Special Issue

Identifying Genes and Associated Markers for Wilt Resistance in Plants

Message from the Guest Editor

Vascular wilt diseases caused by fungi such as Fusarium spp. and Verticillium spp. are among the most challenging diseases of many important crops. However, genetic resistance to wilt diseases has been found for some taxa in breeding material and plant germplasm collections. As plant genome sequencing capabilities have advanced, more genes conferring wilt resistance have been identified, and orthologs of particular genes have been cloned from a wide range of species, including wild relatives of crop species. Building on this gene identification, signaling pathways have been elucidated, showing some cross talk between resistance signaling and different fungal pathogens. Molecular markers for wilt resistance have been developed and successfully implemented in many breeding programs. This Special Issue of Plants will highlight the current status of research into genetic mechanisms that determine wilt disease resistance or susceptibility and practical applications for disease resistance breeding.

Guest Editor

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Deadline for manuscript submissions

closed (31 January 2021)

Plants

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 7.6
Indexed in PubMed

mdpi.com/si/48572

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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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