



Molecular Mechanisms and Approaches in Plant-Microbe Interactions and Disease Control

Guest Editors:

Dr. Ying Zhai

Department of Plant Pathology,
Washington State University,
Pullman, WA 99164, USA

Dr. Chuntao Yin

Integrated Cropping Systems
Research Unit, USDA-ARS,
Brookings, SD 57006, USA

Deadline for manuscript
submissions:

closed (20 May 2024)

Message from the Guest Editors

Plant diseases caused by fungal, bacterial, viral, nematode, and oomycete pathogens are a major threat to crop yield and quality worldwide. Due to the arms race between pathogen infection and plant disease resistance strategies, continuous efforts must be made to enhance disease control in agricultural practice; for this, a deeper understanding of the molecular mechanisms of plant-pathogen interactions is necessary. This Special Issue is devoted to recent advances in plant disease resistance at the molecular level and cutting-edge approaches for plant disease control. All relevant molecular and genomic research topics are welcome, including but not limited to plant resistance gene identification and functional analysis, the molecular basis of biological control agent mechanisms, soil and leaf microbiomes involved in plant pathogen control, effectors and their host targets, plant receptors for triggering resistance, pathogen-associated molecular patterns (PAMPs), plant pathways related to PAMP-triggered immunity (PTI) and effector-triggered immunity (ETI), crop genetic engineering and genome editing techniques for improving disease resistance.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Les Copeland

Sydney Institute of Agriculture,
School of Life and Environmental
Sciences, The University of
Sydney, Sydney, NSW 2006,
Australia

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, crossdisciplinary and scholarly open access journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. *Agriculture* is published in an open access format – research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the public have unlimited and free access to the content as soon as it is published.

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, RePEc, and other databases.

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

Contact Us

Agriculture Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/agriculture
agriculture@mdpi.com
X@AgricultureMdpi