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### **Olive biotechnology: The assessment of tissue culture induced genetic variability in olive (*Olea europaea*) by molecular markers**

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Olive is one of the most important tree crops of the country and it is cultivated in many places. Propagation of true to type olive plants is important for many olive companies and farmers in the country and for this reason genetic analysis of randomly selected tissue culture regenerated olive plants of cultivars Kroneiki, Zard, Roughani and X was performed and compared with the mother plant. We used Cp-DNA and RAPD molecular markers to check genetic fidelity versus somaclonal variation. Both RAPD and Cp-DNA analyses revealed that some of the regenerated plants differed extensively in their genetic content. These plants were placed in different clusters far from the mother plants in NJ tree and TNT tree obtained from these two molecular markers. We identified also some regenerated plants that were true to types of the mother plants. These plants also differed in their morphological features. Genetic and morphological changes were more extensive with increase in sub-culture numbers. Different uses of these two types of plants will be discussed.

#### **Biography**

Masoud Sheidai has completed his PhD at the age of 28 years from Poona University India and Sabbatical studies from UBC University in Canada. He is now professor of Biology in ShahidBeheshti University, Tehran, Iran. He has published more than 125 papers in reputed journals and has been serving as an editorial board member of reputed. Gene Conserve, and Biodiversity journals.

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