



ORIGINAL ARTICLE

THE EFFECT OF SPRAYING WITH NUTRIENT SOLUTION CALMAX AND MARINE EXTRACT STIMPLEX AND THEIR INTERACTIONS ON SOME NUTRIENTS AND TOTAL DISSOLVED CARBOHYDRATES OF DATE PALM LEAVES *PHOENIX DACTYLIFERA L.*

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Abstract: This study was conducted during 2019-2020 on date palm offshoots of *Phoenix dactylifera L.* cultivar LuLu at the Department of Horticulture and Landscape, Faculty of Agriculture and Marshlands, University of Thi-Qar, to determine the effect of spraying each of Calmax nutrient solution by three concentrations 0, 2 and 4 ml.L⁻¹ and Stimplex marine extract by four concentrations 0, 4, 8 and 12 ml.L⁻¹. The results showed that the treatment with nutrient Calmax solution has a significant increase in each of total dissolved carbohydrates and nitrogen and phosphorous and potassium where the concentration of 4 ml.L⁻¹ was the highest average, the treatment with the extract (0, 4, 8 and 12) ml liter⁻¹ a significant increase in the total soluble carbohydrates and the nitrogen component where the concentration of 12 ml liter⁻¹ achieved the highest average of 13.11 mg gm⁻¹ and 2.663%, respectively.

Keywords: Palm, Nutrient solution, Marine extract.

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