



Changes in Some Constituents of Kalamata and Picual Olive Fruits During Development

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Abstract : This work was carried out through 2011, 2012 and 2013 seasons on Kalamata and Picual olive cultivars. Trees were about 8 years old, grown in a sandy soil, planted at 5x5 meters apart under drip irrigation system. The investigation aimed to study the changes in some constituents in relation to fruit development stage. Results obtained provide that fruit development of both cultivars followed the double growth pattern in which a great increase in fresh fruit weight occurred during the first stage, (about 10 weeks) after fruit set, followed by a very limited change in fruit size for about (4-5 weeks) then a rapid increase in fresh fruit weight was followed. The change in fruit skin color shortly began during the early period of the third stage. The increment in fruit size prior to fruit coloration comes mainly from increased moisture content of the fruit. Oil begins to accumulate in the fruit and increases gradually through July, August and reaches the maximum as fruit become completely black.

Kew words: Olive (*Olea europaea*), Kalamata, Picual, growth pattern.

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