



EVA
European Evaluation Network

MONTENEGRO'S MAIZE COLLECTION

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EVA Maize – Malanirs Kickoff

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Short presentation of the institute/ organization

- Biotechnical Faculty of University of Montenegro (BTF), with 87 years of existence, is the only scientific research and higher education institution in Montenegro that covers all areas of agriculture. It functioned longest as the Agricultural Institute (until 1997), then the Biotechnical Institute, and from 2008 Biotechnical Faculty.
- BTF is the focal point for plant and animal genetic resources in Montenegro. It also houses the Montenegrin Plant Gene Bank (MGB), established in 2004.
- The only research activity on maize so far has been the assessment of diversity between accessions stored in the MGB and those collected in the 1960s and 1970s and deposited in the gene bank of the Maize Research Institute Zemun Polje (Babic, V., Andjelkovic, V., Jovovic, Z., Babic, M., Vasic, V., Kravic, N. (2021): Diversity Assessment of the Montenegrin Maize Landrace Gene Pool Maintained in Two Gene Banks. *Plants*, 10, 1503. <https://doi.org/10.3390/plants10081503>)



Your institute's maize collection

- The MGB owns a collection of 68 maize accessions collected during 2009 and 2010. In addition, the Gene Bank of the Maize Research Institute Zemun Polje stores another 320 accessions collected in Montenegro in the 1960s and 1970s.
- There is ongoing government support for the cultivation of genetic resources for food and agriculture. In the last year, 5 producers cultivated 8 maize accessions on approximately 10 ha. However, in Montenegro there are a large number of small farmers in rural areas who cultivate local maize populations for their own needs.
- Phenotypic data are available for maize all accessions
- There are seeds available for exchange based on SMTA for about 40 accessions.



Expectations from EVA Maize/Malanirs

- Excellent opportunity for the inclusion of Montenegrin maize accessions in European research programs and databases
- To make available to the wider research community unique Montenegrin flint maize types with high genetic purity.
- No NIRS device and experience to do biochemical analysis on grains
- Ways to cooperate: Providing seeds of new local maize populations (landraces) for genotyping; performing field tests and other working group activities in which we can contribute

