

BOOK OF ABSTRACTS

IV INTERNATIONAL SYMPOSIUM FOR AGRICULTURE AND FOOD

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Economists of the Republic of North Macedonia (AAEM) and
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9th Balkan Animal Sciences Conference BALNIMALCON 2022

IV МЕЃУНАРОДЕН СИМПОЗИУМ ЗА ЗЕМЈОДЕЛСТВО И ХРАНА ,
40-та Средба Факултет-Стопанство
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9th Balkan Animal Sciences Conference BALNIMALCON 2022

Organized by the
Faculty of Agricultural Sciences and Food - Skopje
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BOOK OF ABSTRACTS

In this Book of Abstracts you will find more than 250 abstracts classified in 10 thematic sections. The abstracts are published in their original form as provided by the authors. Double-blinded review will apply for the submitted full papers following the Instructions for Authors available at the ISAF 2022 web site. Looking forward to receive your full papers.

On behalf of the Secretariat of the 4th International Symposium for Agriculture and Food - ISAF 2022,

Ivana Janeska Stamenkovska
President of ISAF 2022 Secretariat

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MORPHOLOGICAL CHARACTERISATION OF MONOGENETIC TRAITS OF TETRAPLOID WHEAT FROM MONTENEGRO

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Abstract

Tetraploid wheat has been the most important cereal in Montenegro until the green revolution and the introduction of elite common wheat cultivars. Realizing the risk of losing these populations, at the Agricultural institute in Podgorica activities on the collection and conservation of these populations were initiated. The entire population of tetraploid wheat of 89 samples is today stored in the plant gene bank of Montenegro. In order to assess the diversity of these populations, an assessment using UPOV morphological markers was performed in 2020. Five monogenetic traits were included in the analysis: type of plant growth, time of ear emergence (major genes controlling this trait are photoperiod sensitivity - *ppd* genes), ear glaucosity, plant height (major genes controlling plant height are reduced height - *rht* genes), the length of the ears without awns, the presence of awns and the seasonal type of plants (major genes vernalization - *vrn*). Multiple correspondence analyses showed that there were no significant differences between these populations. Moreover, dimensions one and two explained only 9.6 and 7.8%, of the total variation, respectively, which indicates the common origin of the population.

Keywords: wheat, genetic resources, morphological markers, mca



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