
Curriculum Vitae

Jeffrey R. Ahern

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Education

Rice University, Houston, TX
Ph.D. program, August 2006-present
Advisor: Dr. Ken Whitney
Expected completion: May 2011

University of Massachusetts, Amherst, MA
B.S. in Biology, *Magna Cum Laude*, May 2005
Departmental Honors
Honors Thesis Advisor: Dr. Adam Porter

Publications

Whitney, K.D., J.R. Ahern, L.G. Campbell (2009). *Hybridization-prone plant families do not generate more invasive species*. *Biological Invasions*, 11: 1205-1215

Whitney, K.D., J.R. Ahern, L.G. Campbell, L.P. Albert, M.S. King (2010). *Patterns of hybridization in plants*. *Perspectives in Plant Ecology, Evolution, and Systematics*, 12: 175-182

Manuscripts in Preparation (available upon request)

Ahern, J.R., K.D. Whitney. (In Prep). *Sesquiterpene lactone stereochemistry influences herbivore resistance and plant fitness*.

Chamberlain, S.A., S.M. Hovick, C. Dibble, B. Van Allen, B.S. Maitner, N. Rasmussen, L. Bell-Dereske, J. R. Ahern, J. Carillo, M. Meza-Lopez, C. Roy, E. Siemann, M.J.

Lajeunesse, K.D. Whitney. (In Prep). *Does Phylogeny Matter? Assessing the Impact of Phylogenetic Corrections in Ecological Meta-Analysis*.

Funding Awards

Spring 2010:	\$14,982	NSF Doctoral Dissertation Improvement Grant: “Evolutionary Ecology of Sesquiterpene Lactones in <i>Xanthium strumarium</i> ”
Summer 2008:	\$350	Rice University Student Travel Award
Summer 2008:	\$5,000	Visiting Scholar Fellowship at the Max Planck Institute of Chemical Ecology.
Spring 2008:	\$998	Sigma Xi GIAR award.
Spring 2008:	\$1,000	Florence H. Thomas Scholarship from the Texas Garden Clubs.
2007-2011:	\$16,500/year	Wray-Todd Fellowship, Rice University.
Summer 2007:	\$250	Rice University Student Travel Award.

Professional Meeting Abstracts

Ahern, J. R., Whitney, K. D. *Factors associated with the maintenance of a defensive chemical polymorphism in Xanthium strumarium*. Ecological Society of America, Austin, TX 2011.

Ahern, J. R., Whitney, K. D. *Ecological factors associated with the maintenance of a defensive chemical polymorphism in Xanthium strumarium*. Society for the Study of Evolution. Norman, OK 2011.

Ahern, J. R. *Evolutionary ecology of sesquiterpene lactones in Xanthium strumarium*. Oral Presentation at the 2nd annual Rice University-University of Houston Joint Graduate Student Conference.

Ahern, J. R., Whitney, K. D. *Effects of sesquiterpene lactone stereochemistry on herbivore resistance in Xanthium strumarium*. Gordon Research Conference: Plant-Herbivore Interactions. Galveston, TX 2010.

Whitney, K. D., J. R. Ahern, L. G. Campbell and L. P. Albert. *Explaining hybridization propensity in plants*. Ecological Society of America, Albuquerque, NM 2009.

Ahern, J.R. & K. D. Whitney. *Sesquiterpene lactone stereochemistry determines herbivore resistance in Xanthium strumarium (Asteraceae)*. Ecological Society of America, Albuquerque, NM 2009.

Whitney, K. D., J. R. Ahern, and L. G. Campbell. *Hybridization-prone plant families do not generate more invasive species*. Society for the Study of Evolution, Minneapolis, MN. 2008.

Teaching Experience

- Spring 2011:* Guest lecturer for undergraduate course in plant diversity.
“Herbivory”
- Spring 2008:* Teaching assistant for undergraduate introductory biology course.
- Spring 2007:* Teaching assistant for undergraduate course in plant diversity.
- Spring 2007:* Guest lecturer for undergraduate course in plant diversity.
“Herbivory on Plants: Effects and Responses”
- Fall 2004:* Guest lecturer in an undergraduate entomology course.
“Methods in detecting behavioral costs of insecticide resistance”

Mentoring Experience

- Darren Li** Co-advised NSF REU student/Senior thesis: “The distribution of a cis/trans chemical polymorphism in the Asteraceae and its effects on insect herbivore resistance.” 2010-2011
- Kyle Klootwick** Advised post-graduate research project: “Plants producing *trans*-fused sesquiterpene lactones confer higher resistance than those producing *cis*-fused lactones, a feeding preference assay.” 2010
- Chris Chen** Co-advised NSF REU student: “The effects of hybridization on herbivore resistance and sesquiterpene lactone chemistry in *Helianthus spp.*” 2009-2010
- Skylar Craig** Co-advised undergraduate research project: “The effects of herbivory on plant fitness in *Xanthium strumarium.*” Spring 2009
- Matt King** Co-advised undergraduate research project: “Correlations between trichome density and herbivory *Xanthium strumarium.*” Fall 2008
- Kate Boles** Co-advised undergraduate research project: “The effects of plant polyploidy on herbivory in *Brassica spp.*” Fall 2007

Research Experience

Rice University

- 2006-Present:* Research assistant under Dr. Ken Whitney:
Adaptive evolution via hybridization

Max Planck Institute of Chemical Ecology

June-August 2008: Visiting scholar fellowship with Dr. Jonathan Gershenzon:
Induced defenses and volatile signaling in *Populus nigra*.

University of Massachusetts, Amherst

2005-2006: Lab technician for Dr. Adam Porter:
Population genetics of *Leptinotarsa decemlineata*, *Operophtera*
spp., and *Papilio spp.*

Summer 2004: Research assistant for Dr. Mitchell Baker:
Insecticide resistance in the Colorado Potato Beetle (*Leptinotarsa*
decemlineata).

Queens College, CUNY, New York

Summer 2005: Lab manager for Dr. Mitchell Baker:
Insecticide resistance in the Colorado Potato Beetle (*Leptinotarsa*
decemlineata).

Professional Service

Fall 2008-Present: Student Representative on the Rice University Lowrey
Arboretum committee.

Spring 2007-Present: Departmental Representative for the Rice University
Department of Ecology & Evolutionary Biology Graduate
Student Association.

Summer 2009: Acting President for the Rice University Department of Ecology
& Evolutionary Biology Graduate Student Association

Summer 2007: Acting President for the Rice University Department of Ecology
& Evolutionary Biology Graduate Student Association

Service in Peer Review

Ecological Entomology
Basic and Applied Ecology (2)

Society Membership

Society for the Study of Evolution
Ecological Society of America