

Study of pollen germination of 5 male cultivars and different pollens "Kabkab" and "Zahedi" effects on physical characteristics of date palm cvs.

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An experiment was conducted in 1994 at Bushehr Research Center to study the effect of different male palm pollens on the quantitative and qualitative characteristics of "Kabkab" and "Zahedi" date fruit. Two of the pollinizers named "Jarvis" and "Fard No.4" resulted from tissue culture and three were local pollinizers with unknown parentage were given serial numbers from 1 to 3 (D_1 - D_3). Two commercial cultivars Kablab and Zahedi were chosen as the female parents. The design of experiment was a latin square with five treatments for Kabkab and with four treatments for Zahedi cv. The experiment of Kabkab was conducted in two locations. Five and four pollen types were used for Kabkab and Zahedi cvs., respectively. The D_3 pollinizer was excluded from Zahedi experiment. After pollination process and fertilization, the required samples were collected and the necessary information were recorded which included physical characteristics of fruit.

The results showed that many of the physical characteristics were affected by different pollinizers, but there was no considerable effect characters, like fruit diameter, length to diameter ratio. The location effect was significant for seed weight, diameter and length. The location by treatment interaction was significant only for fruit weight and pulp weight. Fruit pollinated with D_2 had lowest percentage of seed weight (the highest edible portion) in both cultivars.

According to the results obtained in this experiment, D_2 was better than other male cultivars to pollinate "Kabkab" and "Zahedi" cultivars.