



## Specialized Metabolites in Root cultures

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### Message from the Guest Editors

Triterpenoids and steroids, including phytosterols, represent a characteristic group of natural compounds of high structural diversity. The functions of these compounds in plants are ascribed both to primary (general) and secondary (specialized) metabolism, e.g., the participation of sterols in the structure and fluidity regulation of cellular membranes, and triterpenoids – in diverse strategies of plant chemical defense.

Both triterpenoids and phytosterols exert numerous biological activities and display various pharmacological effects. The multifunctionality of triterpenoids makes them promising multitargeting agents in the treatment of certain cancers and inflammatory diseases, as well as microbial infections. In turn, phytosterols can reduce the intestinal absorption of cholesterol and help maintain cardiovascular health. For this reason, these compounds have become valuable with regard to the production of various food additives. Thus, there is an increasing interest in the pharmaceutical, nutraceutical, and cosmeceutical applications of triterpenoids and phytosterols.





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## Message from the Editor-in-Chief

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