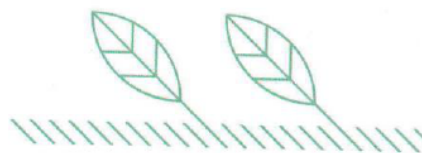




Symposium

**AGROBIODIVERSITY
ALONG THE VALUE CHAIN**

December 4th - December 6th 2023



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Dear participant,

It is our great pleasure to welcome you to Ghent (Belgium) on the occasion of the 1st international CROPDIVA symposium 'Agrobiodiversity along the value chain' (4th to 6th of December 2023). This international symposium aims to stimulate knowledge exchange and interactions between researchers and stakeholders interested in agrobiodiversity. The symposium covers a wide range of topics, organised in the following scientific sessions:

- Genetics: How they shape agrobiodiversity?
- The impact of cropping systems on agrobiodiversity
- Food and feed technology, drivers of change on agrobiodiversity
- Agrobiodiversity: the challenges and opportunities for socio-economic sciences

We are very pleased to welcome Prof Johan Six (ETH-Zürich), Prof Andreas Börner (IPK-Gatersleben) and Prof Carl Lachat (Ghent University) as keynote speakers. They will undoubtedly give inspiring lectures on the various aspects of agrobiodiversity.

We hope that this symposium will be a good opportunity to improve agrobiodiversity in the value chain.

We wish you a pleasant stay in Ghent and hope that you will enjoy not only the scientific program, but also the Belgian hospitality and the social activities we will organise.

Prof. Geert Haesaert

Chairman of the symposium and coordinator of the CROPDIVA project

Characterization of buckwheat (*Fagopyrum* sp.) collection in Serbia

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With the aim of optimizing the buckwheat assortment for the region of Serbia, field trials with 161 accessions of *Fagopyrum* sp. were set up in Bački Petrovac (45° 20' 12" N, 19° 40' 12" E) during 2023. In addition to 148 *F. esculentum* var. *esculentum* accessions, the phenotypic characterization of 30 agromorphological characteristics also includes 7 var. *emarginatum* as well as 4 *F. tataricum*, 1 *F. dibotrys* and 1 *F. ocutatum*. Characterization of properties was carried out according to ECPGR Descriptors for buckwheat. The experiment, which was set up on May 10, was marked by extreme conditions that included high rainfall at the end of May, high temperatures at the end of June, storm at the end of July and high temperatures at the beginning of August. Such extreme conditions allowed test collection for tolerance to high temperatures and lodging.

Within the analyzed collection, significant phenotypic variability was noted for all selected traits. Some of the traits were strongly affected by the extreme conditions such as high temperatures of over 40 °C during the generative phase of plant development which completely destroyed all accessions except *F. esculentum*, from which 26 were also significantly damaged. Additionally, a large part of the collection (93 accessions) showed a pronounced sensitivity to lodging and as such are not suitable for mechanized harvesting. Nineteen accessions showed partial lodging and they could be used with partial yield reduction. In a part of the collection (49 accessions), minimal damage from lodging after a strong wind was noted.

On basis of one-year trials with phenotyping of the buckwheat collection, it can be concluded that only part of the accessions is well adapted for Serbian conditions. Additional lines could be used with the risk of yield reduction but may possess favourable trait usable in breeding. About 50 analyzed accessions proved to be promising, which represents a good basis for continued research.

The presented work was supported by the grant: CROPDIVA - Climate resilient orphan crops for increased diversity in agriculture, the project funded from the European Union's Horizon 2020 research and innovation programme under grant agreement N°101000847, and we also thank to IPK Gatersleben, Germany for providing seeds.

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