

Chemical Proprieties of Selected Contaminated Soils from Basra City, Iraq

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Abstract The main objective of present study is both analyze the chemical properties of soil quality in the urban area of Basra City, southern Iraq, and realize contamination effect on seasonal and spatial differentiation of that soil quality. Soil samples were collected from already contaminated sites during winter and summer seasons of 2009. Sampling sites were selected from various urban land-use patterns. The findings have shown that chemical parameters of soils in the study area were seasonally and spatially varied, and that soil quality is deteriorating because of combined anthropogenic and natural influences. It has been indicated that, in average, soil quality was highly saline in terms of EC index, slightly alkaline in terms of pH index, and saline-sodic in terms of US salinity Lab index. Main reason for this urban soil degradation may be due to effect of contamination caused by various urban activities.

Key Words Soil, Urban Soil, Soil Quality, Contamination, Sanlinization.