

## Effects of Planting Methods and Irrigation Levels on Yield and Yield Component of Two Wheat Cultivars

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Received: 7 March 2011

Accepted: 26 November 2011

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### Abstract

This experiment was carried out to study the effects of different planting methods and irrigation levels on yield and yield component of two wheat cultivars, in 2009-2010 in field's of Ahvaz Shahid Chamran University. Experimental design was strip split plot within randomized complete block with three replications. Row factor was planting methods which include: basin, 3 line on the ridges, 6 and 9 lines on the ridges. Column factor was irrigation which included two levels: irrigation after discharge 25% and 50% plant available water in soil, and two cultivars that include Chamran and Stare were in subplot. Results showed that in planting methods, the grain number in spike, spike number per square meter and grain yield, were significant differences. Among planting methods, 3-line method was significantly higher in grain yield (3.62). 9-line method was significantly fewer number of spikes per square meter compare to other methods (28.58), while differences between other methods was not significant. Grain number in spike, basin and three line method, had significant higher than other method (33.89, 34.39). There was no significant difference between irrigation levels. In cultivars, Chamran cultivar in grain yield was significantly higher. Based on the results of the interaction between factors in this experiment, and status of drought and water shortages in the same test conditions, use of ridge planting method especially 3 line method with second irrigation level is recommended.

**Keywords:** *Planting Method, Depletion of Water, Yield, Yield Component, Wheat*