

The Effect of Cultivation Methods on Yield and Yield Components of Afzal Barley Cultivar (*Hordeumvulgare*) in Yazd Province

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Abstract

In order to determine the best cultivation method for barely (*Hordeumvulgare*), an experiment was carried out in a randomized complete block design with 3 replications and 4 treatments (hill planting, hand spraying, cultivation in-depth, and linear) in the research field of Payam-e Noor University, Ardakan branch, in 2008. The traits such as the length of the main cluster and the sub-cluster, the number of seeds in the main spike and sub-spike, grain weight in the main spike and sub-spike, the biomass, the plant height and the yield were measured. A comparison of the trait means indicated that the maximum amount of seed yield and biomass belonged to the hill planting cultivation method which did not significantly differ with the cultivation in in-depth method. The maximum amount of cluster and sub-cluster lengths, the number of seeds in the main spike and sub-spike belonged to the cultivation in in-depth method and the minimum amount of all traits was for the hand spraying cultivation method. Considering the significance of seed yield for human beings and animals, the best cultivation method appears to be hill planting to increase forage and reduce the possible expenses.

Keywords: Hill planting, Hand spraying, Cultivation in depth, Linear, Afzal Barley, Yield, Yield components.

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