Elaf Abdelillah Ali Elhussein et al., Madridge J Food Technol. 2017
http://dx.doi.org/10.18689/2577-4182.a1.012

madridge CONFERENCES

International Conference on
Food Science and Bioprocess Technology
November 20-22, 2017 Dubai, UAE

Stability of Bioactive Non-Nutrient Resource from Olive Leaf Waste: Ph Influence

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Olive tree (*Olea europaea* L.) is the member of Oleaceae family, which characterized an evergreen and an important source of polyphenol compounds. Furthermore, the highest polyphenol contents were determined in olive leaves when compared with the other parts of the tree or olive fruit. In addition, olive leaves are evergreen and easily available in all seasons as by-products of olive tree cultivation and olive oil mills [1]. Oleuropein is considered as a main appearing active compound in olive leaves extracts. oleuropein have a wide variety of physiological properties, such as antioxidant, anticarcinogenic, antiinflammatory, antiallergic, analgesic, antimicrobial, antiallergenic, antimicrobial, anticancer, platelet aggregation inhibit and cardioprotective [2]. In general, the polyphenol extracts have the specific range of pH values. The decreasing or increasing over these values may cause degradation of polyphenol contents resulting from occurred hydrolysis and oxidation reactions [3]. Microwave-assisted Extraction method was used to prepare all the ethanolic extracts of olive leaves with the different pH (4, 7, and 10). At regular time intervals, the total polyphenol contents, antioxidant activities and oleuropein amounts were determined.

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Biography

Elaf Abdelillah Ali Elhussein got a Bachelor's degree in chemical engineer (University of Science and Technology, Sudan, 2013). In 2014, she went to Turkey for continue her education journey in Istanbul University. Her interested research area: Food processing by-products, Phytochemical compounds, Separation processes. In 2017, she joined two scientific research projects "Investigation of Stability of Olive Leaf Extract's Phenolic Profile" through PAB/İÜ and "Investigation of Graphene Oxide as a Highly Selective Adsorbent for the Recovery of Biophenols Rich in Hydroxytyrosol from Olive Mill Wastewaters: Equilibrium and Kinetic Models" through TÜBİTAK. She also participated in 12 international conferences in Turkey and Italy. Currently, she is developing the thesis approach with her supervisor Assoc.Prof. Selin Şahin.