Special Issue

Functional Genomics of Disease Resistance in Crops

Message from the Guest Editors

Genetic resistance/tolerance is believed to be the most effective and efficient method to manage crop diseases; thus, the study of the functions of resistance-related genes is of critical importance in modern agriculture. Functional genomics is the study of how genes and intergenic regions of genomes contribute to different biological processes, including disease resistance. It can utilize the vast data generated by genomic and transcriptomic projects. Scientists around the world have used functional genomics approaches for understanding plant resistance and developing effective tools for the control of diseases. Recently, genome editing tools, especially the CRISPR/Cas system, have been utilized for functional analyses, and subsequently crop improvement. Functional genomics of disease resistance in crops is embracing a bright future in the omics era. The forthcoming Special Issue aims to provide a comprehensive and updated understanding of functional genomics of disease resistance in crops, with a particular interest in novel techniques used in the functional study of disease-resistance-related genes.

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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