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Plant Essential Oils: Chemistry, Antibacterial Activity and Perspectives of Biotechnological Applications

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closed (31 December 2022)

Message from the Guest Editors

Dear Colleagues,

Essential oils are volatile and aromatic liquids which are produced in some parts of plants and perform important roles such as in interactions with the environment and other organisms. They are rich in bioactive secondary metabolites whose concentrations considerably vary within the same species. Their production is influenced by multiple factors such as the plant development stage and the producer plant organ. Their numerous biological activities are investigated to understand roles and possible applications.

This Special Issue will cover the latest studies of collecting and processing essential oils, and their chemical composition and variability, highlighting antibacterial activities against environmental bacteria, plant and mammalian pathogens and foodborne pathogens. Contributions reporting applications in different fields such as overcoming antibiotic resistance and possible biotechnological applications in agriculture, medicine, pharmacy and cosmetics are also welcome.













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Editor-in-Chief

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Message from the Editor-in-Chief

There are very few fields that attract as much attention as scientific endeavor related to antibiotic discovery, use and preservation. The public, patients, scientists, clinicians, policy-makers, NGOs, governments, and governmental organizations are all focusing intensively on it: all are concerned that we use our existing agents more effectively, and develop and evaluate new interventions in time to face emerging challenges for the benefit of present and future generations. We need every discipline to contribute and collaborate: molecular, microbiological, clinical, epidemiological, geographic, economic, social scientific and policy disciples are all key. Antibiotics is a nimble, inclusive and rigorous indexed journal as an enabling platform for all who can contribute to solving the greatest broad concerns of the modern world.

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