

EFFECT OF HUMIC ACID SPRAY ON SOME CITRUS ROOTSTOCKS TOLERANCE TO IRRIGATION WATER SALINITY.

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ABSTRACT

This experience was carried out in a private nursery in the city of Baquba / Diyala province for the period from 24\ 2\2013 to 1\12\2013 to study the effect of humic acid spray on Some Citrus Rootstocks tolerance to Irrigation Water Salinity . Four Citrus rootstocks seedlings (Soure orange ,Cleopatra mandarin ,Volkameriana lemon and Troyercitrange) treated with three Salinity levels of irrigation water ($EC_w = 0.7, 3.0, 4.5 \text{ dSm}^{-1}$), and two levels of Humic acid (0 ,and 1 %). The results were as follows: Irrigation with 4.5 dSm^{-1} electrical conductivity water gave an increase in leaf Proline ,Carbohydrates , while it caused a decrease in the mean of plant height , main stem diameter increase ,and leaves chlorophyll content. Spraying of humic acid on vegetative system caused a significant increase in mean plant height ,stem diameter and leaves chlorophyll content , and carbohydrates .whereas this application caused a decrease in leaves proline content .Cleopatra mandarin rootstock was significantly superior on other rootstocks in leaves proline content ,while troyer citrange significantly superior on rest rootstocks in the mean increase of Plant length.

Key words : Irrigation Water Salinity , Humic Acid , Citrus Rootstocks.