Effect of organic fertilizer and EM1bio- fertilizer in leaves content of date palm offshoots varieties Al- Berhi and Khallas of some mineral elements.

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## Abstract

Carried out the experiment in accordance with the design of randomized complete block (RCBD) in palm Mandali station / General Authority for palm - the Ministry of Agriculture in the growing season from 2013 to 2014 to study the effect of adding EM1bio- fertilizer, seaweed extract and gibberellic acid in leaf content of date palm offshoots varieties Al-Berhi and Khallas resulting from the multiplication histological agriculture of some mineral elements (Cl, Na, Ca, K, P, N).

The results showed that the addition of bio-enriched EMI, seaweed extract and gibberellic acid in single or mixed led to a significant increase in the percentage of the concentration of nitrogen, phosphorus, potassium and calcium in the leaves compared to treatment of comparison. Record the triple interaction (seaweed extract + gibberellic acid + bio-enriched EMI) a higher concentration of nitrogen, phosphorus, potassium, calcium significantly a superior to Single treatments and treatments interaction duo. Led interaction between the bio-enriched EMI, seaweed extract and gibberellic acid the cultivars Al- Berhi and Khallas in a single or mixed to a significant increase in the concentration of nitrogen and potassium, calcium, phosphorus in palm leaves and both cultivars compared to treatment of comparison. And record the triple overlap (seaweed extract + gibberellic acid + bio-enriched EMI), the highest concentration of nitrogen, phosphorus, and calcium and potassium for both cultivars.

Add the bio-enriched EMI and seaweed extract and gibberellic acid in single or mixed it led to a significant reduction in the percentage of sodium and chlorine concentration compared to the treatment comparison, And record interaction the triple (seaweed extract + gibberellic acid + bioenriched EMI) lower percentage of sodium and chlorine concentration. The addition of bio-enriched EMI and seaweed extract and gibberellic acid and varieties and interaction between the two in a single or mixed led to a significant reduction in the percentage of sodium concentration and both cultivars compared to treatment of comparison. While it led to a significant reduction in the percentage of the concentration of chlorine to class Berhi and not significant for the class of Khallas exception of my treatment interaction duo (bio-enriched EMI + gibberellic acid) and triple interaction (seaweed extract + gibberellic acid + bio-enriched EMI), which led to a significant reduction in the percentage of the concentration of chlorine class of salvation, recorded (seaweed extract + gibberellic acid + bio-enriched EMI) lower values of the percentage of chlorine and sodium concentration of both cultivars.