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Molecular Interactions between Plants and Pests

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Message from the Guest Editor

Dear Colleagues,

Plants have always been exposed to attacks to their aboveground parts by insects and to their roots by soilborne parasites (mostly by parasitic nematodes). Plantpest interactions are primarily characterized by the feeding habits of pests, which can be categorized as necrotrophs, biotrophs and hemibiotrophs. Biotrophic interactions are the most intriguing as pests do not kill host cells and establish an intimate relationship with the host by secreting digestive fluids that are able to induce considerable changes in host gene expression, metabolism, biochemistry, and tissue histology. The interactions induce an elaborate array of reactions involving the release of volatile compounds, effector and signaling molecules, trans-membrane proteins, and a variety of enzymes and hormones.

This Special Issue welcomes multifaceted research on the pathogenesis and molecular mechanisms activated in plant–pest interactions, including the complex network of molecules, signals, and pathways that overcome mutually established defense systems.











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Message from the Editor-in-Chief

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