



Effects of Abiotic Stress on Crop-Fungal Pathogen Interactions

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Message from the Guest Editors

Dear Colleagues,

Fungal pathogens destroy approximately one third of all food crops annually. Climate change threatens to intensify these losses and jeopardize global food security because plant pathogenic fungi and oomycetes comprise the largest fraction of rapidly spreading agricultural pests. Abiotic factors drive plant–pathogen interactions, and the individual and combined abiotic stress factors associated with climate change, including rising atmospheric CO₂, temperature, and extreme precipitation events, can all influence crop susceptibility and disease severity. The impact of abiotic stress can have positive, neutral or negative effects on disease development, and each disease may respond differently to the stress depending on the pathosystem. To fully understand the dynamic plant–fungal pathogen–environment interactions that occur in nature and develop climate-resilient and disease-resistant crops, a combined interdisciplinary research effort is needed. This Special Issue of *Plants* will highlight emerging agricultural threats, knowledge gaps, and potential control strategies.





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Message from the Editor-in-Chief

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