P-74 (47) STUDY ON THE EFFECT OF SALINITY AND HUMIC ACID ON SOME VEGETATIVE TRAITS AND MINERAL ELEMENTS OF MEXICAN LIME (CITRUS AURANTIFOLIA SWINGLE)

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The effects of humic acid on some vegetative traits and mineral elements of Mexican lime grown at various salt concentrations were examined. The applied doses of humic acid were 0, 1500, 3000 and 4000 mg/kg soil and the salinity treatments were 1500, 2500, 3500 and 4500 μmos . The experiment was conducted in pot experiment in CRD as factorial arrangement. Results showed that humic acid 3000 and 4000 mg/kg had positive influence on height enhancing under salinity 3500 μmos . Adding 3000 mg/kg humic acid significantly caused to increase shoot number under salinity 4500 μmos . Application of 4500 mg/kg humic acid enhanced shoot fresh and dry weight, root dry weight and potassium percent in the shoot under salinity of 4500 μmos . Application of 3000 mg/kg humic acid decreased sodium percent in the shoot under salinity of 4500 μmos . Under salinity 3500 μmos , application of 1500 mg/kg humic acid had better influence on reducing shoot sodium percent. Application of humic acid maintained down shoot Cl percent compared to non-application humic acid. Generally, application of 3000 and 4000 mg/kg humic acid could be adjusted destructive effects of salinity and reduce uptake of harmful elements such as sodium and chloride in Mexican lime seedlings.

Keywords: citrus, lime, Mineral Elements, Salinity