عنوان مقاله:
(.Effect of Drought and Salinity Tensions on Germination and Seedling Growth of Artichoke (Cynara Scolymus L

## محل انتشار:

مجله بين المللى تحقيقات پيشرفته زيست شناختى و زيست پزشكى, دوره 3, شماره 3 (سال: 1394)

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Mohsen Rajabi - Department of Medicinal Plants, Applied Scientific University of Jahad-e Agriculture, Hamedan, Iran ive: Germination is one of the most important stages of plants growth that affected by environmental stresses, especially drought and salinity. Methods: In order to study of Artichoke germination under different levels of salinity and drought, two separate experiments were performed. The four levels of salinity by $\mathrm{NaCl}(0,50,100,150 \mathrm{mM})$ with three replications and five levels of drought by PEG ( $0,10 \%, 15 \%, 20 \%$ and $25 \%$ ) with three replications were used based on completely randomized design. Results: Results showed that drought and salinity stresses reduced significantly germination rate, shoot length, root dry Weight and shoot dry Weight. In salinity condition, there was insignificant difference between treatments for germination percent, but in drought condition, there was significant difference. Moisture range optimum for germination was determined non-stress to $20 \%$ PEG concentration. It seemed that among traits, shoot length was more sensitive than others to salinity and drought stresses. It can be concluded .that Artichoke can tolerate salinity up to 150 Mm , but in drought conditions it cannot germinate in 25\% PEG

كلمات كليدى:
Artichoke ، Drought ، Germination ، ، Salinity


