

## Molecular characterization of olive cultivars using amplified fragment length polymorphism markers

S. Ercisli<sup>1</sup>, E. Barut<sup>2</sup> and A. Ipek<sup>2</sup>

<sup>1</sup>Department of Horticulture, Faculty of Agriculture, Erzurum, Turkey

<sup>2</sup>Department of Horticulture, Faculty of Agriculture, Gorukle, Bursa, Turkey

Corresponding author: S. Ercisli

E-mail: sercisli@hotmail.com

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**ABSTRACT.** We sampled six olive cultivars (Tavli Sati, Sati, Gorvela, Sacakli Otur, Butko, and Otur) from Coruh Valley, located in the northeast part of Turkey, and characterized them using amplified fragment length polymorphism (AFLP) markers. Some morphological and biochemical characteristics are also determined. Six AFLP primer combinations were used for molecular characterization and 66 AFLP markers were obtained. Six olive cultivars were classified into two major clusters using UPGMA clustering analysis; cv. Otur alone comprised the first group. Some morphological and biochemical characteristics of cv. Otur were also distinct from those of the other cultivars. The highest genetic similarity was observed between cultivars Tavli Sati and Sati (0.74), while the lowest genetic similarity was observed between cvs. Gorvela and Otur (0.37).

**Key words:** Olive; Amplified fragment length polymorphism; Molecular markers