



## Organic breeding of einkorn (*Triticum monococcum* ssp. *monococcum*)

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# Organic breeding of einkorn (*Triticum monococcum* ssp. *monococcum*)

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The basic axiom of organic farming is, as clearly indicated in the name, the ban of synthetic chemical products in agriculture to decrease their negative impact on the environment, and to improve food safety. Even if the sustainability of organic farming and its impact on human health and food safety are already accepted, the independence of the organic sector is still questionable. Unfortunately organic agriculture still depends strongly on seed industry, especially on conventional plant breeding. Increasingly conventional plant breeding programs are focused on bio- and gene-technology, thereby forcing the organic sectors reliance on conventional breeding. Moreover, conventional breeding efforts in the past have largely developed in response to the demands of intensive agriculture production. Alternatively, organic farming supportive of a philosophy promoting the self-regulating principles of the soil, the plants, and the animals, requires a distinct breeding program. On the other hand, organic farming want to increase farm biodiversity, and in many cases prefers to grow local landraces or traditionally used neglected crop species as a source of special heritage of functional foods. One of the best example is the einkorn in many countries. Organic einkorn production is already growing in several areas of Europe, and in the present lecture we would like to give a general overview of einkorn production and organic breeding in Central Europe.

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