



Biological Control of Phytopathogens: Mechanisms and Applications

Guest Editors:

Prof. Dr. Anton Hartmann

Department of Biology, Microbe-Host Interactions, Ludwig-Maximilian-University (LMU), München, Germany

Dr. Diogo Neves Proença

Department of Life Sciences, University of Coimbra, 3000-456 Coimbra, Portugal

Deadline for manuscript submissions:

closed (20 September 2022)

Message from the Guest Editors

Dear Colleagues,

Biological control of phytopathogen attack involving microbial communities, single strains, or microbial secondary metabolites offers a sustainable alternative approach or supportive backup to disease control in agriculture or horticulture. However, more basic knowledge about the mechanisms involved is necessary before such approaches can widely and robustly applied. Plant microbiome studies and their integration with metabolomic and plant immune response research are bringing about new, in-depth understanding of complex interactions of beneficial and pathogenic microbes with plants leading to potential reduction or elimination of phytopathogens.

In this Special Issue, examples of different microbial biocontrol mechanisms (either via direct inhibition or displacement of pathogens or via stimulation of plant defense) leading to control of plant diseases are welcome. Furthermore, reports about applications of microbial inoculants for biocontrol—as well as the application of microbial metabolites or signaling molecules—in greenhouse and field experiments are possible.

Prof. Anton Hartmann

Dr. Diogo Neves Proença

Guest Editors





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Hinh Ly

Department of Veterinary &
Biomedical Sciences, University
of Minnesota, Twin Cities, MN,
USA

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

mdpi.com/journal/pathogens
pathogens@mdpi.com
[X@Pathogens_MDPI](https://twitter.com/Pathogens_MDPI)