

Special Issue

Plant Immune Networks in Response to Microbial Interaction

Message from the Guest Editors

Plant–microbe interactions are diverse and multifaceted, with significant implications for various aspects of life on Earth, including agriculture, food security, and environmental sustainability. Certain microbes have established mutually beneficial relationships with plants, showcasing a form of mutualism, including mycorrhizal fungi and rhizobia. However, Some microbes are pathogens, capable of causing diseases in plants. This dynamic has given rise to an ongoing evolutionary competition, as plants evolve defense mechanisms to counteract pathogenic attacks, while pathogens continuously develop strategies to bypass these defenses. Understanding the molecular mechanisms underlying these interactions is crucial for agricultural productivity, sustainable agriculture, biological control, climate resilience, and conservation efforts. Studies on the molecular aspects of plant–microbe interactions have the potential to revolutionize agriculture and enhance global food security while minimizing the negative impacts on the environment. Overall, this Special Issue focuses on a fascinating and promising area of scientific inquiry with far-reaching implications.

Guest Editors

Prof. Dr. Jun Liu

Plant Stress and Photosynthesis Lab, Sun Yat-sen University, Guangzhou, China

Dr. Peiguo Yuan

Department of Plant Pathology and Microbiology, Texas A&M University, College Station, TX, USA

Deadline for manuscript submissions

closed (10 April 2024)



Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/182098

Plants

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

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





Plants

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed



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



About the Journal

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.

Editor-in-Chief

Prof. Dr. Dilantha Fernando

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

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 (Ecology, Evolution, Behavior and Systematics)