

Special Issue

Recent Research on the Interaction between Plant and Pathogen

Message from the Guest Editor

Plants are continuously attacked by numerous pathogens of different natures—viruses, bacteria, fungi, etc. In response to this invasion, plants activate a complex immune system and launch various local and systemic defense reactions. During co-evolution, pathogens acquire the ability to exploit these processes for their benefit, hijacking cellular signaling pathways and overcoming plant defense. In this “arms race”, the plant also adjusts its immune system and evolves to gain new features to enable successful resistance to pathogens. However, there are examples when plant response to different stresses results in enhanced protection against one type of pathogen (e.g., bacteria) but increased sensitivity and creation of favorable conditions for the others (e.g., viral pathogens). The identification of the novel factors and regulatory pathways involved in this finely tuned and sophisticated interplay between plants and pathogens reveals new targets for the development of approaches for crop protection and the prevention of infection.

Guest Editor

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