

Special Issue

Biotic and Abiotic Stress Responses of Horticultural Plants

Message from the Guest Editors

Plants are continuously affected by a wide range of biotic and abiotic stresses. Biotic and abiotic stresses, such as increased periods of water shortage, the presence of heavy metals, higher temperatures, salinity, nutrient availability, increased CO₂ concentrations, and diseases caused by fungi, bacteria, nematodes, and herbivores, can affect most horticultural plants' growth and development. Currently, many investigations have highlighted the positive aspects of gas signal molecules as well as plant hormones, such as hydrogen gas, hydrogen sulfide, auxins, gibberellins, abscisic acid, cytokinins, ethylene, salicylic acid, and jasmonic acid, under biotic and abiotic stresses. The advent of genomic studies and gene discovery has also presented an excellent opportunity to improve the stress tolerance of horticultural plants. This Special Issue will consider the biotic and abiotic stress responses of horticultural plants. Under stress, horticultural plants generate some appropriate regulatory mechanisms, including gas signal molecules, plant hormones, genomics, metabolomics, etc., which are welcome.

Guest Editors

Dr. Changxia Li

College of Agriculture, Guangxi University, 100 East University Road, Xixiangtang District, Nanning 530004, China

Dr. Yue Wu

College of Horticulture, Gansu Agricultural University, Lanzhou 730070, China

Deadline for manuscript submissions

closed (15 June 2025)



Horticulturae

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 5.1



mdpi.com/si/222102

Horticulturae
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)