

From the Argan tree to the Argan oil: Extraction process, chemical quality, authenticity and oxidative stability

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Argan oil is extracted from the kernels of the argan tree fruit [*Argania spinosa* (L.) skeels]; a tree that grows endemically only in southwestern Morocco. Depending on the method of extraction of argan kernels two types of oil can be obtained: edible or cosmetic oil. Edible argan oil is produced by cold pressing kernels roasted for a few minutes, whereas cosmetic oil is produced from unroasted kernels. Preparing edible oil requires at least six steps: fruit collection, fruit drying, fruit peeling, cracking nuts, kernel roasting, and mechanical pressing. Each processing step influences the quality of the oil. Quality is defined by physico-chemical parameters, organoleptic properties and the shelf life. In this communication, we will present the chemical composition of argan oil and its nutritional and pharmacological benefits. Then, we will detail different processes used to prepare argan oil and their impact on the oil chemical composition, preservation and organoleptic properties. We will also present some results from our laboratory on argan oil preservation of authenticity.

Keywords: Argan Oil, Roasting, Quality, Oxidation, Extraction.

Biography:

Dr. Said Gharby was born in 1978 in Casablanca City, Morocco. He received his Ph.D. in analytical chemistry, from Faculty of Science, Mohammed V University in Rabat, 2012. He has published more than fifty papers in international journals and presented about seventy communications in symposia and national/international meetings.

His main research interests are in the field of technology of oils, extraction, chemical quality, sensory quality and oxidative stability, chemistry, Phytochemistry and Analytical Chemistry. Recently, he is interested in the elimination of pesticides elements by an adsorbent prepared from natural substance. Said gharby is currently an eengineer at the Ministry of Agriculture, Autonomous Establishment of Control and Coordination of Exports; (2011 – to date) and R&D Analyst at Lesieur-Cristal Morocco: (2004–2011).