



## The effect of supplemental irrigation on yield and yield components of Azad rain fed chickpea cultivar in the kharghan region of Markazi province

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## **Abstract**

In order to investigate the effect of supplemental irrigation on yield and yield components of Azad rain fed chickpea cultivar in the kharghan region of Markazi province, an experiment as a randomized complete block with 3 replications in 2014-2015 was conducted. The applied factor in this supplemental irrigation experiment was included no irrigation (control), once irrigation at planting, once irrigation at 50% of flowering stages and, once irrigation at podding stage. According to the obtained results, supplementary irrigation effect at one percent probable on the plant height, the number of seeds per plant, hundred seed weight and seed yield and at five percent probable on the plant dry weight was significant and also was not observed a significant effect on the number of pods per plant. According to the results, supplemental irrigation at different stages improves and increases the measured characteristics, so that the most number of pods per plant in the supplemental irrigation at planting and flowering stages, the most number of seeds per plant and seed yield in the supplemental irrigation at planting and podding stages, the most hundred seed weight were observed in the supplemental irrigation at planting stage, as well as on the plant height, plant dry weight among supplemental irrigation at planting, 50% of flowering and podding stages here was no statistically significant difference

**Key words:** supplemental irrigation, seed yield, hundred seed weight, Azad cultivar.