

**P-44 (88)****STUDY OF AGRONOMIC TRAITS AND IDENTIFICATION OF SELF-INCOMPATIBILITY ALLELES IN IRANIAN AND FOREIGN ALMOND CULTIVARS AND GENOTYPES**

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In this study, important morphological traits and self-incompatibilities in 71 almond cultivars and genotypes were studied. Simple and multiplex specific PCR analyses were used in order to identify self-incompatibility alleles. Based on the results, cultivars and genotypes including 'Dir Ras-e-Savojbolagh', 'D-124', 'D-99', 'Shahrood12', 'Tuono', 'Nonpareil', 'Price', 'Mirpanj-e-Tehran', 'Pakotahe-e- Taleghan', 'V-13-34', 'V-16-8', 'V-11-10', 'Zarghan10', 'Uromiyeh 68', 'Barg dorosht-e-Hamedan' and 'Yazd60' were late flowering and had the highest quality nut and kernel characters. The result of the PCR method using combined primers ASIII and AmyC5R showed amplification of ten self-incompatibility alleles (S1, S2, S3, S5, S6, S7, S8, S10, S12, and unknown allele) and three Sf alleles. Moreover, S1 had the highest frequencies in comparison with other known S-alleles.

**Keywords:** Almond, Self-incompatibility, S1-allele, Specific PCR.