Division of Biology Presents:

Regulation of Plant Defenses by Sap-Sucking Aphids

Monday, March 30, 2020 • 3:30 PM • Ackert 221

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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. To produce crops that can naturally thwart and/or resist herbivore attack using alternative approaches, detailed understanding of genetic variation in plant resistance and defense signaling mechanisms is required. 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.

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

Coffee & cookies served preceding the seminar in Ackert Hall, Room 225