

# Biology Seminar

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## **Chemical Communication among plants and Insects**

Plant volatiles are airborne chemicals emitted by plants as a by-product of normal physiological activity and also specifically in response to insect feeding, pathogen infection, and other environmental stimuli. These volatile emissions can provide information about the location, identity, and status of the emitting plant to other organisms that perceive them. Volatile-mediated interactions among plants and insects are widespread and well documented. In addition to serving as foraging cues for insect herbivores and pollinators, plant volatiles function as an indirect mode of plant defense by attracting predatory and parasitic insects that attack feeding herbivores. The possibility that volatiles play a similarly important role in plant-to-plant communication has long been debated, but only very recently has the prevalence and ecological significance of volatile signaling within and between plants become clear. A number of recent studies from my research program have contributed to an increased appreciation of the complexity and sophistication of volatile mediated plant-insect interactions and an enhanced understanding of the role of volatiles in plant-to-plant communication. In this presentation I will describe some of our recent and ongoing research and discuss its significance for broader conceptual issues in chemical ecology.



**Friday Apr 2, 2010**

**2:00 PM**

**ENV130 (EESAT)**