

STUDY, EVALUATION AND IDENTIFICATION OF SUPERIOR GENOTYPES OF WALNUT IN KERMAN PROVINCE

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Walnut "*Juglans regia*" is one of the important fruit bearing trees, Species of its genus "*Juglans*" are grown to China, Japan, India, Iran and another regions of the world. The most important native walnut species in Iran is "*Juglans regia*"

In 1999, there were 82829 hectares walnut trees in Iran and Kerman with 9218 hectares is one of the major walnut growing regions in Iran.

This study was started in 1995 and ended in 1998 and in finally 51 superior walnut genotypes were selected.

Biotype collection and evaluation

1. Rabor 2. Baft 3. Bardsir 4. Zarand 5. Raien 6. Sardoiat 7. Dehbacri

Observed characteristics were majored from tree, fruit and kernel and 23 characteristics, were noted.

Frequency distribution of some characteristics the genotypes indicated that 37% of them have more than 50% lateral buds producing pistillate flowers and 52% of them produce high yield, Fruit shape in the 50% of genotypes is short rectangular.

Multiple regression and correlation coefficients between some of the characteristics were determined and results indicated that:

A. there is significant correlation between time of leafing and lateral buds producing pistillate flowers.

B. Kernel color is significantly affected by yield and time of harvesting.