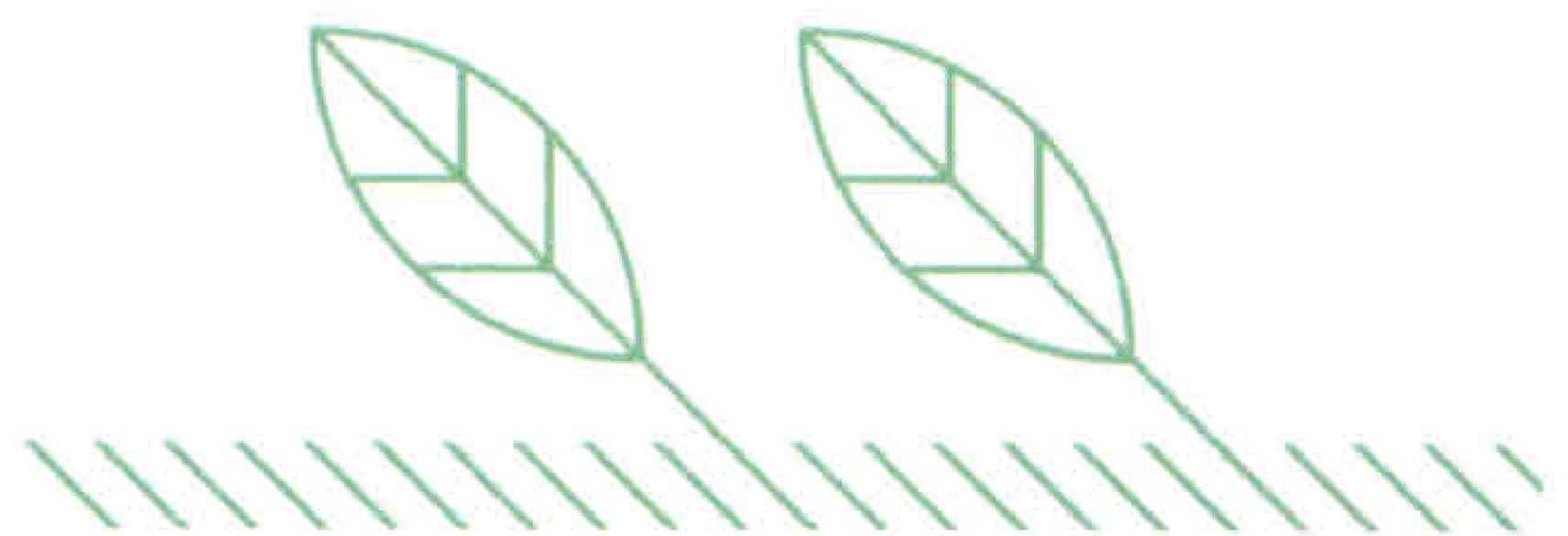




Symposium

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

Exploitation of genetic diversity of spring hull-less barley in a field trial in Serbia

Ljiljana Brbaklić¹, Radivoje Jevtić¹, Vesna Župunski¹, Andreas Boerner², Sanja Mikić¹, Jovana Timić¹, Svetlana Mirkov Knežević¹

¹*Institute of Field and Vegetable Crops, National Institute of the Republic of Serbia, Maksima Gorkog 30, 21000 Novi Sad, ljiljana.brbaklic@ifvcns.ns.ac.rs*

²*Leibniz Institute of Plant Genetics and Crop Plant Research (IPK), Corrensstr. 3, D-06466 Seeland, OT Gatersleben, Germany*

Hull-less barley is an underutilized crop, mostly used for human consumption, representing less than 2% of the entire barley production in both Europe and Serbia. CROPDIVA's priority is to select and improve of hull-less barley breeding for many important characteristics related to yield and quality. The consumption of naked barley has significant positive effects on human health. A total of 360 spring naked barley genotypes was used to evaluate genetic variability. This panel comprised of 300 diverse accessions from IPK genebank collection and 10 standards representing commercial and well-adapted cultivars from the United Kingdom, Switzerland, Germany, and Serbia. The trial was conducted at Rimski šančevi (N 45°19' E 19°50') in Serbia, following soybean as the previous crop. The size of micro plots was 1 m² set up in an augmented block design using 10 standards in six repetitions. The sowing time was on 10th March using standard agronomic practices. During the season, the following traits were measured: date of emergence, canopy size using Canopeo application during growth and developmental phases (GS11, GS31, GS59), heading time, straw length, lodging, and yield. After harvesting season, we will begin measuring yield component traits and quality parameters such as: total biomass, spike number, grain weight, thousand grain weight, grains per spike, harvest index, specific weight, grain colour – staining, treshability, beta-glucan, and nitrogen content. Canopeo values in GS11 (first leaf unfolded - ligule visible), in GS31 (first node detectable) and in GS59 (ear completely emerged above flag leaf ligule) growth stages ranged from 0.48 to 4.99, from 25.7 to 82.02 and 10.95 and 94.01, respectively. Heading day occurred within 23 days' time window, from 17 May to 10 June. The average straw length was 66 cm, varied from to 30 cm to 95 cm. Approximately one third of the accessions was prone to lodging. Preliminary results have shown that the selected IPK collection possesses significant diversity which can serve as a good basis in a further hull-less breeding program.

Acknowledgement

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