

Special Issue

Genetic and Molecular Basis of Crop Resistance to Pathogens

Message from the Guest Editor

Diverse and rapidly evolving pathogens cause plant diseases that threaten crop yield and food security around the world. Genetic plant protection is a convenient alternative to chemical control of diseases. It is based on using plant resistance genes to develop disease-resistant cultivars. Adaptation processes in pathogen populations lead to loss of efficiency of resistance genes, so it is necessary to involve new genes in breeding. In this regard, it is necessary to study genetic resources of resistance and develop a stock of genes with both qualitative and quantitative resistance to ensure breeding. The emergence of new genomic technologies, complete sequencing of genomes of different crops, cloning of resistance genes, and recent advances in genetics of host–pathogen interaction have contributed to the significant acceleration and improvement in research on the problem of the genetic and molecular basis of crop resistance to pathogens. This Special Issue deals with all aspects of genetic of plant resistance to fungal, viral, bacterial and viroid diseases, and the molecular basis of host–pathogen interaction.

Guest Editor

Dr. Olga Silvestrova Afanasenko

All-Russian Research Institute of Plant Protection, 196608 St. Petersburg, Russia

Deadline for manuscript submissions

closed (10 October 2021)



Agriculture

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 6.3



mdpi.com/si/74097

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

[mdpi.com/journal/
agriculture](https://mdpi.com/journal/agriculture)





Agriculture

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 6.3



[mdpi.com/journal/
agriculture](https://mdpi.com/journal/agriculture)



About the Journal

Message from the Editor-in-Chief

Agriculture (ISSN 2077-0472) is an international, cross-disciplinary and scholarly journal on the science and technology of crop and animal production, and management of the natural resource base for agricultural production. We invite submissions from authors according to the aims and scope of the journal described in more detail on this page. *Agriculture* is published in an open access format – articles are published on the journal's website immediately after acceptance, giving the scientific community and the public unlimited and free access to the content.

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

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)