

Special Issue

Plant Tissue Culture and Secondary Metabolites Production

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 plantlets disease elimination. In addition to these applications, in the last few decades 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. This Special Issue aims to conjugate the various aspects of plant cell tissue and organ culture with a special emphasis on the production of phytochemical compounds. 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. 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, and especially such with high economic added value.

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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