

Special Issue

Environmentally Friendly Ways to Control Plant Disease

Message from the Guest Editors

Plant pathogens cause up to 20% of global crop yield losses, and pathogens can adapt and overcome introduced genetic resistances. Plant disease control has traditionally relied heavily on chemical treatments, which can harm human health, animals, and the environment. Moreover, their use can promote the development of resistance in pathogen populations. Therefore, there is a growing demand for crop production alternatives that lead to a reduction in the use of agrochemicals.

In recent years, alternative disease management strategies, including resistance inducers, biological control agents (such as fungi, bacteria, and viruses), and naturally occurring compounds derived from plants or microbes, have been developed. Some of these microbial agents, in addition to controlling plant pathogens and/or inducing resistance in plants, increase plant growth and productivity.

The Special Issue aims to bring together all aspects related to the alternative control of plant diseases from the use of microbial agents, their metabolites, plant-derived products, resistance induction, and other environmentally friendly strategies that can serve as alternatives to agrochemicals.

Guest Editors

Prof. Dr. Eduardo Alves

Prof. Dr. Maria Isabel Balbi Peña

Prof. Dr. Lijuan Zhou

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Agronomy
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
agronomy@mdpi.com

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Editor-in-Chief

Prof. Dr. Leslie A. Weston

Gulbali Centre for Agriculture, Water and Environment Research,
Charles Sturt University, Wagga Wagga, NSW 2678, Australia

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