Abstract

Vegetation is the most important factor affecting the stability and balance of natural ecosystems. The main problem in biodegradation of rangelands and combating desertification and soil erosion is the selection of suitable plant species for regeneration areas. Kerman province has good rangelands and abundant forests. These natural areas are being destroyed and destroyed due to climate change, plant diseases, early grazing, fires, etc. which can be addressed as a desertification problem. The purpose of this study was to identify climatic factors affecting the growth and distribution of dominant plant species in Kerman province. To identify and study climatic parameters in Kerman province, firstly, monthly, seasonal and seasonal climatic databases were selected from 14 stations inside and outside the province that are related to climate and vegetation of the region. Then, using interpolation methods and appropriate cellular network size, point data were converted to spatial data. Factor analysis was used to reduce the data size and identify the most important influencing factors. Cluster analysis was also used to map homogeneous areas. Then the vegetation map of the area was compared with the factor map of the region and the factor scores of the province were determined. The results show that the most appropriate method for interpolation of climatic data is the kriging method and the most appropriate 15 km cell network size. Climate data was generalized to 754 points across the province. Factor analysis showed that the six main factors of temperature, relative humidity and precipitation of hot seasons, cold seasons, wind speeds in cold and hot seasons and dust were respectively 44.5, 35.56, 6.30, 3.93 And account for 1.99% of the total variance of the data. Using Kerman province's six main factors and cluster analysis factor into eight climatic regions: semi-arid cold, hot dry and dusty climate, semi-arid warm wind with relatively high humidity, semi-arid cold air with relatively high humidity, relatively humid warm At relatively high humidity, very hot dry was extremely windy and very hot dry.

Keywords: Vegetative Climate, Factor Analysis, Kriging, Kerman, Gunnar

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