



## Molecular Studies on Plant and Plant In Vitro Systems Secondary Metabolism

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### Message from the Guest Editor

Dear Colleagues,

For centuries, plants have been intensively utilized as reliable sources of food and flavoring. Along with the primary metabolites, plants are notable for their considerable spectrum of secondary metabolites (SMs), such as phenylpropanoids and their derivatives (flavonoids, phenolic acids, and lignins), terpenes (isoprenoids and terpenoids), and nitrogen-containing compounds (alkaloids and heterocyclic aromatics) that possess beneficial biological activities which are important to humans, including anticancer, anti-inflammatory, antimicrobial, and antioxidant properties, among others. Currently, these compounds are obtained via plant raw material extraction, plant in vitro systems cultivation, or chemical synthesis. In general, the content of these SMs in plants is very low (<1%); therefore, approaches for enhancing the biosynthesis of high-value marketable molecules produced via plant/plant in vitro systems, have been frequently applied.

The present Special Issue (SI) is dedicated to discussing the various advances in studying the molecular networks of secondary metabolism accumulation in plants and plant in vitro systems.





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