



plants



an Open Access Journal by MDPI

Biology and Current–Prospective Methods for the Detection and Management of Plant Pathogens for Sustainable Agriculture

Guest Editors:

Dr. Ajay Kumar Mishra

Khalifa Centre for Genetic Engineering & Biotechnology, United Arab Emirates University, Al Ain P.O. Box 1555, United Arab Emirates

Dr. Vishnu Nath

Khalifa Centre for Genetic Engineering & Biotechnology, United Arab Emirates University, Al Ain P.O. Box 1555, United Arab Emirates

Dr. Sagarika Mishra

Khalifa Centre for Genetic Engineering & Biotechnology, United Arab Emirates University, Al Ain P.O. Box 1555, United Arab Emirates

Deadline for manuscript submissions:
closed (30 October 2024)

Message from the Guest Editors

Detecting and subsequently managing plant pathogens is crucial for sustainable agriculture. Traditional techniques, such as crop rotation, the utilisation of resistant varieties, sanitation practices amalgamated with omics techniques, and genetic approaches, can significantly contribute to the development of effective and sustainable strategies for plant pathogen control. These advanced techniques continue to drive innovations in agriculture, contributing to improved crop yields, reduced chemical inputs, and enhanced global food security.

By structuring a Special Issue in this realm, we aim to provide a comprehensive and cohesive overview of recent advancements in microbe identification and the application of multi-omics approaches, including genomics, transcriptomics, proteomics, and metabolomics, in unveiling the molecular mechanisms of pathogen defence in plants. Nevertheless, this Special Issue covers the potential implications of the development of novel antimicrobial strategies, pathogen genome and biotechnological innovations for mitigating the impact of plant diseases, improving crop productivity, and ensuring sustainable agricultural practices.



mdpi.com/si/190649

Special Issue



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 (Ecology, Evolution, Behavior and Systematics)

Contact Us

Plants Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/plants
plants@mdpi.com
[X@Plants_MDPI](https://twitter.com/Plants_MDPI)