

## Economic Impact of Grain Yield and Quality Performances of Different Breeding Cultivars Under Different Seeding Rate\*

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### Abstract

Twelve winter wheat genotypes with different genetic constitution were studied for their adaptability and performances in the limitative field conditions in three different seeding rate: 350 seeds/m<sup>2</sup>, 550 seeds/m<sup>2</sup> and 750 seeds/m<sup>2</sup>. Katarina variety has registered the highest grain yield - 5920.2 kg ha<sup>-1</sup> at 350 seeds/m<sup>2</sup>, Lv 6x genotype 7678.4 kg ha<sup>-1</sup> at 550 seeds/m<sup>2</sup> and Glosa variety- 7528.1 kg ha<sup>-1</sup> at 750 seeds/m<sup>2</sup>. The relationship between yield traits is quite varied, each genotype having a specific reaction to limited conditions. Regarding the quality indices the most varieties has a high quality parameters. The PCA analysis allowed the identification of performant genotypes both for grain yield and quality parameters. The unfavorable climatic conditions has canceled the advantage of hybrid vigor of Hyxperia genotype both for grain yield and grain quality having a negative economic impact generated by the purchase of hybrid seed compared to variety seeds.