

Organic growers harvest ancient grain varieties

Locally grown, healthy, organic cereals

"Today, one person in Hungary consumes an average of 36-37 kg of bread per year, and for this reason, the quality of bread is a key public health issue" – Research Institute of Organic Agriculture in Hungary (ÖMKi). ÖMKi has been conducting research in order to enable Hungarian farmers to grow ancient grains which are best adapted to their area, with sufficient yields and that can be grown using organic methods.



Organic ancient grains (spelt, einkorn and emmer) which have a special nutritional content, are increasingly available in artisanal bakeries and farmers also have an increasing knowledge base for growing and processing them. Since 2012, ÖMKi has been continuously working on research to support farmers in this process.

Furthermore, the end of 2020 ÖMKi launched a national organic winter wheat variety small-plot testing network. The aim of this network is to help farmers choose the best performing varieties under organic conditions in their region, and thus to ensure that the high quality and healthy bakery products make it to the tables of consumers. Activities also include organic on-farm variety tests, where farmers are actively involved in the research, events and publications, and the development of an online farmer-miller-baker database.

10 participating farms are involved in on-farm trials. Under organic farming conditions, more than 20 domestic and international winter wheat varieties, as well as a number of emmer and einkorn wheat landraces and varieties are tested in small-plot field experiments, in seven locations nationwide.



Dr. Dóra Drexler, the director of ÖMKi: *"The ancient grain landraces involved in our research – also known as husked grains – can be successfully grown even in less fertile areas, and are particularly valuable due to their high degree of adaptability. Ancient grains have different nutritional profiles compared to modern bread wheat varieties, often with a different protein composition. As such, they are an important market opportunity targeting environmentally and health-conscious customers, and the gastronomy sector."*

Prior research has already confirmed that emmer and einkorn for example, are particularly healthy foods. The current research will also try to better understand why, despite the gluten content of these grains, they can be more digestible for those who are sensitive to gluten. From an agricultural

perspective, these grains have also shown to have many advantages such as disease resistance, adaptability, vitality and weed suppressing capacity.

The network is careful to include the entire organic product chain in its research. Dr Drexler explains: *"Going beyond the narrow field of research, we regularly organise farmer-miller-baker meetings. In addition, we have created the farmer-miller-baker **database** to make it easier for producers and other participants in the product chain to find each other and thus get healthy, residue-free organic wheat flour to as many bakeries and households as possible."*

This summer, ÖMKi organised a professional field day at the Csoroszlya organic farm in Western Hungary. This farm is hosting a number of research experiments. At the meeting, farm manager Ágoston Nobilis, reported on his experience in growing organic wheat, and the latest developments on the farm.



Mr Nobilis "I am very glad to be hosting a whole series of testing experiments on different crop varieties and get to see the results – production results, average yields, bakery value – so we can see if it's worth growing a new variety in the future." He also explains the value of working directly with bakeries "Bakers know what type of grain they like working with, what direction they would like to go in. For example, we have been working with a bakery for three years now. His involvement in the research has also helped Mr Nobilis to work on weed control and pest control and maintaining a healthy soil. He has been experimenting with rotation, keeping the crops in the rotation diverse, involving secondary plantings and cover crops.

Project video: <https://www.youtube.com/watch?v=2mvvC7qOnQc>

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[Read more about ÖMKi's new organic testing network here.](#)

[Read more about ÖMKi's ancient cereal variety tests here.](#)

Article content: ÖMKi press article and project video