

## Special Issue

# Micropropagation and In Vitro Techniques: Theory, Methods and Applications

### Message from the Guest Editors

Micropropagation was first developed in the 1960s and has since found application in various scientific and economic fields with high impact. Due to the mesmerizing ability of most plants to regenerate from a single cell, micropropagation and in vitro techniques became one of the most efficient and secure plant propagation methods. Growing plant organs or tissues in aseptic conditions requires special attention and full control of the whole process of plant regeneration to obtain high-quality and virus-free stocks of crop plants. Micropropagation can successfully be applied for mass propagation, new cultivar development, preservation of wild, old, or rare plant species. Currently, micropropagation and in vitro techniques are practiced on a large scale as an accelerated version of clonal propagation to satisfy the increasing demand for modern crops or to regenerate genetically modified plants. However, before application, some disadvantages must be considered, such as production and labor costs and the potential risk of plant contamination or plant adaptation failure to normal growing environment.

---

### Guest Editors

Dr. Orsolya Borsai

Dr. Clapa Doina

Prof. Dr. Mirela Irina Cordea

Dr. Monica Harta

Dr. Songling Bai

---

### Deadline for manuscript submissions

closed (28 February 2023)



## Horticulturae

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.1



[mdpi.com/si/121749](https://mdpi.com/si/121749)

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

[mdpi.com/journal/  
horticulturae](https://mdpi.com/journal/horticulturae)





# Horticulturae

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.1



[mdpi.com/journal/  
horticulturae](https://mdpi.com/journal/horticulturae)



## About the Journal

### 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.

---

### Editor-in-Chief

Prof. Dr. Luigi De Bellis  
Department of Biological and Environmental Sciences and  
Technologies (DiSTeBA), Salento University, 73100 Lecce, Italy

---

### 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 - Q1 (Horticulture)