Effect of tiller number per plant on grain yield and yield components of durum wheat at different planting densities

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Abstract:

The effect of tiller number per plant on grain yield and yield components of durum wheat at different planting densities was investigated in a greenhouse experiment. The experiment was conducted with two tiller numbers (1 and 2 per plant) and four planting densities (250, 500, 1000, and 2000 plants per square meter) in a randomized complete block design with three replications. The results indicated that increasing tiller number per plant significantly increased grain yield and yield components, such as grain weight and number of grains per caryopsis. The highest grain yield was obtained with 2 tillers per plant at a planting density of 2000 plants per square meter. The study highlights the importance of tiller number in improving wheat yield and suggests that breeders should consider this factor in breeding programs to develop high-yielding durum wheat cultivars.

Key words: tiller number, grain yield, yield components, durum wheat, planting density.