Special Issue

Genetics and Mechanisms of Disease Resistance in Crop

Message from the Guest Editors

This Special Issue of Agronomy aims to provide a comprehensive overview of the latest advances in crop disease resistance genetics. We seek to bring together cutting-edge research that explores the molecular basis of plant immunity, from the identification and characterization of resistance genes to the complex regulatory networks governing immune responses. The scope of our collection encompasses all major crops and diverse types of pathogens, including fungi, bacteria, viruses, and nematodes. Areas of interest include, but are not limited to, the following topics: identification and functional characterization of R genes and quantitative trait loci (QTLs); molecular mechanisms of plant-pathogen interactions; regulatory networks controlling immune responses; genome editing for disease resistance; marker-assisted breeding strategies; comparative genomics of resistance mechanisms across species; and the application of omics technologies in resistance breeding. We particularly encourage studies that bridge basic research with practical applications for crop improvement.

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Deadline for manuscript submissions

20 September 2026



an Open Access Journal by MDPI

Impact Factor 3.4 CiteScore 6.7



mdpi.com/si/264176

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Impact Factor 3.4 CiteScore 6.7



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Editor-in-Chief

Prof. Dr. Leslie A. Weston

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