PHENOTYPIC ANALYSIS OF A WHEAT DIVERSITY PANEL FROM THE VEGETAL GENETIC RESOURCES BANK "MIHAI CRISTEA" SUCEAVA

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Abstract

Wheat (*Triticum aestivum* L.) is the among the first three agroeconomic important crop plants, with a high carbohydrate and protein content in grains. In this study, 80 cultivars, from the VGRB germplasm collection, were phenotypes in field experiments. Morphological traits were observed on the harvest spike prior to threshing. Awn roughness will be assessed visually and by sliding one's finger along the central part of the awn in the direction from top to bottom. Flowering dates will be retrieved from digitized records of VGRB propagation cycles. Accessions were evaluated in 2020/2021 field trials under a randomized block experimental design. Among the measured phenotypic records there are traits as germination rate, flowering time, disease resistance and yield. Results indicate that VRGB germplasm contains a wide variety of genotypes that have a high agronomical value. This germplasm could be used in future breeding programs.

Key words: *Triticum aestivum*, phenotypic analysis, randomized block design, plant breeding