

## Genetic relationships among turnip (*Brassica rapa* var. *rapa*) genotypes

E. Yildirim<sup>1</sup>, N. Yildirim<sup>2</sup>, S. Ercisli<sup>3</sup>, G. Agar<sup>2</sup> and H. Karlidag<sup>1</sup>

<sup>1</sup>Department of Horticulture, Ispir Hamza Polat Vocational School, Erzurum, Turkey

<sup>2</sup>Department of Biology, Faculty of Science, Ataturk University, Erzurum, Turkey

<sup>3</sup>Department of Horticulture, Faculty of Agriculture, Ataturk University, Erzurum, Turkey

Corresponding author: S. Ercisli

E-mail: sercisli@hotmail.com

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**ABSTRACT.** Turnip (*Brassica rapa* var. *rapa*) is one of the main vegetables consumed by people living in Eastern Anatolia in Turkey. In this region, farmers obtain their own seeds for production, which results in considerable morphological variability. We examined the genetic variation and relationships among 11 turnip genotypes sampled from diverse environments of the Erzurum region located in Eastern Anatolia in Turkey. Thirty-two Operon RAPD primers were screened; among them, 20 gave reproducible and clear DNA fragments after amplification. The average polymorphism ratio was 90.4%. The genetic distance between turnip genotypes were found to range from 0.302 to 0.733, indicating high genetic variability. Eleven genotypes were divided into three main clusters in a dendrogram; ETS2 and ETS8 genotypes were the most distant. We conclude that RAPD analysis would be useful for genotyping turnip genotypes.

**Key words:** Turnip; *Brassica rapa* var. *rapa*; RAPD; Genetic diversity