Special Issue

Molecular Mechanisms of Plant Resistance to Nematodes and Fungi

Message from the Guest Editors

Parasitic nematodes and fungi are major challenges to crop growth and productivity. Plant resistance to parasitic nematodes and fungi is a complex phenomenon that encompasses a wide range of interactions, extending from tangible physical barriers to intricate molecular-level mechanisms. At the molecular core, plants engage in meticulous regulation of their genetic expression, activating a vast network of intricate signal transduction pathways. These pathways act as conductors, orchestrating the plant's response to the presence of parasitic nematodes and fungi. By precisely controlling the expression of numerous genes, plants are able to mount a sophisticated defense system that effectively counteracts the threat posed by these pathogens.In this Special Issue, we welcome articles including original research papers, perspectives, opinions, and reviews that focus on the molecular mechanisms of plant resistance to nematodes and fungi. By deeply studying these mechanisms, we can provide more effective disease prevention and control strategies for agricultural production and promote the healthy growth and sustainable development of crops.

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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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