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The Influence of Environment Characteristics in the Distribution of Vegetation Communities in Rawdhat Salasil, Saudi Arabia

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Abstract : Ecological and botanical surveys were conducted on Rawdhat Salasil, Al-Qassim region, Saudi Arabia. The survey also includes the study of the plant communities in the study area by sampling the associated species in each community using the List Count Quadrant method to study the density, frequency, and plant cover. The present study has shown an account of the under-mentioned five different communities: Haloxylonpersicum community is a dominant perennial shrub with an important value of 47.88%. This community is represented by 20 associated species. The chemical analysis of the soil of this habitat exhibits more alkalinity with low salinity. Tamarixnilotica communityis a perennial shrub with an important value of 60.48%. This community is represented by 14 associated species. The chemical analysis of the soil of this habitat demonstrates richness in alkalis with high salinity.Salsolaimbricata communityis a perennial herb with an important value of 60.18%. This community is represented by 17 associated species. The chemical analysis of the soil of this habitat exhibits richness in alkalis with low salinity.Panicumturgidum is a perennial herb with an important value of 65.1%. This community is represented by 11 associated species. The chemical analysis of the soil of this habitat exhibits richness in alkalis and the absence of salinity. Pulicariaundulata community is predominantly an annual shrub with an important value of 91.79%. This community is represented by 16 species. The chemical analysis of the soil of this habitat exhibits richness in alkalis, and the absence of salinity.

Keywords : rangelands, plant communities, Rawdhat Salasil, edaphic factors
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