

Investigation On Composition of Fatty Acids in Olive Oil of 4 Cultivars Grown in Roodbar

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In this research the effect of cultivar and time of harvesting on composition of fatty acids was experimented. The samples of olive fruits were collected from four cultivars located at Roodbar area. Sampling of each cultivar took place at two weekly intervals throughout the fruit growth and ripening period. The samples of oil were analysed by gas chromatography. These results indicate that fatty acids composition of oil are different among 4 olive cultivars. The main fatty acid in the oil of the cultivars was oleic acid. The Zardzeitoun has a high oleic content (77.8%) than the Roghani (71.2%), Belidi (68%), and Lechino (64%). The ratio of O/L fatty acid lies at between 14.6 in Zard and 5.2 in Roghani. Changes of oleic acid was dependant on the decreasing of palmitic acid and increasing of PUFA. The high ratio of Li/P was obtained at November. At the first period of fruit growth there are maximum SFA. The Roghani has a total MUSFA content of 71.3% in the first period of fruit growth. The PUSFA varies between 12.5% (Lechino) and 8.6% (Zard). At the period of fruit growth the high value of MU/PU fatty acid found for Zard and low value for cultivars of Belidi. At this period there aren't significant differences in MU/US values between four cultivar. The Zard olive is characterised by a low value of L/Li fatty acids. At the ripening period the value of SFA ranges from 27% (zard) to 17% (Roghani). The P/L ratio of oils varies between 1.88 (zad) and 1.1 (Roghani). Important differences of fruit growth and ripening period were found for L/Li ratio.