Comparison of chemical composition and biological activities of Algerian seed oils of Pistacia lentiscus L., Opuntia ficus indica (L.) mill. and Argania spinosa L. Skeels

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Description:

Many parameters can influence the chemical profiles and the biological activities of seed oils. It was therefore of interest to study Algerian seed oils, whose caharacteristics are not well known. So, the physicochemical properties and nutrient profiles (fatty acids, phytosterols, polyphenols) of seed oils from Pistacia lentiscus L. (PL), Opuntia ficus-indica (L.) mill. (OFI), and Argania spinosa L. Skeels (AS) were determined. The antioxidant and antimicrobial activities of the oils were also characterized. The physicochemical parameters of the oils are closely related to the standard values. PL oil is distinguished by its high content of pigments. AS and OFI oils were dominated by linoleic acid, at 39.1 ± 0.5 and $55.8 \pm 0.6\%$, respectively, while the oleic acid $(41.2 \pm 0.4\%)$ was the major fatty acid in the oil of PL. The analysis of phytosterol levels showed that β -sitosterol was present in high amounts in the three oils, of $387\ldots$

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