

Special Issue

Plant Responses to Biotic and Abiotic Stresses: From Cellular to Morphological Changes

Message from the Guest Editor

During their lifecycle, plants have to cope with many abiotic and biotic stresses, each affecting their development or growth. Among these stresses, biotic stress (caused by bacteria, viruses, fungi, nematodes, insects...) and abiotic stress (such as flooding, cold, heat, salinity, or drought) can be distinguished. However, being sessile in nature, plants cannot escape from these stress, and instead adapt transcriptional, molecular, physiological, and morphological changes within their system to overcome the adverse conditions. Therefore, understanding plant responses to these stresses implies a deep description of the mechanisms that operate at the physiological and molecular levels, which include complex transduction pathways, from signal perception to physiological responses. For this research topic, we welcome reviews, perspective, original research, opinions, and methods to underline the latest exciting progress on the understanding of systems biology and the molecular, physiological, and biochemical responses of plants to abiotic and biotic stresses.

Guest Editor

Prof. Dr. Essaid Ait Barka

Research Unit Induced Resistance and Plant Bioprotection, University of Reims, Reims, France

Deadline for manuscript submissions

closed (20 January 2022)



Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



mdpi.com/si/88702

Agronomy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agronomy@mdpi.com

[mdpi.com/journal/
agronomy](https://mdpi.com/journal/agronomy)





Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



[mdpi.com/journal/
agronomy](https://mdpi.com/journal/agronomy)



About the Journal

Message from the Editor-in-Chief

Agronomy draws together researchers from diverse areas of agricultural research with a common aim of enhancing agricultural productivity globally. The journal provides unlimited free access to all those interested in advancing agricultural science from both the research and general community. Papers are released immediately after acceptance through the internet.

Agronomy is supported by our authors and their institutes through low article processing charges (APC) for accepted papers. We hope you will support the journal by becoming one of our authors.

Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research,
Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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), GEOBASE, PubAg, AGRIS, and other databases.

Journal Rank:

JCR - Q1 (Agronomy) / CiteScore - Q1 (Agronomy and Crop Science)