

Comparison of Sowing and Wheat Seedling Planting and its Influence on Yield and Yield Components

R. Avareh Shirazi^{1*}, M. Nabipour², and M. Meskarbashee³

1*. **Corresponding Author:** Graduate student, Department of Agronomy and Plant Breeding, Shahid Chamran University of Ahvaz, Iran, (shirazi.1357@ gmail.com).

2. Associate Professor, Department of Agronomy and Plant Breeding, Shahid Chamran University of Ahvaz, Iran

3. Associate Professor, Department of Agronomy and Plant Breeding, Shahid Chamran University of Ahvaz, Iran

Received: 13 March, 2011

Accepted: 21 December, 2011

Abstract

In order to compare the direct sowing and wheat seedling planting grown with different ages and cultures in different dates, an experiment was conducted during 2009-2010 in Ahvaz Agricultural College. The experiment was carried out to split split plot and in a randomized complete block design with three replications. The main plots included culture methods applied at three levels of seedling planting without cutting, with cutting, and the seed culture. The sub factor included two levels of wheat cultivars, composed of cultivars, varieties of Fong and Chamran and sub-sub plots, including dates of planting seeds and seedlings transplanted at 30 December and 15 January. Results showed that spikelets per spike and spike number were the largest amount in direct planting and the lowest in seedling planting. In planting and transplanting date, treatment of spike lets per spike and grain yield were the highest value on the first planting date (with grain yield 2776.3 kg/ha) and the lowest in the second planting. Between Phong and Chamran cultivars observed, no significant differences were seen in the characteristics of spikelet number per spike, seed number per spike, and 1000 kernel weight. According to the results, delayed seedling transplanting and cultivation reduced the grain yield significantly. Direct culture was move effective than transplanting culture. Comparison of interactions revealed that direct seedling cultivation treatments of Chamran cultivars had the highest yield on the first planting date and seedling treatments had the lowest yield on the second planting date. Then cutting and no cutting seedling treatment of Chamran cultivar had the highest yield on the first planting date. In Khuzestan climate, seedling planting of wheat can be decrease reduction due to, delayed planting during the interruption in rainfall autumn.

Keywords: *Wheat, Seedling transplanting, Planting date, Direct sowing*