



**XII INTERNATIONAL SYMPOSIUM ON
AGRICULTURAL SCIENCES**

BOOK OF ABSTRACTS

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**24-26, May, 2023
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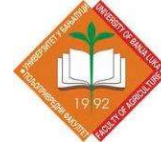
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On-farm conservation, management and use of barley, oats, rye and wheat genetic resources in Serbia

Ljiljana Brbaklić¹, Sanja Mikić¹, Milan Mirosavljević¹, Radivoje Jevtić¹,
Vladimir Aćin¹, Dragan Živančev¹, Vera Popović¹

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Abstract

The study compiles the achievements of a two-year collecting mission conducted in 2020 and 2021 period in Serbia, which aimed at collecting small grains genetic resources and information about the state of their conservation, management and use. In total 12 samples were collected, namely seven accessions of barley landraces, two of oats, two of rye and one wheat variety in four regions of Serbia. The local traditional cereals were mostly preserved in remote and mountainous parts of southern and south-western parts of Zlatibor district. Most of the samples were collected at Pester mountain plateaux, where local farmers still grow very few traditional varieties on small areas for personal use. The local varieties are valued by farmers for different traits, some for resistance to lodging and diseases, some for their nutritional value for human consumption and animal feed. These local crops are cultivated either as a sole crop or in crop mixtures so-called „polovice“, on poorer soils with very low inputs, achieving modest yields. Recipes for traditional dishes from local cereals are preserved. The accessions were described and deposited in the long-term storage in Serbian National gene bank and Svalbard Global Seed Vault. All collected samples were multiplied for morphological characterization in field trials and distribution to farmers for on-farm evaluations. Recently, there have been initiatives to establish local community seed banks and promote seed exchange among farmers. The collected genetic resources could be a valuable material for pre-breeding activities and genetic diversity studies.

Key words: barley, collection, genetic resources, local farmers, oats, rye, genebank

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resources towards increased sustainability of grain-value chain and improved farmers' livelihoods in Serbia and Bulgaria-GRINEFIT”.