



Molecular Mechanism of Forest Tree Defense against Pathogens and Pests

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Message from the Guest Editor

Dear Colleagues,

In response to biotic stressors, plants defend themselves through various physical, morphological, biochemical, and molecular mechanisms. Like other plants, forest trees have evolved a complex set of defense mechanisms.

Unlike annual plants, trees do not die from genetically programmed senescence. However, trees are subjected to repeated attacks from pathogens/pests during their long lifespan and can be killed by various forest diseases. In addition to the defense processes highly conserved in all plants, trees have equipped themselves with other specific defensive machineries, such as protective structures consisting of bark and defensive chemicals specific to wood tissues. The current knowledge of the molecular mechanisms underlying trees' physical, morphological, and biochemical defenses, as well as host resistance or susceptibility to forest parasites, is very limited. This Special Issue aims to improve the current understanding of the molecular interactions between tree hosts and their biotic agents in forest habitats, and thus review and research papers involving all aspects of tree defense against pathogens and pests are very welcome.





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