

Effect of Table Olive Processing Methods on the Physico-Chemical Properties of Some Promising Olive Genotypes

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Proper selection of cultivar and processing method are the main factors intended for production of table olive. Therefore, in the current research, the different processing ability and quality of processed green and black table olives were evaluated during fermentation and storage periods. Evaluations were carried out on selected cultivars including Shiraz, Manzanilla, Zard, Direh, Meshkat, Tokhm Kabki, and genotypes including KH15, BN5, QG18, TMN2 and GW1. Evaluation of qualitative parameters during fermentation and storage periods showed the highest amount of acidity in Shiraz cultivar and TMN2 genotype, which decreased with increasing fruit maturity. Also, in terms of oleic acid, there was a significant difference between cultivars at harvest time, which reduced with increasing fruit maturity and changing fruit skin color to black. According to the sensory analysis results unscratched fruit treated with NaOH with a profit compared to the scratched fruit have a higher rating in terms of overall acceptance and texture hardness; however, the scratched samples also had a remarkable superiority in traits such as the pit detachment and fruit color compared to unscratched fruits. According to results of the processed black olive, Manzanilla, Meshkat, BN5 and GW1 had higher potential for production of black table olives due to uniform color, appropriate firmness and optimal overall acceptance.

Keywords: Debittering, Table olive, Fermentation, Storage.

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