Division of Biology Presents:

Regulation of Plant Defense Responses to Sap-Sucking Aphids

*Monday, May 03, 2021 • 3:30 PM • Zoom*

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Annually, approximately 20 percent of global crop loss is attributable to insect infestation, which is a major economic and ecological problem that decreases the food supply for a growing global population that is expected to exceed nine billion by 2040. U.S. farmers have been using transgenic crops that express *Bacillus thuringiensis* (Bt) toxin to control insect pests, but despite this approach’s success, its use is limited due to perceived public safety concerns, questionable resistance durability, and high production costs. As an alternative approach, detailed understanding of genetic variation in plant resistance and defense signaling mechanisms are required to develop crops that can naturally thwart and/or resist herbivore attack. We are utilizing genomic resources to gain insight into the underlying genetic networks and phenotypic traits that contribute to monocot crop resistance to phloem-feeding aphids. Lab Website: [Plant-Insect Interactions Lab](#)

If you would like to visit with Dr. Joe Louis, please contact Ruth Welti at welti@ksu.edu.

Join Zoom Meeting  
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Meeting ID: 939 4594 2171  
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