

O 31. STUDY OF INTRA-VARIETAL DIVERSITY IN BIOTYPES OF ALBANIAN AUTOCHTHONOUS (*VITIS VINIFERA L*) CULTIVARS ‘SHESH I BARDHË’ AND ‘SHESH I ZI’ BY RAPD-PCR

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ABSTRACT: Spontaneous somatic mutations that occur in the process of vegetative propagation of *Vitis vinifera L.* cultivars are the major source of intra-variety variability. ‘Shesh i Bardhë’ and ‘Shesh i Zi’ are two Albanian grape cultivars used mainly for wine production, showing ampelographical diversity among grape biotypes grown in different regions of Albania. In order to assess the genetic diversity among accessions of these two cultivars, 18 selected accessions that showed variability in ampelographic evaluation were analysed by means of 10 RAPD markers. Genetic similarity-dissimilarity among individuals was calculated using Dice’s coefficient. Cluster analysis was done based on UPGMA algorithm by means of NTSYS software. The analysis generated over 137 polymorphic fragments, with a mean of 13.7. Intra-variety diversity has been detected in both cultivars. The mean similarity coefficient among biotypes of ‘Shesh i Bardhë’ and ‘Shesh i Zi’ was 0.72 and 0.63, respectively. Two main groups were observed in cluster analysis, however there were no groupings based on the geographical origin or the berry colour. This study confirms the intra-cultivar variability among biotypes of the two important grape cultivars, which is valuable regarding the identification and conservation of biotypes of valuable grape cultivars.

Keywords: Grape, Biotypes, RAPD, Albania