

## Genetic diversity of eggplant (*Solanum melongena*) germplasm from Turkey assessed by SSR and RAPD markers

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**ABSTRACT.** Eggplant is a major crop in Turkey, which produces more of this crop than all of Europe; consequently, germplasm resources are of concern for the country. Molecular characterization of eggplant genotypes collected from different geographical regions of Turkey was carried out using SSR and RAPD markers. With amplification of five SSR loci, the number of alleles per microsatellite locus ranged from 2 to 10, with a total of 24 alleles. The greatest number of alleles was found at the *emf21H22* locus (10 alleles); followed by *emh11O01* and *emf21C11* as five and four alleles, respectively. The average number of alleles per locus was 4.8. Using 11 decamer RAPD primers, 100 bands were amplified, among which 29 were polymorphic. The number of bands per primer ranged from seven (*OPH10*, *OPH19*, *OPH20*, *OPH03*) to 14 (*OPB07*). Primer *OPB07* was the most polymorphic, generating 64% polymorphic bands; the rest of the primers gave less than 50% polymorphism. UPGMA dendrograms were used to examine the genetic relatedness of the genotypes.

**Key words:** Eggplant; *Solanum melongena*; SSR; RAPD;  
Genetic resources