

Determination of Some Chemical Characteristics and Antioxidant Activity of Extra Virgin Olive Oil belong to Gaziantep District

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Olive oil which is one of the important part of Mediterranean Nutrition Diet has increasingly been of importance on account of its fatty acid composition and antioxidant activity content. Quality of olive oil is affected by some factors such as climate, origin and growth area, so determination of species and characterization of olive oil has importance. For this reason the present study was performed to determine the characteristics of Nizip Yaglık and Gemlik type extra virgin olive oil belong to Gaziantep district. Peroxide value (PV) and Free Fatty Acidity (FFA) of the samples were individually determined and fatty acid composition of these samples were determined by Gas Chromatography System. For determination of antioxidant activity; ABTS and DPPH radical scavenging methods were used. α -tocopherol content of the olive oils were determined by LC/MS/MS System. According to the results obtained from the present study; oleic acid has the highest content (between 63.3 and 70.4 %) within all of the other fatty acids Peroxide values were obtained between 6,9 and 8,1 meq O₂/kg oil, FFA of the samples were less than 0.8 % oleic acid. DPPH, ABTS radical scavenging tests values are between 200-700 μ g trolox/g oil and 173-435 μ g Trolox/g oil, respectively. α -tokoferol content was determined between 113-136 μ g Trolox/g oil.