

Effects of pollens of different orange cultivars on orange cv. "Washington Navel" fruit set and formation

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Fruit formation in "Washington Navel" cultivar is as parthenocarpy, but the number and bigness of fruit can be increased by cross pollination and settingg beehive in orange orchards.

In this research work effects of pollens of nine cultivars in a randomized complete block design with four replications were examined. 25 flowers in different sides of each tree were pollinated. Fruit counting was done in two stages:

A. 15 days after removing isolation bags (fecundation)

B. After June drop

In ripening date, number of fruits as well as weight, length, diameter, volume of fruits and also peel tickness and number of seeds in each fruit were determined.

Statistical analysis of variance showed that there is significant difference among treatments in fruit set and foramation, number of seeds as well as fruit weight, length, diameter, but there is no significant diference in peel tickness.

The results showed that, pollen of "dancy" mandarian had the most effect on the yield of orange cv. "Washington novel" and there is a positive correlation between fruit set and formation.