Research Article

Quality of Cosmetic Argan Oil Extracted by Supercritical Fluid Extraction from Argania spinosa L.

Chouaa Taribak,¹ Lourdes Casas,² Casimiro Mantell,² Zoubaida Elfadli,¹ Rédouane E. Metni,¹ and Enrique J. Martínez de la Ossa²

¹Department of Chemical Engineering, Faculty of Science, University Abdel Malek Essaadi of Tétouan, 93002 Tétouan, Morocco
²Department of Chemical Engineering and Food Technology, Faculty of Science, International Agri-food Campus of Excellence, University of Cadiz, 11510 Puerto Real, Cadiz, Spain

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Abstract

Argan oil has been extracted using supercritical CO₂. The influence of the variables pressure (100, 200, 300, and 400 bar) and temperature (35, 45, 55°C) was investigated. The best extraction yields were achieved at a temperature of 45°C and a pressure of 400 bar. The argan oil extracts were characterized in terms of acid, peroxide and iodine values, total tocopherol, carotene, and fatty acids content. Significant compositional differences were not observed between the oil samples obtained using different pressures and temperatures. The antioxidant capacity of the argan oil samples was high in comparison to those of walnut, almond, hazelnut, and peanut oils and comparable to that of pistachio oil. The physicochemical parameters of the extracted oils obtained by SFE, Soxhlet, and traditional methods are comparable. The technique used
for oil processing does not therefore markedly alter the quality of argan oil.

資料來源：http://www.hindawi.com/journals/chem/2013/408194/