

Special Issue

Molecular Breeding for Wheat Disease Resistance

Message from the Guest Editor

Wheat is the most important cereal crop of humankind, with the largest current cultivation area. The success of wheat cultivation can significantly influence the situation of plant growers and the national economy. The genetic yield potential of modern, currently cultivated wheat varieties is modified by several factors. However, wheat yields are significantly threatened by several pathogens, which cause an estimated 11.6% annual yield loss in global production. Breeding resistant varieties is the most economical and ecofriendly way to protect against plant diseases. The scope of this field encompasses the identification and functional analysis of resistance genes and quantitative trait loci (QTLs), the development and deployment of molecular markers, and the use of omics technologies (genomics, transcriptomics, and proteomics) to better understand host–pathogen interactions. It also includes the strategic pyramiding of multiple resistance genes for durable protection and the ongoing surveillance of pathogen evolution to ensure long-term effectiveness.

Guest Editor

Dr. Monika Cseplo

Agricultural Institute, HUN-REN Centre for Agricultural Research,
Brunszzvik Str. 2, 2462 Martonvasar, Hungary

Deadline for manuscript submissions

closed (15 November 2025)



Agriculture

an Open Access Journal
by MDPI

Impact Factor 3.6
CiteScore 6.3



mdpi.com/si/240800

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, scholarly and scientific open access journal publishing peer-reviewed research papers, review articles, communications and short notes that reflect the breadth and interdisciplinarity of agriculture.

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)