



an Open Access Journal by MDPI

# Towards Tissue Culture in Fruit Trees: Latest Advances and Prospects

Guest Editors:

## Prof. Dr. Irina Mitrofanova

Plant Physiology, Immunity and Protection Department, N.V. Tsitsin Main Botanical Garden of Russian Academy of Science, 127276 Moscow, Russia

### Dr. Cristian Silvestri

Department of Agriculture and Forest Sciences, University of Tuscia, Via San Camillo De Lellis, s.n.c., 01100 Viterbo, Italy

### Dr. Renato Paiva

Biology Department, Universidade Federal de Lavras, Lavras 37200-000, Brazil

Deadline for manuscript submissions: closed (31 May 2022)



Message from the Guest Editors

Dear Colleagues,

Plant biotechnology offers the possibility to clean up, propagate, preserve, and acclimatize cultivars and species of fruit trees, which are valuable as everyday food, used for cosmetics and medicine. Genomics provides us with useful information on open mechanisms of plant development at different stages of reproduction and adaptation. Tissue culture has developed useful biotechnological approaches to horticulture.

The purpose of this Special Issue titled "Toward Tissue Culture in Fruit Trees: Latest Advances and Prospects" is to present results in biotechnology, studies, traditional and new methods, and perspectives of in vitro conservation that have been successful in several fields of tissue culture applied to fruit trees:

Clonal micropropagation;

Organogenesis/somatic embryogenesis;

Plant cleaning up and obtain virus- and viroid-free cultivars and forms.

Genomic of plant regeneration, conservation ,and acclimatization in fruit trees;

Anatomomorphological and physiological aspects of plant propagation;

Plant conservation;

Plant acclimatization ex vitro and in vivo.



mdpi.com/si/97841





an Open Access Journal by MDPI

# **Editor-in-Chief**

## Prof. Dr. Luigi De Bellis

Department of Biological and Environmental Sciences and Technologies, Università del Salento, Centro Ecotekne, Via Provinciale Lecce Monteroni, 73100 Lecce, Italy

## 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.

# **Author Benefits**

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), PubAg, AGRIS, FSTA, and other databases.

Journal Rank: JCR - Q1 (Horticulture) / CiteScore - Q2 (Horticulture)

# **Contact Us**

*Horticulturae* Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/horticulturae horticulturae@mdpi.com X@Horticul\_MDPI