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Plant Tissue Culture and Secondary Metabolites Production II

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Message from the Guest Editors

Plant cell tissue and organ culture is an irreplaceable fundamental technique, supplementary to conventional plant breeding, for optimized large-scale clonal propagation, germplasm conservation, somatic embryogenesis, and plantlet disease elimination. This technique has been intensively utilized for plants that are important from a phytochemical point of view for the biotechnological delivery of pharmacologically relevant secondary metabolites.

Secondary metabolites play a key role in the diverse defense mechanisms of the plant organism in response to environmental stimuli such as climatic fluctuations, pathogenic organisms, predatory herbivores, as well as competing plants. Therefore, by providing the opportunity of the controlled modification of environmental conditions, in vitro culture is a well manageable experimental system, able to be utilized as a source of secondary metabolite delivery for industrial application, as well as for food, cosmetic, and pharmaceutical purposes.

This Special Issue will highlight the modern use of different plant cell tissue and organ culture approaches for the successful production of plant secondary metabolites.



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Special Issue



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Message from the Editor-in-Chief

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