



an Open Access Journal by MDPI

## Mechanisms of Plant Resistance to Pathogens

Guest Editor:

**Dr. Yantao Jia**

State Key Laboratory of Plant  
Genomics, Institute of  
Microbiology, Chinese Academy  
of Sciences, Beijing 100101,  
China

Deadline for manuscript  
submissions:

**closed (31 December 2022)**

### Message from the Guest Editor

Dear Colleagues,

Plants are constantly subjected to biological pressures that could compromise their growth and development. As the interests of plants and pathogens are opposite and antagonistic, the evolutionary dynamics between them will never end. The arms race is triggered by the confrontation between the resistance of plants and the ability of pathogen invasion. Plant immune systems trigger a wide range of defense mechanisms to orchestrate transcriptional reprogramming through receptor proteins, signal transduction cascades, reactive oxygen species, hormone signaling pathways, and epigenetic modifications to protect plants against pathogens. The complex mechanisms of plants enable them to survive not only against single stresses but also against a combination of biotic and abiotic stresses.

For this Special Issue of the journal *Pathogens*, we invite investigators to submit research papers and review articles presenting recent advances related to our knowledge of the mechanisms of plant resistance to pathogens including bacteria, fungi, and virus in agricultural and horticultural plants. We look forward to your contribution.

Dr. Yantao Jia



[mdpi.com/si/101847](https://mdpi.com/si/101847)

# Special Issue



an Open Access Journal by MDPI

## Editor-in-Chief

### Prof. Dr. Lawrence S. Young

Warwick Medical School,  
University of Warwick, Coventry  
CV4 7AL, UK

## Message from the Editor-in-Chief

The worldwide impact of infectious disease is incalculable. The consequences for human health in terms of morbidity and mortality are obvious and vast but, when infections of animals and plants are also taken into account, it is hard to imagine any other disease that has such a significant impact on our lives—on healthcare systems, on agriculture and on world economics. *Pathogens* is proud to continue to serve the international community by publishing high quality studies that further our understanding of infection and have meaningful consequences for disease intervention.

## 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, Embase, PubAg, CaPlus / SciFinder, AGRIS, and other databases.

**Journal Rank:** JCR - Q2 (*Microbiology*) / CiteScore - Q2 (*General Immunology and Microbiology*)

## Contact Us

---

Pathogens Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/pathogens](http://mdpi.com/journal/pathogens)  
[pathogens@mdpi.com](mailto:pathogens@mdpi.com)  
[X@Pathogens\\_MDPI](https://twitter.com/Pathogens_MDPI)