Special Issue

Shaping the Future of Plant Breeding: Harnessing Phenomic and Genomic Insights for Disease Resistance

Message from the Guest Editors

This Special Issue aims to gather cutting-edge research, technology, and advancements in the field of disease resistance breeding in agricultural crops, with a focus on modern phenomic and genomic technologies. We welcome original research articles and reviews in the following thematic areas:

- Quantitative trait loci (QTL) mapping, meta-QTL analyses, genome-wide association studies (GWAS), and fine mapping.
- Marker-assisted selection (MAS), genomic selection (GS), complex modeling, and gene pyramiding to enhance genetic gain across multiple traits and environments.
- Genome editing and genetic transformation using modern techniques such as CRISPR/Cas9.
- High-throughput phenotyping (HTP) using artificial intelligence (AI), unmanned aerial vehicles (UAVs), drones, and sensors to accelerate disease-resistance breeding.
- Use of double-haploids (DHs) for fast-track breeding in the context of global climate change.

Guest Editors

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