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 (S1, S2, S3, S4 and S5) and compatibility allele (SC) 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 were amplified. In four cultivars no S-allele were amplified. Using second intron consensus primers. Likewise, the flowering coincidence among these cultivars and “Shahrood 12”, “Shokoufeh” and “K-4-10” 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


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