

**P-72 (263)****THE MORPHO-POMOLOGICAL EVALUATION OF ALMOND CULTIVARS AND GYNOTYPES UNDER KARAJ ENVIRONMENTAL CONDITIONS****Assoc. Prof. Ali Imani**, Temperate Fruit Research Center, Horticultural Science Researcher Institute, AREEO, Karaj, Iran; [imani\\_a45@yahoo.com](mailto:imani_a45@yahoo.com) (Presenting author)

In this research, quantitative and qualitative characteristics of 60 almond cultivars and genotypes in Karaj climate conditions and their characteristics were studied in order to select the best cultivars. These cultivars and genotypes were planted in randomized complete block design with three replications. The cultivars were evaluated for all vegetative and reproductive traits and marketable characteristics. Multivariate statistics were used to determine the relationships between important traits such as fruit length and width, fruit weight with skin, kernel weight and kernel percentage. The results of the studied quantitative traits of the important characteristics of the various organs of the tree of 60 almond cultivars, including tree height, spread radius (canopy) and tree trunk diameter, flower size, number of stamens, pistil diameters, fruit and kernel size including length, width, thickness and weight, and percentage and double of kernel showed that there was a significant difference between the cultivars. Finally, after the conclusion, it was determined that the cultivars late flower: Shokoufeh, Ferragnes, A230 and A200 were due to the late flower less chance of exposure to spring cold, as well as the percentage of good kernel and soft shell: Nonpareil; and early to Mid-flower cultivars: Mamaei, Ne Plus Ultra, Shahrud 21 was recommended because of the strength of the tree, the early maturity, ease of removal of the hull from the fruit and the tree.

**Keywords:** almond, fruit, morphology, cultivar, yield