

based molecular analysis of economically important Turkish apricot cultivars

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ABSTRACT. Turkey is not only the main apricot (*Prunus armeniaca*) producer and exporter in the world, but it also has a wide variety of apricot germplasms, owing to its close proximity to the centers of apricot origin. However, there is little or no genetic information on many apricot cultivars that are extensively cultivated in Turkey. We examined the genetic relatedness of 25 Turkish and four exotic apricot cultivars using SSR (simple sequence repeat) markers that were either previously developed for apricot, or for peach (*P. persica*), a close relative of apricot. Allele diversity (with an average allele number of 6.37) at the SSR loci and the heterozygosity rates (with an average H_o value of 0.648) of these cultivars were found to be higher than in previous studies that used the same loci for apricot. This fact might be attributed to the analysis of different numbers of accessions in the different studies. No correlations were found between the genetic relatedness and the geographical distributions of these cultivars. The data reported here will assist in the prevention of confusions in the apricot propagation and breeding in Turkey. The findings can also be directly compared with other studies that used the same SSR markers on apricot.

Key words: Apricot; Simple sequence repeats; Turkey