

# Special Issue

## New Insight for Vegetable Growing in Protected Structure

### Message from the Guest Editor

Growing vegetables in protected structures is very different from growing them in the open field. To improve vegetable production in protected structures, it is necessary to manage not only environment factors but also crop growth, development, yield, and quality. Among the environment factors involved, light is the leading factor that affects both other environment factors, such as temperature and humidity, and plant growth through light intensity, quality, and duration. Similar to temperature, the relative humidity in protected structures is often high, which may induce infectious diseases and cause stress to some vegetable crops. Atmospheric gases, especially carbon dioxide, affect plant growth, respiration, photosynthesis, and so on. The management of water and nutrients in soil and vegetable plants in protected structures must be constantly improved along with the development of the vegetable industry. The investigation of the effects of these biological factors on vegetable crops and of breeding and cultivar selection for vegetable production in protected structures will provide new insights into growing vegetables in protected structures.

---

### Guest Editor

Prof. Dr. Zhihui Cheng

College of Horticulture, Northwest A&F University, 3# Taicheng Road, Yangling 712100, China

---

### Deadline for manuscript submissions

closed (15 January 2023)



# Horticulturae

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 5.1



[mdpi.com/si/101505](https://mdpi.com/si/101505)

*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 5.1



[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)