**Summary**

**Determination of Suitable Pollinizers for Almond (*Prunus dulcis*) Cultivars and Genotypes “Shahrood 12”, “Shokoufeh” and “K-4-10” Using Specific Amplification of S-alleles**

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**Abstract**

In this study, S-alleles of 16 almond cultivars and genotypes were determined using allele-specific and consensus primers. Likewise, the flowering coincidence among these cultivars and “Shahrood 12”, “Shokoufeh” and “K-4-10” were determined. Twelve different S-alleles were distinguished in studied cultivars. Using allele-specific primers five S-alleles \(S_1, S_2, S_3, S_4\) and \(S_6\) and compatibility allele \(S_c\) were amplified. In five cultivars both S-alleles, in seven cultivars only one S-allele and in four cultivars no S-allele were amplified. Using second intron consensus primers 31 out of 32 S-alleles of studied cultivars were identified. In 15 cultivars both S-alleles and in seven cultivars only one S-allele and in four cultivars no S-allele were amplified. Using second intron consensus primers. Likewise, the flowering coincidence among these cultivars and flowering coincidence of cultivars, suitable pollinizers were determined. For “K-4-10” genotypes “K10-11”, “K14-12”, “K16-30”, “K12-4” and cultivars “Shahrood 12” and “Marcona”; for “Shahrood 12” genotype “K4-10” and “Marcona”; and for “Shokoufeh” cultivars “SuperNova”, “Sahand”, “Touno”, and “Genotype 8”, “Genotype 7”, and “K16-25” are recommended as suitable pollinizers.

**Keywords:** pollination, self-incompatibility, PCR, stone fruit

**References**


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To look at the figures and tables, please refer to the Persian text (pages: 7-15= 7·15).