# Special Issue

# Plant Tissue Culture and Plant Somatic Embryogenesis–2nd Edition

### Message from the Guest Editors

Plant in vitro cultures and plant somatic embryogenesis is the focus of this 2nd Edition of the Special Issue entitled 'Plant Tissue Culture and Plant Somatic Embryogenesis'. Micropropagation is extensively used for the production of high-quality cuttings, and it is also employed in gene banks for the in vitro conservation and storage of plant genetic resources. A micropropagation is also a crucial tool for the production of specific secondary metabolites of medicinal plants. One of the most efficient plant regeneration methods is somatic embryogenesis. However, the genetic stability of plants can be disrupted during micropropagation and regeneration processes. Therefore, ensuring the true-to-type nature of plants obtained through these methods requires confirmation of their genetic stability. Molecular markers, applicable at any stage of plant development, are particularly effective for this purpose. The genetic variability induced through techniques such as mutagenesis, or genetic transformation, in in vitro cultures also facilitates the breeding of novel crop cultivars.

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