Effect of tiller manipulation at different planting densities on grain yield and its components of Atrak cultivar in south Khuzistan

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ABSTRACT

The purpose of this research was to determine the effect of tiller manipulation at different planting densities on the grain yield and its components of Atrak cultivar in south Khuzistan. The experiment was conducted in a randomized complete block design with three replications. The treatments included different planting densities (2, 3, 4, and 5 plants per meter) and two tiller manipulation methods (with and without tiller manipulation). The results showed that the highest grain yield and its components were obtained at the planting density of 4 plants per meter and with tiller manipulation. The total yield of the crop was improved by 18.7% compared to the control treatment. The research indicates that tiller manipulation at the optimal planting density can improve grain yield and its components of Atrak cultivar in south Khuzistan.

Key words: Atrak cultivar, tiller manipulation, planting density, grain yield, south Khuzistan