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Kolmogorov–Smirnov test
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SAR	EC (ds/m)		
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Effects of unwise agriculture on desertification (Case study: Dashti region of Boushehr province)

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Abstract

There are large areas in arid regions having low rainfall affected by land degradation caused due to change in environmental condition and anthropogenic activities (e. g. agricultural and mis-use of the land). Consequently these fertile lands were changed in to degraded and bare lands. The goal of this study is the comparison of EC and SAR changes in agricultural and range lands. In many parts of arid and semi-arid regions of Iran agricultural activities such as unwise management of the land as well as inappropriate irrigation systems has seriously led to salinity and soil degradation. Then wise management of soil and water resources is inevitable to avoid consequence degradation. For this purpose different agricultural treatments were selected to compare SAR, EC with rangelands of Khormouj plain (Dashti county) of Boushehr province in two depths (0-30 cm) and (30-60cm). The results showed that there is significant difference between the measured factors both in top and sub soil. Comparison of means using Duncan test indicated that the highest amount of EC and SAR in both layers occurs in wheat cultivated lands; therefore this crop has resulted the highest degradation. Also the most favorable treatment in the study region is vegetable cultivation.

Keywords: Sodium absorption ratio (SAR), Electrical conductivity (EC), Khormouj plain, Agricultural lands, Rangelands