



Effect of Flood Spreading on Soil Physico-Chemical Properties (Case Study: Barabad Region)

Hasan Barabadi^{1*}, Gholamreza Zehtabian², Ali Tavili³, Abolghasem Dadrasi Sabzevar⁴, Hasan Khosravi⁵

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Abstract

Using seasonal floods is very important in arid and semi arid areas. Suspended sediments in the flood are caused changes on soil properties. The aim of this study is to investigate the effect of low quality floods on soil chemical and physical properties. Soil sampling in three phases including two phases of *Atriplex* and one phase of *Haloxylom* were done and soil factors in depth of 0-30, 30-60 and 60-90 cm were measured. Changes of soil properties were compared by Duncan Mean Comparison according to Completely Randomized Block Design. The results showed that the electrical conductivity, sodium, carbonate, gypsum and pH decreased but; organic matter, potassium, phosphate and bicarbonate have increased in the most samples. These changes were significant at the 5%. Soil texture and sand increased but clay has decreased in the depth of 0-30 cm so, soil structure has improved.

Keyword: Flood, Flood Spreading, Soil Properties, Completely Randomized Block Design, Duncan Mean, Sabzavar

1. MSc. Student, of Natural Resources College, University of Tehran, Karaj, Iran h67borabadi@gmail.com
2. Professor, Faculty of Natural Resources College, University of Tehran, Karaj, Iran ghzehtab@ut.ac.ir
3. Associate Professor, Faculty of Natural Resources College, University of Tehran, Karaj, Iran atavili@ut.ac.ir
4. Ph.D. Student of Water resources, University of Shahid Chamran, Ahvaz, Iran Dadrasi_a@gmail.com
5. Assistant Professor, Faculty of Natural Resources College, University of Tehran, Karaj, Iran hakhosravi@ut.ac.ir