

**Effects of carbohydrates spraying on some qualitative and quantitative traits of pistachio (*pistacia vera* L. cv. Kalleh-ghoochi) nuts**

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Because of strong competition for metabolic absorption specially carbohydrates between vegetative growth and embryo development, some quantitative traits could be decreased. For this reason carbohydrates spraying was carried out in different times of embryo development on pistachio cv. kalleh-ghoochi for determine their effects and the best time for foliar application.

Then a mixture of carbohydrates (sucrose 3%, glucose 2% fungicide (copper oxy chloro) 0.5%) were selected to study their effects on quantitative traits of pistachio (*pistacia vera* L.) cv. Kalleh-ghoochi nuts. This experiment was carried out in Rafsanjan Pistachio Research Institute (RPRI) with a randomized complete block design in 5 treatments and 3 replications on summer 1997. The chosen dates for treatment coincided with the period of fast development stage of embryo and kernel maturation stage with large requirement for carbohydrates in 4 treatments (treatment 1: time of andosperm rapid growth starting, treatment 2: time of andosperm completion and embryo rapid growth starting treatment 3: time of embryo and cotyledon completion and digestion of andosperm treatment 4: treatment was done in three times of 1, 2 and 3 treatments simultaneously) and compared with control. Results indicate that the best time for treatments was the time of andosperm rapid growth because treatment in this time improved some quality characteristics such as increased shell dehiscence and decreased percentage of blank nut and fruit abnormalities.