







Special Issue Reprint

Plant Tissue Culture and Secondary Metabolites Production

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This Special Issue aims to bring together the various aspects of plant cell tissue and organ culture with a special emphasis on the production of phytochemical compounds, considered therapeutically valuable for their antioxidant, antiviral, antibacterial, and anti-inflammatory properties.

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, and competing plants. Therefore, by providing the opportunity for controlled modifications of environmental conditions, in vitro culture is an easy-to-manage experimental system that can be utilized as a source of secondary metabolites for industrial applications, 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 successfully producing plant secondary metabolites, particularly those with high economic value.



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