

## **Abstract**

In order to separate the study of vegetation communities Khash and determine the most important factor or factors in the distribution of plant communities was conducted. According to the study collected data on vegetation and environmental factors in the study area after the initial visit and the delimitation was carried out. Sampling of vegetation in the delimitation of the study, through the establishment of systematic random sampling plots along transects were carried out. Sample size and the size of the minimum level of species, 2, 3 and 5 square meters was set and the number of plots and 150 plots were determined according to vegetation changes. List plants in each plot, canopy cover, the number of plants per cent of litter, stone and gravel and bare soil were determined. In addition to recording information about the vegetation in each habitat latitude, altitude, slope and aspect at each site were recorded. In order to take samples of soil, along each transect the soil profile due to the depth of rooting plant species in the region of 30-0 and 60-30 cm depth of soil samples and soil physical and chemical properties of tissue , the percentage of lime, pH, electrical conductivity, nitrogen, phosphorus and potassium were measured in the laboratory. The study area for vegetation classification and diagnosis of plant groups with similar ecological requirements, using a numerical scale vegetation Van--in Marl (1986) and to help TWINSpan method was classified. A total of five vegetation types in the study area was determined that these types of ecological requirements differ. In order to investigate the relationship between environmental factors and distribution of plant communities of the PCA (PCA) using PC-ORD software was used. The results show the distribution of different types of vegetation and environmental factors are related and environmental factors contributing to the breakdown of plant communities in the study area, altitude, slope, pH, electrical conductivity, percent of lime and soil texture.

**KEYWORDS:** Plant communities, principal component analysis, canonical correspondence analysis, TWINSpan, meadows Khash



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**Study of Effective Environmental Factors on Distribution of Some  
Plant Communities ( case Study: Khash Range lands)**

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