



## Water Resource Management in Horticultural Systems

Guest Editors:

**Dr. Sergio Tombesi**

Department of Sustainable Crop Production (DiProVeS), Università Cattolica del Sacro Cuore, Via Emilia Parmense 84, 29122 Piacenza, Italy

**Dr. Joanna Kocięcka**

Department of Land Improvement, Environmental Development and Spatial Management, Poznań University of Life Sciences, 60-649 Poznań, Poland

**Prof. Dr. Atilgan Atilgan**

Department of Biosystem Engineering, Faculty of Rafet Kayis Engineering Faculty, Alanya Alaaddin Keykubat University, TR-07450 Antalya, Turkey

Deadline for manuscript submissions:

**30 March 2025**

### Message from the Guest Editors

Water efficiency is becoming increasingly important in the face of the ongoing climate change. It is crucial to use adequate irrigation to meet plants' water needs and ensure their proper development. Modern irrigation techniques and intelligent solutions in agriculture are becoming increasingly important and help combat water shortages. This Special Issue discusses the use of advanced irrigation systems and their impact on plant crops. It also covers the maintenance and operation of irrigation systems and the relationship between soil, water, and plants. Articles related to water management regarding the ongoing climate change will also be extremely valuable.

The main topics covered in this Special Issue include but are not limited to the following:

- Precision and water-saving irrigation;
- Estimation of water requirements of plants;
- Water resource management;
- Innovative irrigation methods;
- Water management in the face of climate change;
- Operational problems of irrigation systems;
- Water–plant–soil relationship;
- Estimation of irrigation doses.

Original research papers as well as review articles are welcome in this Special Issue.





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, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
www.mdpi.com

mdpi.com/journal/horticulturae  
horticulturae@mdpi.com  
X@Horticul\_MDPI