



Plant Defense Genes Against Biotic Stresses

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Message from the Guest Editor

Plant–pest and pathogen relationships are intricate interactions encompassing complex networks of molecules and signalling pathways and strategies to overcome defenses developed by each other. The induction of plant defense genes is initiated when specific receptors recognize the presence of pathogen, pest, incurred damage, or their volatiles. The success of plants in withstanding biotic stresses depends on their fast response by triggering a wide range of specific genes and compounds with defense properties. These plant defences locally or systemically induced by biotic stresses are regulated by a complex hormonal cross-talk. Transcriptomic and proteomic profiles have demonstrated that plants may discriminate among species of pathogens and pests and activate specific responses. Metabolomic approaches have corroborated plants' ability to differentiate species and determine the onset of indirect defense responses to complement the direct defenses. This Special Issue calls papers covering all aspects on the understanding of plant response to biotic stresses.

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Guest Editor





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Message from the Editor-in-Chief

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