

## Special Issue

# Metabolic Responses to Environmental Stresses in Plants

### Message from the Guest Editor

Metabolomics has emerged as an integral part of the systems biology approach and other -omics platforms to explore different aspects of the molecular and physiological changes caused by environmental stresses in plants. There is limited knowledge on the system-level differences among the metabolites induced in response to stresses such as temperature, water, salt, heavy metals, or a combination of multiple stresses. Recent advances in analytical and -omics technologies have allowed the rapid simultaneous detection of thousands of metabolites and exploring the underlying stress-induced molecular pathways. We welcome studies that use cutting-edge tools to better understand stress-induced responses using the classic metabolite signatures such as proline, branched-chain amino acids,  $\gamma$ -amino butyrate, polyamines, or sugars under stress conditions. We are also inviting you to share studies that expand our understanding of stress-induced metabolites by exploring the species-level responses, natural genetic variation, specific production practices, synergistic/antagonistic effects during multiple stresses and developmental changes.

### Guest Editor

Dr. Vijay Joshi

Texas A&M Agri Life Research, Department of Horticultural Sciences,  
Texas A&M University, Uvalde, TX 78801, USA

### Deadline for manuscript submissions

closed (10 June 2022)



## Horticulturae

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 5.1



[mdpi.com/si/92493](https://mdpi.com/si/92493)

*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, 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)