

## **Identification of female pistachio phenotypes in Semnan province**

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The first and most important step on pistachio research are based on identification of genetical capable of local germplasm potential which concern about environmental problems in a region. In addition, breeders are becoming educated concerning the available sources, after categorizing the concerned data which are employed to genetic solution to female pistachio phenotypes were collected based on morphological characteristics in a design.

At first, 150 genotypes were collected, then 70 genotypes discarded in two stages. three characteristics categories were recorded from the remain genotypes.

The first of them include, tree shape, vegetative, generative, fruit shape, colour, inflorescence rachis , alternat bearing ... characteristics and method of orchard management were recorded in the orchard.

In the second stage , after harvesting and preparing fruit crop of each selected genotype separately, their characteristics such as length, width, diameter, weight colour nut and degree of suture opening nuts were measured.

Finally, 24 genotypes from 80 preselected genotypes were recognized favourite because of high producing, largeness suture opening nut, blank and low alternate bearing were selected. The 56 remain genotypes because of acceptable having characteristics will be employed in improved programs in pistachio nut, some of them such as resistance to psyllid (*Agonoscena pistaciae*), frost,sustainable to shaking, very late, very early riping, blind and very suture opening nuts werer studied. Finally, 16 genotypes were selected.

Fresh and dried pischio fruit, their vegetative and generative characterstics are discussed in this paper.