

Extraction of Squalene from Lebanese Olive Oil

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Abstract : Squalene is a valuable component of the oil composed of 30 carbon atoms and is mainly used for cosmetic materials. The main concern of this article is to study the Squalene composition in the Lebanese olive oil and to compare it with foreign oil results. To our knowledge, extraction of Squalene from the Lebanese olive oil has not been conducted before. Three different techniques were studied and experiments were performed on three brands of olive oil, Al Wadi Al Akhdar, Virgo Bio and Boulos. The techniques performed are the Fractional Crystallization, the Soxhlet and the Esterification. By comparing the results, it is found that the Lebanese oil contains squalene and Soxhlet method is the most effective between the three methods extracting about 6.5×10^{-4} grams of Squalene per grams of olive oil.

Keywords : squalene, extraction, crystallization, Soxhlet

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