Influence of Priming with Chemical Stimulies on Seed Germination Characteristicts of *Capparis Spinosa* under Salt, Drought and Temperature Stresses

Abstract

Much of the Iranian plateau is comprises arid and semi-arid. warm weather and dry and winters are mild to cold low precipitation throughout the year and vegetation is poor to very poor. The salinity of the soil and water plants growing problems in these areas. And the preservation and development of rangeland vegetation and desertification and desert areas of the biological mechanisms ecosystem management of natural pastures. The best way to restore the ranges native species compatible are with the environment, with a high value of forage, soil stabilization and preservation of the environment. To evaluate the influence of chemical compounds on germination and early growth of *C. spinosa* under salt, drought and temperature stresses as a factorial based on completely randomized design study, repeated 4 with in three separate experiments in Agriculture Department of Zabol University in the 2014.One factor in the kidneys priming experiment included three levels of asid salicylic acid (100, 200, 300 mg / liter), gibberellic acid at three levels (125, 250, 500 ppm) and ascorbic acid levels (100,200,300 mg/liter) and distilled water as a control. The second factor in 5 of NaCl salinity (0, 0.1, 0.3, 0.5, 0.7 mol per liter), 5 levels of drying experiments on polyethylene glycol (0, -0.3, -0.6, -0.9, -1.2 MPa) and temperature in test temperature 5 levels (5, 10, 15, 20, 25° C), respectively. Experimental results using MCTATC software and Duncan's test were analyzed. Analysis of variance showed that priming treatments, salinity, drought, and temperature on germination characteristics of the seed of the *C. spinosa* significant effects are significant at 1%. salinity stress, drought and temperature effect on the properties of a germination inhibitor *C. spinosa* seed of the deterrent, but the negative impact of stress on seed Prime were far less. The highest percentage of germination at 25 ° C, was seen. Among all the treatments salcilic acid 200 mg/l greatest effect on germination characteristics of this plant is stressed.

Keywords: Priming, germination, Drought, Temperature, Salinity, *C. spinosa*

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