Special Issue

Plant Pathogenic Fungi: Genetics and Genomics

Message from the Guest Editor

Recent advances in multi-omics approaches such as genomics and transcriptomics offer new opportunities to more clearly understand molecular mechanisms that can help in the prevention and management of fungal plant diseases. The integration of omics approaches can also speed up the identification of effectors and proteins in plant pathogenic fungi and the characterization of their virulence functions in their host plants. Moreover, as the interaction between plants and their fungal pathogens is a dynamic process, these interactions should be analyzed as a dual process, providing a more complete insight in pathogenicity. In this Special Issue, we invite you to contribute with research on any aspect related to plant pathogenic fungi. This may include, but not limited to: (1) adaptation patterns of fungal pathogens under changing environmental conditions; (2) molecular traits underlying the infection processes; (3) phylogenomic studies to offer insights into phylogenetic inference of plant pathogenic fungi; and (4) genetic basis for multi-omics analyses to provide a thorough overview on plant–pathogen interactions.

Guest Editor

Dr. Micael F. M. Gonçalves
Microbiology Division, Department of Pathology, Faculty of Medicine, University of Porto, 4200-319 Porto, Portugal

Deadline for manuscript submissions

closed (31 March 2025)

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/si/168124

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

mdpi.com/journal/microorganisms

Microorganisms

an Open Access Journal by MDPI

Impact Factor 4.2
CiteScore 7.7
Indexed in PubMed

mdpi.com/journal/microorganisms

About the Journal

Message from the Editor-in-Chief

"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

Editor-in-Chief

Dr. Nico Jehmlich
Department of Molecular Toxicology, UFZ-Helmholtz Centre for Environmental Research, 04318 Leipzig, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, PubAg, CAPlus / SciFinder, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Microbiology) / CiteScore - Q1 (Microbiology (medical))

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.2 days after submission; acceptance to publication is undertaken in 2.9 days (median values for papers published in this journal in the first half of 2025).

MDPI