Djebari S, Wrona M, Boudria A, Madani K, Nerin C.

Pistacia lentiscus L. vegetable oil: Physicochemical quality, composition and antibacterial capacity.

Flavour Fragr J. 2023; 38: 426-441. doi:10.1002/ffj.3755

Abstract

Recently, there has been a growing interest in natural products of plant origin as herbal remedies. In this study, the profile of bioactive volatile organic compounds and odorous compounds in a sample of *Pistacia lentiscus* L. vegetable oil has been determined. The study indicated that the oil extraction yield is influenced by the method, the extraction conditions, the stage of maturity of plant and the sampling area. Analysis by HS-SPME-GC–MS and GC–MS showed that monoterpenes and sesquiterpenes represent the most numerous groups among the 57 compounds identified. The most abundant compounds are beta-myrcene, d-limonene and linoleic acid ethyl ester. Among other compounds humulene, caryophyllene, a-muurolene and copaene have been detected known for facilitating wound healing. Moreover, β-caryophyllene and α-humulene with anti-inflammatory effects have been determined. 38 different odorous compounds with herbal, citrus and vegetable aromas were detected by panellists using HS-SPME-GC-O-MS. Research confirmed that the analysed samples have only pleasant aromas that make it a perfect active agent for medicinal use and may gain acceptance of consumers.

Keywords : not available