



*plants*



an Open Access Journal by MDPI

## Biodiversity and Genetic Control of Tolerance to Abiotic and Biotic Stresses in Plants

Guest Editors:

**Prof. Dr. Ndiko Ludidi**

Department of Biotechnology,  
University of the Western Cape,  
Bellville, 7530, South Africa

**Dr. Faheem Shehzad Baloch**

Faculty of Agricultural Sciences  
and Technologies, Sivas  
University of Science and  
Technology, Sivas, Turkey

Deadline for manuscript  
submissions:

**closed (30 April 2024)**

### Message from the Guest Editors

Dear Colleagues,

Despite tremendous progress in plant science towards improving plant performance to attain high yields, the occurrence of abiotic and biotic stresses remains the major limitation to yield in plants. These stresses can reduce plant crop yield to a level that threatens food security. This necessitates the understanding of the mechanisms that regulate plant responses to abiotic and biotic stresses and exploring holistic plant–environment interactions in order to develop strategies for improving plant tolerance to abiotic and biotic stresses. Parts of such strategies should take advantage of the contribution of biodiversity as a source of genetic resources that can be harnessed to attain the goal of improving plant tolerance to these stresses and ultimately contribute to stress resilience in the food production system. This Special Issue will focus on how biodiversity as a broader concept, and the interaction of plants with their environment at the genetic, physiological and ecological levels, and contributes to plant tolerance to abiotic and biotic stress tolerance.



[mdpi.com/si/158769](https://mdpi.com/si/158769)

# Special Issue



# plants



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Dilantha Fernando**

Department of Plant Science,  
University of Manitoba, Winnipeg,  
MB R3T 2N2, Canada

## Message from the Editor-in-Chief

*Plants* is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

## 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), PubMed, PMC, PubAg, AGRIS, CAPlus / SciFinder, and other databases.

**Journal Rank:** JCR - Q1 (*Plant Sciences*) / CiteScore - Q1 (*Plant Science*)

## Contact Us

---

*Plants* Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/plants](http://mdpi.com/journal/plants)  
[plants@mdpi.com](mailto:plants@mdpi.com)  
[X@Plants\\_MDPI](https://twitter.com/Plants_MDPI)