

Special Issue

Omics Era in Medicinal and Aromatic Plants: Towards a New Age of Agriculture and Sustainability

Message from the Guest Editors

In the context of medicinal and aromatic plants (MAPs), omics technologies can be transformative in their promotion of sustainable agriculture. By incorporating high-throughput omics techniques into medicinal and aromatic plant research, the identification of functional genes, vital metabolites, pharmacologically active components, and molecular markers linked to phytochemical compounds can be significantly improved. So far, multi-omics strategies have led to the creation of large-scale databases that encompass the genome, transcriptome, proteome, metabolome, and phytochemical characteristics of individual medicinal plant species or various species. These extensive datasets provide a profound insight into the molecular mechanisms governing the biosynthesis and regulation of bioactive compounds in these plants. Therefore, this Special Issue aims to provide an update on the application of omics technologies in medicinal and aromatic plant research. It seeks to address fundamental and applied challenges in medicinal plant studies, facilitating the development of new and enhanced medicinal plant resources and the discovery of novel medicinal ingredients.

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Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

Editor-in-Chief

Prof. Dr. Luigi De Bellis
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