Third National Congress of Recycling and Reuse of Renewable Organic Resources in Agriculture
Islamic Azad University, Khorasgan Branch (Isfahan)
Agricultural Faculty, Waste and Wastewater Research Center
13-15 May 2008

Investigation of soil available phosphor changes via irrigation by Ahwaz east wastewater

A. Eigder[1], S. Boroomand Nasab[2] and H. Ali Kashkooli[2]
1. M.Sc. of Islamic Azad University
2. Professor of Chamran University

Using municipal and domestic wastewater for irrigation in arid and semi-arid regions not only reduces water shortage in these regions it may also be an environmentally safe way to reduce the risk of environmental pollution. Municipal and domestic wastewater may be used as cheap sources of water and nutrients in agricultural lands. One of the most important chemical parameters in this case is soil available phosphor. The study was performed in 6 experimental plots with a size of 2.5m in 2.5m each on the lands beside the K.S.C green space in the east of the city of Ahwaz. The irrigation waters used were Karoun river water and Ahwaz east wastewater and the statistical design was a factorial design with three replications. The soil texture of the experimental plots was determined to be of clay loam type. Soil available phosphor of the experimental plots was measured in outset and after 180 days of the irrigation with Karoun river water and Ahwaz east wastewater. Analysis of the results obtained showed that Ahwaz east wastewater in comparison to Karoun river water had significantly ($P<0.05$) increased the available phosphor of the soil.

Keywords: Irrigation, Wastewater, Available phosphor

[1] Corresponding author Email: a_eigder@yahoo.com