

Abstract

In order to investigate the effect of salinity stress and different levels of potassium fertilizer on quantitative and qualitative yield of kochia, a field experiment was conducted at the Agricultural Research Institute of Agriculture, Zabol University, Zahak, Iran. This experiment was conducted in a randomized complete block design with three replications. Treatments included salinity stress at three levels of control (1 dS / m), (7 dS / m), and (14 dS / m) as the main factor and values Various fertilizers of potassium sulfate fertilizer were considered as sub plots at three levels (100, 200 and 300 kg ha). The results of this study showed that salinity stress reduced altitude, branch, fresh weight, dry weight, leaf dry weight, shoot dry weight and different levels of potassium fertilizer, height, sub branch, fresh weight, dry weight, leaf dry weight, shoot dry weight increased. Also, the results of this study showed that in higher salinity, the effect of potassium fertilizer on modifying the effects of salinity and increasing dry matter was more. So, application of 300 kg / ha potassium sulfate in salinity conditions of 1, 7 and 14 dS / m significantly increased the weight Dry matter was 15.1%, 20.4% and 61.2%, respectively, compared to 100 kg potassium sulfate, respectively. The interaction between salinity and potassium fertilizer showed that irrigation of 1 dS and using 300 kg of potassium fertilizer increased quantitative and qualitative traits.

Keywords: Crude protein, Ash percentage, Forage yield.



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Title:
**Study of salinity stress and different levels of potassium
fertilizer on quantitative and qualitative yield of Kochia**
(Kochia scoparia)

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