic plant varieties in organic farming, organic vegetable and fruit production. Bioverita is a platform of organic plant breeders and organic farming associations in Europe. It promotes varieties from organic cereal, vegetable and fruit breeding and it aims to get more organic processors and traders involved. The label is about to be established as a marketing tool and first projects such as a special bred from organic varieties are already on the market. www.bioverita.ch



What you can do

- If you are a farmer or gardener, search for organic or open pollinated plant varieties.
- Find a list of breeding initiatives, background information and further links on www.organic-plant-breeding.org, www.eco-pb.org and www.liveseed.eu
- Consider to start your own breeding activity for your favourite crop (literature: van Bueren, Myers: Organic crop breeding, Wiley Online Library)
- Support organic plant breeding and donate for organic plant breeding (e.g. www.saatgutfonds.de)
- Spread the word: Tell about organic varieties in your communications and marketing.
- Join the movement!

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