

CURRICULUM VITAE

MATTHEW DAVID GINZEL

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PERSONAL HISTORY AND PROFESSIONAL EXPERIENCE

Educational Background

B.S. (1994) Department of Biology, Beloit College, Beloit, Wisconsin
Minor concentration in Environmental Studies
Graduated with Departmental Honors in Organismal Biology

M.S. (1999) Department of Entomology, University of Illinois at Urbana-Champaign (UIUC), Urbana, Illinois

Dr. L. M. Hanks, supervisor. Thesis title: Mate location and recognition in *Xylotrechus colonus* F. (Coleoptera: Cerambycidae)

Ph.D. (2003) Department of Entomology, UIUC
Dr. L. M. Hanks, supervisor. Dissertation title: Chemically-mediated mate location and recognition in the longhorned beetles (Coleoptera: Cerambycidae)

Academic Positions Since Final Degree

Postdoctoral Research Fellow, Department of Biochemistry and Molecular Biology, University of Nevada-Reno. G. J. Blomquist, supervisor. Endocrine regulation of pheromone production in the pinyon Ips, *Ips confusus*. (October 2003- August 2006).

Assistant Professor, Departments of Entomology and Forestry Natural Resources, Purdue University, West Lafayette, IN (August 2006-present)

Intensive Training Courses

Agilent Technologies, Introduction to Mass Spectral Interpretation I and II; Elk Grove Village, IL, March 2000.

Workshop on Molecular Evolution, Woods Hole Marine Biological Laboratory, Woods Hole, MA, August 2002.

GRANTS RECEIVED

Graduate College Master's Thesis Research Grant, UIUC, Spring 1998.

Program in Ecology and Evolutionary Biology Travel Grant, UIUC, Spring 1999; Spring 2002; Spring 2003.

Graduate College Conference Travel Grant, UIUC, Fall 1999; Fall 2001; Fall 2002.

Francis M. and Harlie M. Clark Research Support Grant, UIUC, Fall 2000; Spring 2002; Spring 2003.
Animal Behavior Society Student Research Grant, Animal Behavior Society, Spring 2001.
Herbert Holdsworth Ross Memorial Fund, UIUC, Spring 2002.
Graduate College On-Campus Dissertation Research Grant, UIUC, Fall 2002.
USDA National Research Initiative Competitive Grant. M.D. Ginzel (P.I.)
“Endocrine regulation of pheromone production in the pinyon *Ips*.” 2004-2006; Agreement number 2004-35607-14878; \$105,495.
Nevada Agriculture Experiment Station, Hatch Grant. C. Tittiger, G.J. Blomquist, and M.D. Ginzel. “Toward controlling Nevada’s most devastating forest insect pest, the pinyon Ips (*Ips confusus*)” 2005-2008; Agreement number #0339; \$96,000.

HONORS, RECOGNITION AND OUTSTANDING ACHIEVEMENT

Ethel B. Horton Biology Scholarship, Beloit College, Beloit, WI, 1993.
Walter S. Haven Research Fellow, Beloit College, Beloit, WI, 1994.
Outstanding Teaching Assistant in Biology 120, UIUC, Spring 1997.
Dupont Award for Outstanding Teaching by a Graduate Student in the Department of Entomology, UIUC, Spring 1998.
John G. and Evelyn Hartman Heiligenstein Award for Excellence in the Teaching of Biology, UIUC, Spring 1999.
List of Teachers Ranked Excellent by Their Students, UIUC, Fall 1995, Spring 1996, Spring 1997, Fall 1998, Fall 1999.
List of Teachers Ranked Outstanding by Their Students, UIUC, Spring 2000.
Elected Member of Sigma Xi, the Scientific Research Society, Spring 2003.

PRESENTATIONS

Invited Presentations

Ginzel, M. D., L. M. Hanks, and K. N. Paige. USDA Exotic Insects Research Forum, Annapolis, MD, 17 January 2002.
Hanks, L. M., M. D. Ginzel, and K. N. Paige. USDA Exotic Insects Research Forum, Annapolis, MD, January 2003.
Ginzel, M. D. Department of Biochemistry and Molecular Biology, University of Nevada-Reno, Reno, NV, April 2003.
Ginzel, M. D. Department of Entomology, UIUC, September 2003.
Lacey, E. S., M. D. Ginzel, J. G. Millar, and L. M. Hanks. National Meeting of the Entomological Society of America, Salt Lake City, UT, November 2004.
Millar, J. G., L. M. Hanks, M. D. Ginzel, and E. S. Lacey. National Meeting of the Entomological Society of America, Salt Lake City, UT, November 2004.
Reagel, P. F., E. S. Lacey, J. F. Tooker, M. D. Ginzel, M. T. Smith, R. W. Fuester, & L. M. Hanks. Annual meeting North-Central Branch of the Entomol. Soc. Am., West Lafayette, IN, March 2005.
Reagel, P. F., E. S. Lacey, J. F. Tooker, M. D. Ginzel, M. T. Smith, R. W. Fuester, & L. M. Hanks. IX European Workshop on Insect Parasitoids, Cardiff University, Cardiff, Wales, September 2005.
Ginzel, M. D. Department of Entomology, Purdue University, West Lafayette, IN, December 2005.

Ginzel, M. D.. CSREES USDA-NRI Awardee Workshop (poster), Tucson, AZ, May 2006

Ginzel, M.D. Department of Entomology, North Carolina State University, Raleigh, NC, April 2007 (scheduled).

Submitted Presentations

- Ginzel, M. D., and L. M. Hanks. National Meeting of the Entomological Society of America, Las Vegas, NV, November 1998.
- Ginzel, M. D., and L. M. Hanks. Annual Meeting of the North Central Branch of the Entomological Society of America, Des Moines, IA, March 1999.
- Tooker, J. F., M. D. Ginzel, and L. M. Hanks. National Meeting of the Entomological Society of America, Atlanta, GA, December 1999.
- Ginzel, M. D., G. J. Blomquist, J. G. Millar, and L. M. Hanks. National Meeting of the Entomological Society of America, Atlanta, GA, December 1999.
- Ginzel, M. D., J. F. Tooker, and L. M. Hanks. Annual Meeting of the North Central Branch of the Entomological Society of America, Minneapolis, MN, March 2000.
- Pham, V. N., M. D. Ginzel, and L. M. Hanks. The Howard Hughes Program for Undergraduate Education in the Life Sciences at the University of Illinois at Urbana-Champaign Poster Session (submitted poster), Urbana, IL, July 2000.
- Ginzel, M. D., and L. M. Hanks. National Meeting of the Entomological Society of America (Submitted poster), Montreal, Quebec, Canada, December 2000.
- Ginzel, M. D., G. J. Blomquist, J. G. Millar, and L. M. Hanks. International Society of Chemical Ecology annual meeting, Lake Tahoe, CA, July 2001.
- Steed, J. N., M. D. Ginzel, and L. M. Hanks. The Howard Hughes Program for Undergraduate Education in the Life Sciences at the University of Illinois at Urbana-Champaign Poster Session (Submitted poster), Urbana, Illinois, July 2001.
- Ginzel, M. D., and L. M. Hanks. National Meeting of the Entomological Society of America, San Diego, CA, December 2001.
- Ginzel, M. D., J. N. Steed, and L. M. Hanks. National Meeting of the Entomological Society of America (submitted poster), San Diego, CA, December 2001.
- Bennett, A. B., J. F. Tooker, M. D. Ginzel, L. M. Hanks, and C. S. Sadof. National Meeting of the Entomological Society of America, San Diego, CA, December 2001.
- Ginzel, M. D. "4th Annual Graduate Student Symposium, University of Illinois at Urbana-Champaign, Urbana, IL, February 2002.
- Ginzel, M. D., and L. M. Hanks. Annual Meeting of the North Central Branch of the Entomological Society of America, East Lansing, MI, March 2002.
- Ginzel, M. D., and L. M. Hanks. Joint Meeting of the Society of Systematic Biologists and the Society for the Study of Evolution annual meeting, Urbana, IL, June 2002.
- Ginzel, M. D., J. G. Millar, G. J. Blomquist, and L. M. Hanks. National Meeting of the Entomological Society of America, Fort Lauderdale, FL, November 2002.
- Reagel, P. F., M. D. Ginzel, and L. M. Hanks. National Meeting of the Entomological Society of America, Fort Lauderdale, FL, November 2002.
- Ginzel, M. D., J. G. Millar, and L. M. Hanks. Annual Meeting of the North Central Branch of the Entomological Society of America, Madison, WI, March 2003.
- Ginzel, M. D., J. G. Millar, and L. M. Hanks. Ecological Society of America 88th Annual Meeting, Savannah, GA, August 2003.
- Reagel, P. F., M. D. Ginzel, and L. M. Hanks. Ecological Society of America 88th Annual Meeting, Savannah, GA, August 2003.

- Ray, A. M., M. D. Ginzel, and L. M. Hanks. National Meeting of the Entomological Society of America, Cincinnati, OH, October 2003.
- Ginzel, M. D., C. I. Keeling, C. Tittiger, and G. J. Blomquist. Eighth International Conference on Juvenile Hormones, King's Beach, CA, June 2004.
- Ginzel, M. D., C. I. Keeling, C. Tittiger, and G. J. Blomquist. Joint meeting of the International Society of Chemical Ecology and Phytochemical Society of North America (Submitted poster), Ottawa, Ontario, Canada, July 2004.
- Lacey, E. S., M. D. Ginzel, J. G. Millar, and L. M. Hanks. Joint meeting of the International Society of Chemical Ecology and Phytochemical Society of North America (submitted poster), Ottawa, Ontario, Canada, July 2004.
- Ray, A. M., M. D. Ginzel, E. S. Lacey, J. G. Millar, and L. M. Hanks. Joint meeting of the International Society of Chemical Ecology and Phytochemical Society of North America (submitted poster), Ottawa, Ontario, Canada, July 2004.
- Ginzel, M. D., C. I. Keeling, C. Tittiger, and G. J. Blomquist. National Meeting of the Entomological Society of America, Salt Lake City, UT, November 2004.
- Ray, A. M., M. D. Ginzel, E. S. Lacey, J. G. Millar, and L. M. Hanks. National Meeting of the Entomological Society of America, Salt Lake City, UT, November 2004.
- Blomquist, G. J., C. Tittiger., C. I. Keeling, A. B. Gilg, M. D. Ginzel., J. C. Bearfield, S. Young, T. M. Aw, and P. A. Sandstrom. International Society of Chemical Ecology annual meeting, Washington, D. C., July 2005.
- Ginzel, M.D., C.I. Keeling, C. Tittiger, and G. J. Blomquist. 2006 International Plant Resistance to Insects Workshop (submitted poster), West Lafayette, IN, April 2006.
- Ginzel, M.D., C.I. Keeling, C. Tittiger, and G. J. Blomquist. 5th International Symposium on Insect Molecular Science (submitted poster), Tucson, AZ, May 2006.
- Ginzel, M.D., J. C. Bearfield, C.I. Keeling, C. Tittiger, and G. J. Blomquist. International Society of Chemical Ecology annual meeting, Barcelona, Spain, July 2006.
- Ginzel, M.D., J. C. Bearfield, C.I. Keeling, C. Tittiger, and G. J. Blomquist. National Meeting of the Entomological Society of America, Indianapolis, IN, December 2006.

RESIDENT INSTRUCTION

UIUC

- Laboratory teaching assistant in Animal Biology (Biology 104), Fall 1995.
- Laboratory teaching assistant in Genetics, Evolution and Biodiversity (Biology 120), Spring 1996, Spring 1997, Fall 1998, Spring 2000.
- Laboratory teaching assistant in Introduction to Entomology (Entomology 301), Fall 1996, Fall 1997, and Fall 1999.
- Quiz writer and grader in Genetics, Evolution and Biodiversity (Biology 120), Spring 1998.
- Laboratory teaching assistant in Animal Behavior (Biology 346), Spring 1999.
- Laboratory teaching assistant in Honors Population Biology (Biology 252), Spring 2000.
- Graduate student advisor to undergraduate students in the Howard Hughes Medical Institute Program for Undergraduate Research Program: Vincent N. Pham, Summer 2000 - Spring 2001; Jennifer Steed, Summer 2001.

University of Nevada-Reno

- Advisor to undergraduate student research projects in the Department of Biochemistry and Molecular Biology: Amanda Smith (2004), Ben Crawford

(2004-2005), Billy Mendoza (2004-2005), Anastasia Henry (2005-2006), Dinah Buensalida (2005-2006), Joni Nastal (2005-2006)
Advisor to research project of Nicholas Garol, Master's student in the Biotechnology Program (2004-2005). Project title, "Influence of feeding and juvenile hormone treatment on pheromone production in *Ips confusus*, the pinyon Ips."

Purdue University (Courses taught and students advised)

Courses

Forest Entomology (ENTM 595* and FNR 598*), scheduled Fall 2007.

Major Professor

Current PhD Students

Brad Barnd

Committee Member

Master's committee member: Carolyn Foley

PhD committee member: Darla G. French

Other Contributions to Instruction

Guest lecturer – Introduction to Entomology (Entomology 301), "The Hemipteroids"; 7 September 2000.

Guest lab instructor – Introduction to Entomology (Entomology 301). "Insect excretion"; 17 October 2002.

Guest lecturer – Introduction to Entomology (Entomology 301). "Use of pheromones in cerambycid mating systems"; 28 July 2003.

Demonstration of Gas Chromatography – Mass Spectrometry for Insect Physiology (Entomology 310), UIUC, March 2000 and March 2002.

Guest lecturer – Arthropod Genomics (ENTM 692W) "Microarray analysis", 29 January, 2007.

SERVICE (Public, Professional/Disciplinary and University)

Public Service

Exhibitor, Insect Expo, Illinois Natural History / Department of Entomology, UIUC, October 1995-1999.

Exhibitor. Insect Expo, Illinois Natural History / Department of Entomology, UIUC with C. Helm and L. M. Hanks, "Impact of the Asian longhorned beetle", October 2000.

Volunteer / Coordinator, Insect Fear Film Festival, Department of Entomology, UIUC, February 1996-2002.

Entomology judge, 4-H Program, Illinois State Fair, Springfield, IL., August 1998.

Guest teacher, El Paso Prairie School, El Paso, IL, 14 September 1998.

Media interview: Daily Illini (Urbana, Illinois) "*Insect Expo Swarms into Armory*", 1 November 1999.

Guest presenter, Cub Scout Pack 124, Urbana, IL, 22 February 2002.

Collaborator with D. Seigler and Dr. Jacob Friedman (Department of Plant Science, University of Tel Aviv), in a study of chemical diversity in *Foeniculum vulgare.*, November 2002.

Assisted lab of Dr. Glen Hartman (PMPB program in SIB, UIUC) with methods of using olfactometer to study response of soybean aphid to plant volatiles, October 2002.

Guest presenter, Cub Scout Pack 48, Champaign, IL, 21 October 2002.

Guest presenter, Playtime Preschool, Urbana, IL, 23 May 2003.

Assisted Dr. Sam Beshers (Department of Entomology, UIUC) with GC-MS analysis of dead worker ants to characterize chemical cues involved in undertaking behavior, September 2003.
Guest judge, "The Invention Convention", Roy Gomm Elementary School, Reno, NV 8 March 2004.
Media interview: Reno Gazette-Journal "UNR researcher working to save embattled trees says he fights one beetle at a time", 7 September 2004.
Assisted Kelly Kissane (Department of Ecology, Evolution, and Conservation Biology, University of Nevada-Reno) with GC analysis of cuticular hydrocarbons of the spider, *Dolomedes triton*, Fall 2004.
Consultant to F.M. Stephen, Department of Entomology, University of Arkansas on contact pheromones of red oak borer, July 2005.

Service to Disciplinary or Professional Societies or Associations

Registration volunteer, National Meeting of the Entomological Society of America, Nashville, KY, December 1997.
Volunteer, Joint Meeting of the Society of Systematic Biologists and the Society for the Study of Evolution, Urbana, IL, June 2002.
Moderator, Section B contributed session, National Meeting of the Entomological Society of America, Fort Lauderdale, FL, November 2005.
Judge of student presentations, Ohio Valley Entomological Association Annual Meeting, Highland Heights, KY, November, 2006.

University/Campus Service

Panelist for School of Life Science T.A. Orientation, UIUC, August 1998.
Elected Student Representative to the Department of Entomology Graduate Student Admissions Committee, UIUC, 2000-2002.
Participated in faculty focus group for the Life Sciences Library at Purdue University, December 2006.

Professional Service

Reviews:

Journal manuscripts: *Journal of Entomological Science*, *Annual Review of Entomology*, *Journal of Insect Physiology*, *Entomologia Experimentalis et Applicata*, *Journal of Insect Behavior*, *Journal of Chemical Ecology*, *Chemoecology*, *Environmental Entomology*

Grants: Nevada Agricultural Experimental Station Competitive Grants, National Science Foundation

PUBLICATIONS

Articles in Journals

Ginzel, M. D., and L. M. Hanks. 2002. Evaluation of synthetic hydrocarbons for mark-recapture studies on the red milkweed beetle. *Journal of Chemical Ecology* 28: 1041-1047.
Reagel, P. F., M. D. Ginzel, and L. M. Hanks. 2002. Aggregation and mate location in the red milkweed beetle (Coleoptera: Cerambycidae). *Journal of Insect Behavior* 15: 811-830.
Ginzel, M. D., G. J. Blomquist, J. G. Millar, and L. M. Hanks. 2003. The role of contact pheromones in mate location and recognition in *Xylotrechus colonus*. *Journal of Chemical Ecology* 29: 533-545.
Ginzel, M. D., and L. M. Hanks. 2003. Contact pheromones as mate recognition cues of four species of longhorned beetles (Coleoptera: Cerambycidae). *Journal of Insect Behavior* 16: 181-187.

- Ginzel, M. D., J. G. Millar, and L. M. Hanks. 2003. Z-9-Pentacosene: contact pheromone of the longhorned beetle *Megacyllene robiniae*. *Chemoecology* 13: 135-141.
- Lacey, E. S., M. D. Ginzel, J. G. Millar, and L. M. Hanks. 2004. Male-produced aggregation pheromone of the cerambycid beetle *Neoclytus acuminatus acuminatus*. *Journal of Chemical Ecology* 30: 1493-1507.
- Ginzel, M. D., and L. M. Hanks. 2005. Role of host plant volatiles in mate location for three species of longhorned beetles. *Journal of Chemical Ecology* 31: 213-217.
- Ellis, J. A., A. D. Walter, J. F. Tooker, M. D. Ginzel, P. F. Reagel, E. S. Lacey, A. B. Bennett, E. M. Grossman, and L. M. Hanks. 2005. An evaluation of conservation biological control in urban landscapes: Manipulating parasitoids of bagworm (Lepidoptera: Psychidae) with flowering forbs. *Biological Control* 34: 99-107.
- Ginzel, M.D., Moreira, J.A., Ray, A.M., Millar, J.G., and Hanks, L.M. 2006. (Z)-9-Nonacosenemajor component of the contact sex pheromone of the beetle, *Megacyllene caryae*. *Journal of Chemical Ecology* 32: 435-451.
- Ginzel, M.D., Bearfield, J.C., Keeling C.I, McCormack, C.C., Blomquist, G.J., and Tittiger, C. (2007) Antennally-mediated negative feedback regulation of pheromone production in the pine engravaer, *Ips pini*. *Naturwissenschaften* 94: 61-64.

Book Reviews

- Ginzel, M. D. 2006. Review of book, *Insect Sampling in Forest Ecosystems* by Simon R. Leather for Entomological Society of America ()

Abstracts, Proceedings, Technical Papers

- Ginzel, M. D., and L.M. Hanks. 1998. The locust borer. Home, Yard and Garden Pest Newsletter of the UIUC Cooperative Extension Service 19:3-4.
- Reagel, P. F., M. D. Ginzel, J. F. Tooker, L. M. Hanks, and P. Nixon. 1999. Evaluation of insecticides for thrips control and associated phototoxicity. *Arthropod Management Tests* 24: report G73.
- Ginzel, M.D., C.I. Keeling, C. Tittiger, and G.J. Blomquist. Juvenile Hormone Abstracts. 2004. Abstracts from Eighth International Conference on the Juvenile Hormones. 17pp. *Journal of Insect Science*, 4:28, Available online: insectscience.org/4.28.
- Blomquist, G.J., and M.D. Ginzel. 2005. "Bark beetles of Little Valley". In Whitell Forest Fuel Reduction and Forest Enhancement Plan, ed. Steve VanderWall. <http://www.unr.edu/biology/WhitPlan.doc>