

## **Abstract**

In order to Study effects of drouth stress and potassium fertilizer on quantitative and qualitative of Ammi(Carum Capticum) a field experiment was conducted-using split plot design with three replication in research farm station, zabol university, zabol, Iran at cropping season 2011.

Treatments included application of three irrigation regimes(4, 6 and 8 days intervals), as main plots and four level of potassium fertilizer(0 ,75 , 150 and 225 kg/h) as sub plots.

The statistical analysis showed that drought stress had significant effect on quantity characteristics plant, such plant height, number of flower per plant, seed yield and biological yield, and decrease them. In this study, drought stress led to increased essential oil percentage, but the greatest essential oil percentage and oil yield obtained when irrigation regimes 6 days intervals.

Using of potassium fertilizer increased quality characteristics plant and using 225 kg/h potassium fertilizer increase seed yield. The positive effect of potassium fertilizer on essential oil percentage and essential oil yield observed maximum to 225 kg/h.

**Keywords:** *carum capticum*, Drought stress, potassium fertilizer.



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**The Thesis Submitted for the Degree of M.Sc in the field of  
Horticultural Science- Medicinal Plant**

**Effects of drouth stress and potassium  
fertilizer on quantitive and qualitive of  
Ammi(Carum Capticum)**

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June 2013