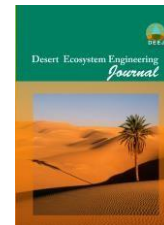




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Response of Two Shrub Species, *Artemisia sieberi* and *Eurotia ceratoides*, to Different Harvesting Intensities in the Steppe Rangelands of Nodoushan, Yazd Province

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Abstract

Determining the allowable use of key species in rangelands of Iran is necessary to range management. Despite of the importance of the subject, little information is available in this regard. The aim of this study was to investigate the response of plants to harvest intensities in order to determine the allowable use of the key species of steppe rangelands. Two key species, *Artemisia sieberi* and *Eurotia ceratoides*, were studied in Nodoushan rangelands of Yazd province in this research. Study was performed in an enclosure area of rangeland in Nadoushan which is known an important pole ranch of Yazd province. Four different harvesting intensities, 0, 25, 50, 75%, were implemented for 4 years in this study. The results showed the tangible effect of year on the production of the studied species. In case of *E. ceratoides*, different harvest intensities had significant effect on the production where the removal treatments of 0 and 25% were obviously different from those of 50 and 75%. Then the allowable use for the *E. ceratoides* was established 25%. No significant effect of harvesting on *A. sieberi* was determined in this study suggesting the *A. sieberi* species is resistant to pressure of grazing and intense harvesting, at least in short term. This characteristic may be a major reason for the undisputed presence of this species in desert, arid and semi-arid areas of the country.

Keywords: Allowable use, Arid rangelands, Harvesting intensities, Production, Sagebrush, Winter fat.

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