# INVESTIGATION On THE EFFECTS OF PLANT GROWTH REGULATION on QUANTITATIVE OF QUALITATIVE AND QUALITATIVE CHARACTERISTICS OF "KABKAB" DATE (PHEONIX DACTLY FERA L.)

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An investingation was carried out in 1998 on "Kabkab" date, one of the leading varieties in Bushehr privince, in two locations (borazjan and saadabad).

Plant growth regulators benzyladenine, naphthalenacetamide(0,25,50,100 mg/l) and 2, 4-D *isopropylester* (0, 10, 20, 30 mg/l) were applied to the clusters two weeks affter pollination to point of ran off.

The experminent was carried out in a completely randomized block desing with 12 treatments and 4 replications in each location. Twelve palms in each location were selected for uniformity and on each one 4 clusters were treated. The characteristic measured were; cluster weight, length and diameter and weight of fruit and seed at two stages of Khalal and Tamar. Pulp weight, pulp/seed ratio and total soluble solids were also measured. means were compared using Duncan's Multiple Rang Test.

Fruit weight, lenght and diameter and pulp/seed ratio were increased in both locations by all 3 growth regulators when compared with control. Effects were more pronounced when concentrations increased. 2, 4-D at the reate of 30mg/l had the highest increase effect on fruit weight and fruit size. Seed weight, length and diameter and percent of total soluble solid were not affected by the treatment.

Benzyladenine at the rate of 100mg/l enhanced fruit ripening whereas 2,4-D and naphthalenacetamide retareded it. This retardation of ripening was