

## Special Issue

# Development and Application of In Vitro Culture Techniques in Plants

### Message from the Guest Editors

Dear Colleagues, The techniques developed within plant in vitro culture are diverse and depend on the purposes or objectives of each research, development, and innovation laboratory, mainly determined by the plant species they are working on or commercializing. This Special Issue gathers general information, illustrated with examples, with the purpose of orienting future research and development groups. This issue will compile methodologies for (1) micropropagation, (2) development and application of bioreactors, (3) sanitation or virus elimination, (4) adventitious regeneration, (5) mutagenesis (6) somatic embryogenesis, (7) protoplast culture and somatic hybrids, (8) production of doubled haploid plants by androgenesis, gynogenesis, or parthenogenesis, (9) polyploid generation, (10) rescue of immature embryos or interspecific crosses, (11) cell suspensions as a source of metabolites and food, (12) bioassays for biotic and abiotic stress agents, (13) protocol improvement aimed at genetic transformation or for editing tools, (14) control of endophytes under in vitro culture, and (15) beneficial effects of microorganisms in plant in vitro culture.

### Guest Editors

Dr. Ramon Dolcet-Sanjuan

IRTA, Fruitcentre, Plant In Vitro Culture Laboratory, Fruticultura Program, Parc AgroBiotech, 25003 Lleida, Spain

Dr. Jean Carlos Cardoso

Department of Biotechnology, Plant and Animal Production, Centro de Ciências Agrárias, Universidade Federal de São Carlos, Araras, SP 13600-970, Brazil

### Deadline for manuscript submissions

closed (30 December 2025)



## Plants

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*Plants*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[plants@mdpi.com](mailto:plants@mdpi.com)

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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, and 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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### Editor-in-Chief

Prof. Dr. Dilantha Fernando  
Department of Plant Science, University of Manitoba, Winnipeg, MB  
R3T 2N2, Canada

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