

Study on phenological and pomological characteristics of promising walnut clones in Iran

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As the walnut originated in Iran, high genetic variations on *Juglans regia* population tree is found around the country.

In the walnut improvement research program which have been arranged in 6 phases in SPII at Karaj, the main objective is to obtain the best clones or cultivars among the 250 preselected population which were collected around the walnut plantation area in 1982-1986.

The first and second phases had been done for identification and collection and plantation of preselected genotypes.

The third step is to study 23 phenological and pomological characteristics at the collection orchard.

Based on high productivity, fruit weight and time of bud burst some genotypes were placed in the top group such as K21/2, K103/1, K23/2, K18/1, K31/3, K87/1, K23/1, K140/1, K94/2, K66/1, Z60, Z63, G3, K21/3, K37/1.

But generally 15 preselected genotypes were placed in the highest productive group data for tree, fruit and kernel characters. Finally four promising clones as B21-1/3, G3, Z63, Z60 were identified considering commercial characters as productivity, lateral bearing fruit weight of nut, date of leafing and percentage of kernel.