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Investigation of some ecological characteristic of Salsola imbricata in Tabas area

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Abstract

Distribution and establishment of plants are affected by genetic characteristics and environmental conditions. Salsola imbricata distributed in arid and semiarid area of Iran. This study investigated some ecological characteristics of Salsola imbricata in Tabas area. Edaphic characteristics of the species habitat such as texture, Ec, gypsum, lime, Na+, organic matter was investigated. Climatic and biometric characteristics of the habitat, the effects of salinity stress on germination and Na and K content of the stem were measured. The results showed all of species need soils texture of loamy-sand with high amounts of gypsum and lime and pH of alkaline. Due to low humidity and organic matter of the soil, density and coverage of studied plant was low. Rainfall in all habitats was low, average temperature between summer and winter was high and annual aridity was between 10 to 12 months. The number of days in freezing-point in habitat was low. The highest and lowest germination percentage in control and in salinity of 22.8 g Nacl was equal to 65 and 22.5 percent respectively. Results also showed the amount of Na was more than K in aerial parts of the species.

Keywords: Ecology, Salinity stress, Salsola, Halophyte.

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