

Special Issue

Essential Oil: Variability, Environmental Conditions, Composition and Bioactivity

Message from the Guest Editor

Essential oils (EOs) are a complex matrix composed of numerous volatile compounds generally extracted from different parts of the plant by steam distillation. They are known to have various biological activities often attributed to their phenolic constituents. They have always been used in folk medicine and for food preservation. Today, many applications concern the use of EOs as new natural sources of biological interest. Their chemical composition depends on cultivars, environmental factors, and extraction processes. Ensuring the reproducibility of EO's quality requires controlling all these parameters. This Special Issue will focus on the variability of EO's composition, the identification of factors that influence variability as well as authenticity indicators. The aim of this Special Issue is also to provide an overview of the demonstration of the synergistic effect between EO's molecules or in association with existing drugs to strengthen biological activities. Finally, research on the impact of the domestication of plants on the chemical composition and biological activity of their EOs will be appreciated for the sustainable management of biodiversity.

Guest Editor

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Deadline for manuscript submissions

closed (31 October 2021)



Molecules

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Message from the Editor-in-Chief

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