

Comparative studies on possibility of using sewage water for citrus irrigation

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The present dissertation was conducted during two successive experimental seasons throw three 2001; 2002 and 2003 years with the main purpose to investigate the effect of irrigation with Cairo sewage effluent (primary reclaimed) on fruitful trees and young nursery trees (transplant) of some Citrus species /cultivars budded on some citrus rootstocks and grown in sandy soils. So two factorial experiments were conducted as follows: V. I. Experiment, I "Fruitful trees" :It was carried out during two seasons of 2001- 02 & 2002 - 03 on 25 year old fruitful trees of two orange cvs. (Valencia & Washington navel orange budded on sour orange rootstock) and seedy Balady lime cv. grown in sandy soil at two locations i.e., El-Gabal Al-Asfar & Quesna regions irrigated with primary reclaimed Cairo sewage effluent and well water, respectively. In this factorial experiment the six investigated treatments were representative of the differential six combinations between two studied factors (3 Citrus species /cultivars X 2 irrigation water resources), where it was dealing with investigating the specific effect of water resource and citrus spp / cvs, as well as interaction effect of their combinations. The complete randomized block design with five replications was employed, where each replicate was represented by a single tree. The specific & interaction effects were evaluated through the response of the following measurements.