

# **EFFECTS OF HUMIC ACID AND K-HUMATE TREATMENT ON VEGETATIVE GROWTH ,FRUITS QUANTITATIVE CHARACTERS AND NUTRIENTS CONTENT OF DATE PALM CV. KHASTAWI GROWN IN GYPSIFRIOUS SOIL.**

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## **ABSTRACT**

This experiment was conducted at Falluja date palm research station province fellow horticulture station ,Ministry of Agriculture during the growing season 2013 to test the effect of organic fertilization and addition methods on some vegetative properties and yield component, leaves content of nitrogen, phosphors ,potassium, carbohydrate, starch and sugar of date Khastawi grown in Gypsifrious Soil . The addition organic fertilization Humic acid at 2 gm.l<sup>-1</sup> spraying on vegetative part, 4 gm.l<sup>-1</sup> addition to soil, and addition K-Humate acid at 2 gm.l<sup>-1</sup> spraying on vegetative part, 4 gm.l<sup>-1</sup> addition to soil, include interaction between them and the control treatment , three weeks after of pollination . RCBD was used , the data collect , analyzed and compared the significantly inferences with LSD level 0.05. The results were:The treatment Humic acid at 4 gm.l<sup>-1</sup> and K-Humate 4 gm.l<sup>-1</sup> (T<sub>10</sub>) had superiority by giving highest leaf length, leaflet length ,leaves contents of chlorophyll, nitrogen ,phosphors, potassium ,carbohydrate, starch , total sugar , fruit diameter , weight and total yield of 55.67 kg.date palm <sup>1-</sup> ,while the lowest average of these parameters were found in the control treatment and gave the yield total 37.33 date palm <sup>1-</sup> .C/N ratio of control treatment had superiority compared with (T<sub>10</sub>) treatment (5.50- 4.02).

**Key words:** date palm, Humic acid, K-humate, Khastawi, Gypsifrious Soil