

A double edged-sword: Cytokinins in disease resistance and susceptibility of plants to pathogens

Summary: The plant hormone cytokinin is widely known for its effect on plant growth. Cytokinins, whose name derives from cytokinesis, are usually associated with control of cell division. Research from our lab and others has uncovered that this plant hormone can serve additional functions in plants, including having a role in defense activation through priming of the plant immune system. Interestingly, recent results from our lab also show that in some environmental contexts, cytokinins can function to increase plant susceptibility to pathogens. In my seminar, I will discuss these opposing roles of cytokinins in plant-pathogen interactions, as well as show how they can be exploited to benefit agriculture.