



Relationships between Plant Species and some Environmental Factors in Khorramabad Rangelands

R. Hasanpori^{1,*}, A. Tavili², S.A. Javadi³

¹Science & Research Islamic Azad University, Tehran, Iran; ²Natural Resources Faculty, University of Tehran, Iran; ³Faculty of Natural Resources, Science and Research Islamic Azad University, Tehran, Iran.

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Abstract: Determination of effective factors on plant species distribution is necessary to proper management of any Rangeland ecosystem. The purpose of this study is investigation of distribution reason of plant species and the relationship between plant species and ecological factors in experimental area. At first, plant types were separated and the areas which represent each type were also identified. In each plot canopy related factors were measured and at primary and end points of each transect profiles were dug and to determine chemical and physical properties of soil, sampling were done. Also at each sampling point, slope percent, direction and altitude were recorded. To evaluate the environmental properties of studied plant types, one-way ANOVA were used, and to denote the relationship level between environmental variables and vegetation, ecological factors correlation with cover percentage and species density of each vegetation type were calculated. Results showed that among the studied ecological factors, soil texture, organic matter, nitrogen, phosphorus, potassium, lime, direction and altitude were more effective on distribution of plant species at the area.

Key words: *Distribution, Ecosystem, Plant species, Ecological factors.*

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*Corresponding: E-mail: hasanpori@yahoo.com; Tel: 00989166610280; Fax: 00986613241253