Special Issue

Crop Plants and Biotic Stress

Message from the Guest Editors

Universal, 25 to 35% of crop yield is lost each year because of pests and pathogens, requiring a 30 billion USD per year agrochemical industry. Disease control using agrochemicals increases energy consumption, environmental pollution, and the cost of production. Plant breeders count on genetic variation for disease resistance in their selection of superior crop varieties.

A detail understanding of interactions between plants and viruses, bacteria, oomycetes, fungi, nematodes, and insects provide sustainable solutions for the control of crop diseases and the increasing demand for food supply worldwide.

Plants defend themselves against pathogens and pests through constitutive and inducible defenses, and other response mechanisms, while pests and pathogens in turn have evolved adaptations to defeat these mechanisms. Diverse molecular processes regulate the interactions between plants and other biotic organisms, and consequent compensatory processes in the plants. Examining the molecular mechanisms by which crop plants defend themselves from attack by pathogens and pests is crucial for the control of crop diseases.

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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.

Editor-in-Chief

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