



## Genetic Diversity of Disease Resistance in Crops

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### **Message from the Guest Editors**

A major objective of plant genetic improvement is to obtain genotypes resistant against one or more pathogens, both present or emerging. Accordingly, breeders have traditionally exploited resistance sources, taken from existing resistant varieties or from wild crop relatives. Over time, however, such resistance is typically overcome by the evolved pathogen population. Pyramiding several resistance genes into a single genotype can lead to more durable disease resistance. Knowledge of plant genetic diversity is essential for its utilization, together with the knowledge of pathogens population diversity. The advancement of genetic and genomic investigation tools has greatly accelerated, on one hand, the ability to exploit plant genetic resources in search of new sources of resistance, and, on the other hand, the efficiency in monitoring the pathogen populations and their evolution.

This Special Issue has two main pillars:

- 1) Evaluation, characterization, and exploitation of genetic diversity for resistance to pathogens in crop and wild relative collections
- 2) Evaluation and characterization of plant-pathogen populations diversity and evolution





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