New opportunities in the UAE through essential oil-based research: Native plants as natural resources for future drugs after the oil era

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The United Arab Emirates (UAE) is a young country, with an oil-based economy, that has limited lifetime expectancy. Although the UAE is located in the arid regions, however, the native wildlife is considered to be rich in biodiversity. Also, throughout history, the traditional folk medicine, through the use of the local medicinal plants, has proven its effectiveness and efficiency. The main purpose of this work is to shed the light on new opportunities in the aromatherapy field based on the UAE native essential oil-bearing plants. This initiative "named as Aroma Niche" was adopted recently by the United Arab Emirates University (UAEU) science and innovation park, and currently in the pipelines for implementation. It is significant to fill the gaps between the traditional folk practices, research and technology; in order to build a concrete base ground for new natural derived drugs. The whole process is seeking for professional experts in the field of aridlands agriculture, chemical engineering and pharmacognosy. This initiative believing that, desert plants, who survive the arid conditions, capable of providing high quality ingredients with potential applications in aromatherapy. The promising company will provide 100% certified organic products "chemicals free", and will follow the U S Food and Drug Administration (FDA) regulations. The extraction process would be done by hydrodistillation, and product quality will be monitored by the analytical technology of the Gas Chromatography/Mass Spectrometry (GC/MS). There is a crucial necessity to implement this idea; in order to sustain the local economy after the oil peak.

Biography
Suzan M Shahin is a Lead Ambassador of the United Arab Emirates University (UAEU) graduate students. She is a researcher and PhD candidate in the Aridland Agriculture Department, College of Food and Agriculture, UAEU. Her research interests are the UAE indigenous plants, essential oil extraction and analysis, natural resources, natural drugs, environmental sciences and sustainable environmental approaches.

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