### **Abstract:**

The country has a very high climatic variation, due to which climatic conditions and other specific geographic factors, varieties and abundance of plants occur in many parts of the country, most of them have health benefits. Sistan and Baluchestan province is one of the rich centers of genetic reserves in Iran, which has important medicinal plants including Astragalus fasciculifolius Bioss Penols, Planoids and PolysacaridS are one of the most important chemical compounds present in this plant that have a medicinal aspect. This study was performed by solving individual out ecology, evaluation of Rhizia morphophytocamical and phylogenetic diversity in some natural habitats of Balochistan, Iran in 5 districts (Saravan, Mehrestan, Khash and Suran), in 3 replications in the form of Nested. Became In order to investigate the relationship between Anzarut quality indices and some ecological factors, the most important ecological features of the studied sites were determined in three sections: morphology, soil and trait physiology. For the purpose of similarity between the studied sites, the quantitative statistics of selected environmental factors and the Anzarut quality index were analyzed by SAS software and Duncan test at 5% level. The results of quantitative and quantitative analysis showed significant differences between regions and insignificance among the cities. The results showed that environmental factors (altitude, geographic, latitude and topographic factors) had a significant effect on the traits and there were significant differences between the traits. If the purpose of this research is to identify Anzarut for future medicinal uses, the best habitat of this study is the city of Mehrestan, because in this city due to cold weather conditions and the average daily temperature of the flavonoid compounds is high. These compounds are very effective in treating cancer due to their high antioxidant properties, that the city of Saravan with the highest level of aerial and terrestrial performance, the highest branch height and the number of sub branches are suitable for better planting of Anzarut. If our goal is to extract the quality and use them in the manufacture of herbal medicines, it is better to plant this species in the city Mehrestan to increase the quantity and quality of the substance. Because in the region there are more than Birk which constitute the major components of the Antioxidants.

Key words: Anzarut, Autecology, Secondary metabolites, Geographic distribution, Natural habitats.



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# Study autecology and varietion phytochemical sarcocola plant (*Astragalus fasciculifolius* Bioss) in some natural habitats south of Sistan and Baluchestan

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