

Effect of Salinity Water and Spray Water Salinity Levels of Alg 600 Extract and Potash Fertilization and its Interaction in the Growth of Wheat Crop *Triticumaestivum* L. and in the Absorption and Preparedness of NPK in Soils Affected by Salts

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Abstract

The experiment was carried out in the wooden canopy of the Department of Soil Science and Water Resources at the College of Agriculture - Basrah University at Kermat Ali region in 2018 in green clay soil according to the randomize complete block design (RCBD) using three replicates of the effect study. The level of irrigation water used and the level of compost fertilizer and the Alga 600 marine extractor were studied in the absorption and readiness of some plant extracts (N, P, K) in *Triticumestivum* L. and soil. The experiment included three variables: irrigation with three levels of conductivity electricity 8.1, 6.7, 2.1 decimeters⁻¹ and three levels of potassium K₂SO₄ (K 41.5%) 200, 100.0 kg K-e⁻¹ and three levels of spray with sea extract Alga 600 6, 4.0 mm L⁻¹. The dry weight of the vegetative, soluble and inertial mass of K, P, N was measured at flowering stage,

. Soil samples were taken before and after agriculture to estimate some chemical and physical properties of soil. The results increased the salinity of irrigation water to a decrease in the concentration of potassium and phosphorus in the plant and increase the concentration of nitrogen. In addition, alga 600 and increased potassium levels increased soil concentration when increasing the levels of added potassium and spray with marine extract. There was also a decrease in the concentration of phosphorus available in the soil and an increase in the concentration of ready-made potassium when increasing salinity of irrigation water. In nitrogen concentration in the soil. The effect of the third overlap between the factors of the study in wheat grain yield was obtained with the highest yield of 10.412 and 9.052 and 7.600 (g /pot) and the percentage of decrease of 27.13% compared with the highest yield respectively when increasing the salinity of irrigation water 8.1, 6.7, 2.1) dsi⁻¹, respectively, when adding potassium at 200 kg K⁻¹ and spraying with Alga 600.

