

Special Issue

Multidimensional Drivers of Plant-Pathogen Interactions: From Molecular Mechanisms to Ecosystem Dynamics

Message from the Guest Editors

Plant–pathogen interactions are a complex and dynamic relationship. This Special Issue aims to explore the impact of diverse environmental factors on the molecular, biochemical, and ecological aspects of plant–pathogen interactions. Furthermore, it will address how environmental variability contributes to the emergence of new disease patterns. We are soliciting original research articles, reviews, and case studies that focus on the following:

The effects of specific environmental factors (e.g., temperature, precipitation, soil nutrients) on plant–pathogen interactions;

Mechanistic studies examining how plants and pathogens adapt to changing environments;

The influence of global climate change on pathogen distribution and disease incidence;

Field studies and experiments assessing how variable environmental conditions affect pathogen virulence and plant resilience;

Technological approaches (e.g., remote sensing, bioinformatics) for studying plant–pathogen interactions in varying environmental contexts; Modelling and predictive studies on future plant disease trends under projected climate scenarios.

Guest Editors

Dr. Jiehua Qiu

Dr. Huangbin Shi

Dr. Caterina Morcia

Deadline for manuscript submissions

30 August 2025



Agronomy

an Open Access Journal
by MDPI

Impact Factor 3.4
CiteScore 6.7



mdpi.com/si/228070

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), PubAg, AGRIS, and other databases.

Journal Rank:

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