

BRIDGET DIANE DELAY

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Education

B.S., 2004, University of Illinois Urbana-Champaign (Entomology)
M.S., 2007, University of Illinois Urbana-Champaign (Crop Science – Plant Pathology)
2007 – present, University of Maryland College Park (Ph.D. Entomology)

Teaching Experience

2007-2008 Teaching assistant, BSCI 207 Organismal Biology
University of Maryland, College Park, MD
2008-2012 Teaching assistant, BSCI 222 Genetics
University of Maryland, College Park, MD

Research Experience

2004-2007 Research assistant, University of Illinois Urbana-Champaign
Maintained soybean aphid colonies, tested artificial diets for suitability for soybean aphid, characterized bacterial symbionts of soybean aphid, surveyed fields for soybean aphid presence, screened soybean plants for genetic markers associated with soybean rust resistance.
2007-present Research assistant, University of Maryland College Park
Characterized symbiotic bacteria present in salivary glands of potato leafhopper and brown marmorated stink bug, sequenced sialotranscriptome of potato leafhopper, studied effects of asymbiotic potato leafhoppers on alfalfa and soybean, characterized saliva of potato leafhopper, created and updated Lamp lab website.

Research Interests

I am interested in the symbiotic bacteria present in phytophagous insects, and how these bacteria influence insect feeding and plant response. My current research is focused on the potato leafhopper, *Empoasca fabae*, which incites a plant wound response known as hopperburn when it feeds on alfalfa, *Medicago sativa*. Through salivary gland transcriptome analysis and greenhouse studies, I plan to determine if salivary gland symbiotic bacteria are involved in the hopperburn response seen in alfalfa. Individual potential saliva components will also be tested to determine if they are capable of inducing hopperburn symptoms and plant wound response cascades.

Awards

2012-2013 Gahan Fellowship, University of Maryland

2011-2012 Gahan Fellowship, University of Maryland

2011-2012 Department of Entomology Teaching Achievement Award, University of Maryland

2009-2010 Steinhauer Award, University of Maryland

2007-2008 Department of Entomology Teaching Achievement Award, University of Maryland

2007 Entomological Society of America President's Prize, First Place (Display Presentation),
Entomological Society of America, Annual Meeting: Session B2 (Physiology,
Biochemistry, Toxicology and Molecular Biology)

Presentations

W.O. Lamp and B. DeLay. 2012. Plant Physiological Disruption Preceding Hopperburn by a Leafhopper. Poster presented at the International Congress of Entomology 2012.

B. DeLay and W. Lamp. Bacterial symbionts associated with the gut of the invasive brown marmorated stink bug, *Halyomorpha halys*. Poster presented at the 2012 Entomological Society of America's Annual Meeting.

B. DeLay and W. Lamp. 2012. Salivary gland transcriptome of the potato leafhopper, *Empoasca fabae*. Talk given at the 2012 Entomological Society of America's Annual Meeting.

B. DeLay, P. Mamidala, A. Wijeratne, S. Wijeratne, O. Mittapalli, J. Wang and W. Lamp. 2011. Salivary gland transcriptome analysis of the potato leafhopper (*Empoasca fabae*). Poster presented at the USDA ARS Field Day in Beltsville.

DeLay, B. and W. Lamp. 2011. Bacterial symbionts associated with the salivary glands of the potato leafhopper, *Empoasca fabae*. Poster presented at the Entomological Society of America Eastern Branch meeting.

DeLay, B. and W. Lamp. 2010. Salivary symbionts present in the potato leafhopper, *Empoasca fabae*. Talk given for the NCCC-31 forage crop meeting.

DeLay, B. and W. Lamp. 2009. Salivary symbionts present in the potato leafhopper, *Empoasca fabae*. Poster presented at the Entomological Society of America annual meeting.

DeLay, B. and W. Lamp. 2010. Symbiotic bacteria present in the potato leafhopper, *Empoasca fabae*. Poster presented at the Entomological Society of America Eastern Branch meeting.

DeLay, B., P. Mamidala, A. Wijeratne, S. Wijeratne, O. Mittapalli, J. Wang and W. O. Lamp. 2011. Salivary gland transcriptome analysis of the potato leafhopper (*Empoasca fabae*). Poster presented at the USDA ARS BARC Field Day.

Wille, B. and G. Hartman. 2007. Coexistence of two species of symbiotic bacteria in the soybean aphid, *Aphis glycines*. Poster presented at the annual meeting of the Entomological Society of America.

Peer-Reviewed Publications

B. DeLay, P. Mamidala, A. Wijeratne, S. Wijeratne, O. Mittapalli, J. Wang and W. Lamp. 2012. Transcriptome analysis of the salivary glands of the potato leafhopper, *Empoasca fabae*. *J. Insect Physiol.* 58(12): 1626-34.

Wille, B.D. and G.L. Hartman. 2009. Two species of symbiotic bacteria present in the soybean aphid (Hemiptera: Aphididae). *Environ. Entomol.* 38(1):110-5.

Wille, B.D. and G.L. Hartman. 2008. Evaluation of artificial diets for rearing *Aphis glycines* (Hemiptera: Aphididae). *J. Econ. Entomol.* 101(4):1228-32.

Other Publications

B. DeLay and W. Lamp. 2012. Soybean response to potato leafhopper. Report prepared for NCCC-31: Ecophysiological Aspects of Forage Management.

C. O'Leary, B. DeLay and W. Lamp. 2012. Brown marmorated stink bug incidence in Maryland Vinyards. Report prepared for National Institute of Food and Agriculture "Biology, Ecology, and Management of Brown Marmorated Stink Bug in Orchard Crops, Small Fruit, Grapes, Vegetables, and Ornamentals" grant working group.