Do amount of phenolic compounds depend on olive varieties?

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Olive oil is the only vegetable oil which contains appreciable amounts of polyphenols acting as antioxidant substances and conferring to it a greater stability against oxidation. The purpose of this study was to screen these compounds in three variety of Iranian olive [Shanghe,Roghani and Zardeh] that are cultivated in north of Iran. In this work HPLC, GC and GC-Mass have been used for characterization of phenolic compounds, triacylglycerols and fatty acid. The qualitative and quantitative analysis of olive oil had significant amount of phenolic compounds for var. Shanghe, tyrosol , hydroxytyrosol, phenolic acid ,oleuropein and some lignans determined in different concentration in three varieties. The results showed that the three varieties differ in fatty acid and triacylglycerols composition. Higher amount of monounsaturated oleic acid (C18:1) and lower linoleic acid were obtained for var. Rogahni.

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