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ABSTRACT BOOK



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The Effects of Different Solvent Usage in Oil Extraction on Fatty Acid Composition of Fenugreek Plant (*Trigonella foenum graecum* L.)

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Abstract

Fenugreek is an important medicinal and aromatic plant belonging to the family of *Fabaceae* which is known by names such as Boy otu, Buy otu, Çemen otu in our country. The seeds used in the experiment were harvested from the kind garden in 2016. This study was carried out with the aim of determining the effect of different solvents used to obtain oil on fatty acid composition in fenugreek plant. For this purpose, two different solvents (hexane and ethanol) were used to determine oil. At the end of this study, five fatty acid components were detected. Among these components, linoleic acid is the main component, followed by linolenic acid, oleic acid, palmitic acid and stearic acid respectively. The highest oleic acid (12.34%) and palmitic acid contents (9.04%) were obtained from hexane application while the highest linoleic acid (42.78%), linolenic acid (29.32%) and stearic acid contents (4.13%) were obtained from ethanol application. As a result, it has been determined that the use of different solvents may affect the proportions of fatty acids when the oil is obtained.

Key Words: Fenugreek, *Trigonella foenum-graecum*, fatty acid composition, solvent