

An assessment of genetic variability and relationships among wild-grown blackthorn (*Prunus spinosa* L.) plants based on RAPD markers

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ABSTRACT. *Prunus spinosa*, blackthorn, exists as wild populations that inhabit uncultivated uplands of Coruh Valley in the northeastern part of Turkey; the fruit is used to make preserves. We examined genetic diversity in wild-grown *Prunus spinosa*; 16 individual plants from wild populations of Coruh Valley were sampled and subjected to RAPD (random amplified polymorphic DNA) analysis. We tested 51 random decamer primers; 15 of them gave reproducible polymorphic patterns. These 15 primers produced 226 bands, of which 65% were polymorphic. A UPGMA dendrogram clearly divided the genotypes into four groups; we concluded that RAPD analysis can be used for examining genetic relatedness among blackthorn genotypes.

Key words: Blackthorn; Genetic diversity; *Prunus spinosa*; Random amplified polymorphic DNA