Circadian Regulation of Plant Innate Immunity

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Plants are frequently attacked by various pathogens and pests. A growing body of evidence supports the importance of the circadian clock in plant defense responses. Plants activate timed defense with various strategies to anticipate likely attacks of pathogens and pests and to modulate responses to specific invaders in a time-of-day-dependent manner. Pathogen infection is also known to reciprocally modulate clock activity. Such a crosstalk likely reflects the adaptive nature of plants to coordinate limited resources for growth, development, and defense. My lab is interested in elucidating the molecular mechanisms underlying the crosstalk between the circadian clock and plant innate immunity. I will discuss our recent progress in this research area.