PHENOTYPIC EVALUATION TRITICUM SP. GENOTYPES VARIATION

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Abstract

The intensity of selection, improvement of different traits and the influence of climate change collectively amplify the frequency of detrimental alleles. This phenomenon causes genetic drift, resulting in an accidental decline in the diversity of plant germplasm sources. Genetic variability is of great importance for the adaptability and tolerance of a species to stress factors. Our investigation centres on Triticum germplasm within the agroclimatic conditions of the Ezareni Farm Iaşi, encompassing 2021-2022 field trials. Phenotypic characterization was performed for 15 genotypes, which belong to two species of *Triticum (T. aestivum L.* and *T. monococcum L.*). The data analysis involved the calculation of amplitude of variation, variance (s2), standard deviation (\sqrt{s}), and coefficients of variation (s%) for three pivotal agronomical traits: plant height, spikelets per spike, and total seeds per spike. The results showed a high coefficient of variation, indicating a significant variability within the analyzed germplasm. The genotypes that stood out with high results of the analyzed parameters can be used in future breeding programs.

Key words: Triticum germplasm, genetic variability, phenotypic characterization