

## **Land zonation for dryland wheat using and climatic factors in the north east of Khuzestan province**

### **Abstract :**

In this study, the effect of agricultural meteorological characteristics and climatic factors, soil and topographic data on wheat yield in Khuzestan province has been identified. In the event of the unavailability of components related to climatic conditions Khuzestan wheat cultivation, production will be strategic in the North East region with serious deficiencies. Beginning, solidarity agricultural meteorological parameters (including the sum of growing degree days, the annual monthly average daily temperature and precipitation), Climatic factors (including average monthly minimum and maximum daily temperatures yearly), Monthly and annual average daily temperature, total precipitation daily, monthly and yearly), Information soil (soil texture, soil, organic materials, pH), And land topography (including slope, Slope direction, elevation) study were derived. Using the available Information and on DEM in GIS Arc software for database were prepared and analyzed. After preparing the layers and integrating obtained maps in GIS Arc, different regions based on their potential to grow wheat in good areas, good, average and poor were zoned. In this study, zoned climate Domarten method was performed. Land in three areas of the Mediterranean, semi-arid and dry were divided. The combination of temperature- rainfall- soil results showed that 23.4% of the area of land suitable for the cultivation of wheat, 25.2 per cent fit, 32.4percent average, 18.9 percent actually have been inappropriate

Keywords: Land suitability, Geographic Information System (GIS), Rainfed wheat, soil



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