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The Severity of Wind Erosion Assessment in Ala Region of Semnan Using IRIFR.E. A Model

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Abstract

The main parts of Iran have been countered in arid and hyper arid area that in result of especial environmental condition as low precipitation and vegetation density can be caused wind erosion, whereas wind erosion usually has a tiny destruction quantity than water erosion due to wide its activity. Because of not matching presented models by other countries with climate and edaphic condition of our country, empirical model of IRIFR.E. A was offered. In this model nine effective factors in sedimentation of wind erosion are studied and then sedimentation of wind erosion is determined for each working unites, sub basins and basins. In this study, the IRIFER.E. An empirical method used for investigation of wind erosion classes in Ala region of Semnan. To reach this goal, scores of determined working units in this region were measured according to nine factors affecting this method. With considering the results, the highest score obtained from working units of waterway and clay land with Kalootak included annual sedimentation about 4443.2 and 5212.6 tone/Km² respectively. Therefor 2.5 %, 48.23 %, 19.98 % and 29.19 % of region have a minor erosion (very low), low erosion, medium erosion and high erosion respectively.

Keywords: severity of wind erosion, IRIFER.E.A method, Ala region of Semnan.

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