

# Special Issue

## Plant Tissue and Organ Cultures for Crop Improvement in Omics Era

### Message from the Guest Editor

Plant tissue and organ cultures have been employed over the years for plant regeneration, multiplication, germplasm conservation, production of secondary metabolites and improvement of genetic characteristics by somaclonal and gametoclonal variations. In the last few decades, plant tissue cultures have also been used as experimental systems for genetic transformation and genome editing of several plant species for the development of smart crops with improved quality and yield. Thus, the plant tissue and organ culture constitute one of the most promising tools in research and biotechnology. Therefore, this Special Issue of 'Plant Tissue and Organ Cultures for Crop Improvement in Omics Era' will be focused on the most recent studies on the following topics (but not exclusively): gene expression during organogenesis and somatic embryogenesis, transcription and translation studies in gene regulation, genetic and epigenetic changes associated with in vitro culture conditions, gene transfer, genome editing, metabolic engineering, molecular breeding.

### Guest Editor

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### Deadline for manuscript submissions

closed (10 November 2024)



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### Message from the Editor-in-Chief

Horticultural plants and their products provide sustenance, health, and beauty. A confluence of factors is putting increasing pressure on horticultural production to evolve, and innovative research is addressing these challenges. *Horticulturae* provides a venue to communicate research results in a rapid manner with open access, allowing everyone the opportunity to stay abreast of leading research addressing horticulture. I invite you to consider publishing the results of your research in this high quality, peer-reviewed journal.

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### Editor-in-Chief

Prof. Dr. Luigi De Bellis  
Department of Biological and Environmental Sciences and  
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