E-ISSN 2410-8693
ISSN 2410-3918

Academic Journal of Business, Administration Law and Social Sciences

Vol. 11 No. 3
November, 2025

INTERNATIONAL INSTITUTE FOR PRIVATE COMMERCIAL AND COMPETITION LAW (IIPCCL - AUSTRIA)

Research Article

© 2025 Markos Konini and Aurel Nuro
This is an open access article licensed under the Creative Commons Attribution-NonCommercial 4.0 International License (https://creativecommons.org/licenses/by-nc/4.0/)

An overview of the chemical profile of some aromatic-medicinal plants of the South region (Llogara) in Albania

Markos Konini
High School "Meridian+", Albania

Aurel Nuro
University of Tirana, Albania
ORCID: 0000-0003-1875-2430

DOI: https://doi.org/10.2478/ajbals-2025-0025

Abstract

Albania, located in the Mediterranean region, possesses a climate highly suitable for the growth of numerous plant species (over 3,000), of which more than 300 are aromatic and medicinal. These plants are widely used in culinary applications, traditional medicine, and as ornamental species. Medicinal plants have been utilized since ancient times due to their health-promoting effects, and they continue to play an important role today, both in traditional therapies and in the formulation of pharmaceutical products and dietary supplements. Owing to their natural origin and minimal side effects compared to synthetic drugs, herbal medicines are increasingly incorporated into long-term treatments and clinical applications. The biological properties of these plants are mainly attributed to their phytochemical constituents, particularly essential oil components. This study presents data on the chemical composition of essential oils from three of the most commonly used aromatic plants in Albania, primarily from the southern region: *Salvia officinalis* L. (sage), *Origanum vulgare* L. (oregano), and *Laurus nobilis* L. (laurel). Wild populations of these species were collected from the Llogara Mountain area (southern Albania) in June 2025. Air-dried plant materials were subjected to hydro-distillation using a Clevenger-type apparatus to obtain the essential oils. The chemical composition was analyzed by gas chromatography equipped with a flame ionization detector (GC/FID) using a VF-1ms capillary column for compound separation.

The results showed that α- and β-thujones were the most abundant constituents in *S. officinalis* oils; carvacrol and thymol were predominant in *O. vulgare*; and 1,8-cineole (cineol) was identified as the major component of *L. nobilis* essential oil. The chemical profiles of these Albanian wild populations were consistent with previously reported data for the Balkan and broader Mediterranean regions.

Keywords: *Salvia officinalis*; *Origanum vulgare*; *Laurus nobilis*; essential oil; terpene; hydro-distillation; GC/FID.

Full Text: PDF

This work is licensed under Creative Commons Attribution 4.0 License.

Academic Journal of Business, Administration, Law and Social Sciences ISSN 2410-3918 (print)

ISSN 2410-8693 (online)

Copyright © IIPCCL-International Institute for Private, Commercial and Competition law