

Abstract:

Wind erosion imposes serious hideous and obvious damages to the ecosystem and human beings in nearby and distant areas, which nowadays this challenge has become more pronounced due to severe and continuous droughts and inappropriate land use change. So that the number of days with dust in the country has increased significantly, and greatly affects the mental health of the communities. Hence, identifying the factors affecting wind erosion and its potential in each area is inevitable for proper management and timely planning. Accordingly, in this research, the potential of wind erosion in the Nehbandan area of Chahdashi district of South Khorasan province using the IRIFR model and capabilities of ArcGIS10.3 software based on topographic maps, geomorphic DEM, land use and field observations in working units has been calculated. The results show that erosion intensity varies from very small to very high in different units. The highest wind erosion in the area is related to the working unit of 3-3-1 (Ripple Mark and Silk) and agricultural lands with an erosion potential of 3.14 tons per hectare per year was placed in the low erosion class.

Key words: Wind erosion potential, IRIFR, Chahadashi area



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**Study of Wind Erosion Potential Chahdashi Area by
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