



## THE EFFECT OF LAND USE CHANGE ON IDENTIFIED CLAY MINERAL USING XRD METHOD IN WESTERN PART OF ESFAHAN

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## Abstract

One of the most important issues that cause the threat of renewable natural resources and ultimately humans will be destroyed pasture vegetation and the waste of fertile. The use of land according to their suitability and capability within a proper management plan can reduce the damaged soil and restoration resources. The present study of land use changes in Aghcheh Fereidan in Isfahan province with 2000 hectares. Sampling was done in 0-30 cm soil depth in four land uses as natural Rangeland, Irrigation Farming, Dry Farming and abandon Dry Farming. The kind of clay minerals was identified by X-Ray Diffraction method (XRD) and the diffractograms was interpreted. The results show existence of minerals of Vermiculite, Illite, Kaolinite, Attapolygite and quartz in the soil of the region. This result also showed a logical sequence of Mica destruction is happening. Finally, change of land use in the study area shown, operations and cultivation and the destruction of natural rangelands, physical properties, soil chemical and mineralogy influence and eventually can reduce quality and increase soil degradation and its Consequences adversely in the long term to be followed.

Keywords: Land use changes, XRD, Clay mineral, Western part of Esfahan



