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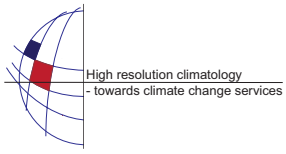

Determination of climatic potential of Qom province for rain fed wheat using RS and GIS

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This investigation was done to determine climatic potential of Qom province for wheat culture using RS and GIS.

After collecting meteorological and wheat phonological data of available stations in Qom and its adjacent provinces we analyzed the data to obtain agrometeorological indices which affects on growth and yield of wheat. In the next step for these indices (the maximum and minimum temperature, sunshine hours, relative humidity, slope, elevation, GDD,rainfall,wind.land use and thermal stresses) we prepared separate maps using GIS and RS.

Finally the above mentioned layers were overlaid to obtain agroclimatic map of wheat in Qom province. Results showed that about 30.2 percent of province is very suitable,53.5 percent is suitable,15.2 percent is moderate and 1.1 percent is not suitable for wheat culturing.

Key words: *Agrometeorology, GIS, RS, Wheat*