



**XI INTERNATIONAL SYMPOSIUM OF
AGRICULTURAL SCIENCES**

BOOK OF ABSTRACTS

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**XI INTERNATIONAL
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AGRICULTURAL SCIENCES**

**26-28, May, 2022
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Variation of protein content in wheat seed

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Abstract

Wheat grain quality characteristics depend greatly on genotype, environment and interaction genotype/environment. The aim of the study was to determine grain protein content, amino acid content and dry gluten content in eight bread wheat genotypes grown under different environmental condition. In this paper gluten content, grain protein content and amino acid content of eight wheat genotypes were analyzed during two year (2015/16 and 2016/17) with different climatic conditions (temperature and precipitation). In the first year, the genotype Dukat had the lowest content of protein (11.80%) and dry gluten content (24,21%), while genotype KG 3633-1/00, had the highest protein content (13.20%) and gluten content (27.15 %). In second year the lowest content of protein (12.80%) had KG-3606-2/00 and the lowest dry gluten content was in wheat Dukat (27.84%) while in genotype KG 3633-1/00, found the highest protein content (14.40%) and gluten content (31.10%). The contents of essential and non-essential amino acids in wheat grains and EAA value were higher in novel genotypes. The differences of amino acid composition in analyzed genotypes were determined. The content and composition of proteins and amino acids, especially essential amino acids, are

important for proper nutrition and human health, which has a significant contribution to the economy of wheat production.

Key words: wheat, quality, genotypes, environment

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