

# Corey K. Gerber

## Curriculum Vitae

### Current Address:

Department of Agronomy, 915 West State Street, Purdue University, West Lafayette, IN 47907-2054, Phone: (765) 496-3755, E-mail: [gerberc@purdue.edu](mailto:gerberc@purdue.edu)

### Education:

- Ph.D. Purdue University, West Lafayette, IN. May 2003. Department of Entomology. Thesis: Testing the Areawide Pest Management Concept for the Western Corn Rootworm (*Diabrotica virgifera virgifera* LeConte) in Northwestern Indiana and East-Central Illinois.
- MS Purdue University, West Lafayette, IN. August 1995. Department of Entomology. Thesis: Distribution and Seasonal Activity of the Southern Masked Chafer (*Cyclocephala lurida*) and the Northern Masked Chafer (*Cyclocephala borealis*) in Indiana.
- BS Purdue University, West Lafayette, IN. May 1993. Department of Entomology. Major: Entomology.

### Research/ Extension Professional Experience:

July 2003 - Present

Director of the Purdue Crop Diagnostic Training and Research Center (Professional Staff): Department of Agronomy, West Lafayette, IN. Extension duties include: Coordinate the designing, planning, marketing, promotion, and execution of the Purdue Crop Diagnostic Training and Research Center. Also, serve as a liaison between Indiana's agricultural sector and university crop production programs/staff to identify, promote, and implement appropriate adult continuing education. (Served as the Interim Director of the Crop Diagnostic Training and Research Center from April to June 2003.)

January 1998(9) - March 2003

Areawide IPM Specialist (Professional Staff and Graduate Student): Department of Entomology, Purdue University, West Lafayette, IN. Research: 1) Areawide pest management on pests in the corn and soybean rotational system with emphasis on western corn rootworm in first-year corn. 2) An investigation on western corn rootworm populations, as well as the severity of injury to first-year corn by rootworm larvae, in northwest Indiana. This investigation included the development of a sampling program, as well as economic thresholds and economic injury levels, for western corn rootworm beetles in soybean grown in rotation with corn. 3) Conducted insecticide efficacy trials on corn and soybean insect pests. Duties included: Experimental planning and evaluation, as well as written communication of results.

July 1995 - December 1997

Extension Entomologist: Department of Entomology, Purdue University, West Lafayette, IN. Extension: Diagnostics, diagnostic training, and 4-H. Duties included: Identifying insect pests and diagnosing insect problems in the Plant and Pest Diagnostic Laboratory. Training homeowners, pest control operators, and lawn care, as well as golf course personnel, in diagnosing and controlling insect problems. Developed and provided assistance in 4-H programs and

activities. Research: 1) Turfgrass insecticide efficacy testing. 2) An investigation on western corn rootworm populations in northwest Indiana. (See above) Duties included: Experimental planning and evaluation, as well as written communication of results.

August 1993 - July 1995

Graduate Student and Research Assistant: Department of Entomology, Purdue University, West Lafayette, IN. Research: Investigation on the use of degree-day values to more accurately time chemical controls against masked chafer infestations. Also, to determine the population distribution of each masked chafer species within Indiana.

May 1991 - August 1993

Laboratory Technician: Department of Entomology, Purdue University, West Lafayette, IN. Duties included: Aiding in identifying insects, as well as insect related problems. Monitoring night flying turfgrass pests using black light traps. Constructed insect collections for extension training sessions.

### **Refereed Papers:**

- Brabham, C. B., C. K. Gerber, and W. G. Johnson. 2011. Fate of Glyphosate-Resistant Giant Ragweed (*Ambrosia trifida*) in the Presence and Absence of Glyphosate. *Weed Science*. 59: 506-511.
- Westhoven, A. M., G. R. Kruger, C. K. Gerber, J. M. Stachler, M. M. Loux, and W. G. Johnson. 2008. Characterization of Selected Common Lambsquarters (*Chenopodium album*) Biotypes with Tolerance to Glyphosate. *Weed Science*. 56: 685-691.
- Ott, E. J., C. K. Gerber, D. B. Harder, C. L. Sprague, and W. G. Johnson. 2007. Prevalence and Influence of Stalk Boring Insects on Glyphosate Activity on Indiana and Michigan Giant Ragweed (*Ambrosia trifida*). *Weed Technol.* 21: 526-531.
- Edwards, C. R., C. K. Gerber, and G. J. Hunt. 2003. A Laboratory Study to Evaluate the Toxicity of the Mediterranean Fruit Fly, *Ceratitis capitata*, Bait, Success 0.02 CB, to the Honey Bee, *Apis mellifera*. *Apidologie* 34: 171-180.
- Barna, G., C. R. Edwards, J. Kiss, C. Gerber, and L. W. Bledsoe. 1999. Study of behavioral change of western corn rootworm beetle by crop and sex in maize and soybean fields in northwestern Indiana, USA. *Acta Phytopathologica et Entomologica Hungarica* 34 (4), 393-402.
- Barna, G., C. R. Edwards, C. Gerber, L. W. Bledsoe, and J. Kiss. 1998. Management of western corn rootworm (*Diabrotica virgifera* LeConte) in corn based on survey information from previous soybean crop. *Acta Phytopathologica*. 33 (1-2), 173-182.
- Buhler, W. G., C. R. Edwards, L. W. Bledsoe, C. Gerber, M. E. Gray, and K. L. Steffey. 1998. Areawide pest management of western corn rootworm in Indiana and Illinois - turning the first corner. *Pflanzenschutzberichte, Band 57, Heft 2*, 69-74.
- Edwards, C. R., C. Gerber, L. W. Bledsoe, G. Barna, and J. Kiss. 1998. Comparisons of Hungarian pheromone and Pherocon AM traps under economic western corn rootworm populations in Indiana, USA. *Pflanzenschutzberichte, Band 57, Heft 2*, 52-56.
- Barna, G., C. R. Edwards, J. Kiss, C. Gerber, and L. W. Bledsoe. 1998. Comparison of male and female western corn rootworm beetle numbers in maize following soybean in Indiana, USA. *Acta Phytopathologica* 33 (1-2), 173-182.

### **Book Chapters:**

- Gerber, C. K., C. R. Edwards, L. W. Bledsoe, M. E. Gray, K. L. Steffey, and L. D. Chandler. 2005. Application of the Areawide Concept Using Semiochemical Baits for Managing the Rotation Resistant Western Corn Rootworm Variant in the Eastern Midwest, USA. *In* S. Vidal, C. R. Edwards, and U. Kuhlmann [eds.], *Western Corn Rootworm: Ecology and Management*. CAB International, Wallingford, UK.
- Gerber, C. K., C. R. Edwards, L. W. Bledsoe, J. L. Obermeyer, G. Barna, and R. E. Foster. 2005. An Economic Threshold and Injury Level for the Rotation Resistant WCR Adult Variant in Soybean to Predict Subsequent Damage to Corn in Indiana, USA. *In* S. Vidal, C. R. Edwards, and U. Kuhlmann [eds.], *Western Corn Rootworm: Ecology and Management*. CAB International, Wallingford, UK.

### **Non Refereed Publications:**

- Gerber, C. K., S. M. Brouder, J. J. Camberato, S. N. Casteel, T. Creswell, J. Faghihi, B. C. Joern, W. G. Johnson, C. H. Krupke, T. R. Legleiter, J. S. Loven, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, and K. A. Wise. 2014. *Corn and Soybean Field Guide – 2014 Edition*.
- Gerber, C. K., J. J. Camberato, S. N. Casteel, W. G. Johnson, C. H. Krupke, T. R. Legleiter, C. W. Mansfield, J. L. Obermeyer, G. J. Schwab, and K. A. Wise. 2013. *Wheat Field Guide*.
- Gerber, C. K., S. M. Brouder, J. J. Camberato, S. N. Casteel, T. Creswell, J. Faghihi, B. C. Joern, W. G. Johnson, C. H. Krupke, T. R. Legleiter, J. S. Loven, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, and K. A. Wise. 2013. *Corn and Soybean Field Guide App – First Edition*.
- Gerber, C. K., S. M. Brouder, J. J. Camberato, S. N. Casteel, T. Creswell, J. Faghihi, B. C. Joern, W. G. Johnson, C. H. Krupke, T. R. Legleiter, J. S. Loven, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, and K. A. Wise. 2013. *Corn and Soybean Field Guide – 2013 Edition*.
- Gerber, C. K., S. M. Brouder, J. J. Camberato, S. N. Casteel, T. Creswell, J. Faghihi, B. C. Joern, W. G. Johnson, C. H. Krupke, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, G. C. Steinhardt, and K. A. Wise. 2012. *Corn and Soybean Field Guide – 2012 Edition*.
- Gerber, C. K., B. K. Fisher, K. D. Johnson, E. J. Kladviko, J. L. Obermeyer, D. A. Robison, V. J. Ackroyd, D. G. Bass, G. W. Bird, D. C. Brainard, R. G. Goldy, T. M. Harrigan, M. K. Hausbeck, D. R. Mutch, M. Ngouajio, K. A. Renner, C. L. Sprague, E. C. Taylor, T. C. Kaspar, J. J. Hoorman, K. R. Islam, J. S. Petrosino, R. C. Reeder, A. P. Sundermeier, C. E. Young, C. M. Brown, K. A. Callow, M. J. Celetti, D. E. Robinson, A. U. Tenuta, L. L. Van Eerd, E. A. Verhallen, K. A. Albrecht, and G. R. W. Nice. 2012. *Midwest Cover Crops Field Guide*.
- Gerber, C. K., S. M. Brouder, J. J. Camberato, S. N. Casteel, T. Creswell, J. Faghihi, B. C. Joern, W. G. Johnson, C. H. Krupke, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, G. C. Steinhardt, and K. A. Wise. 2011. *Corn and Soybean Field Guide – 2011 Edition*.
- Gerber, C. K., L. W. Bledsoe, D. R. Buckmaster, J. J. Camberato, W. G. Johnson, K. D. Johnson, C. H. Krupke, R. P. Lemenager, M. K. Neary, T. D. Nennich, G. R. W. Nice, J. L. Obermeyer, M. A. Russell, J. J. Volenec, and K. A. Wise. 2010. *Forage Field Guide – Second Edition*.
- Gerber, C. K., S. M. Brouder, J. J. Camberato, T. Creswell, J. Faghihi, B. C. Joern, W. G. Johnson, C. H. Krupke, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, G. C. Steinhardt, and K. A. Wise. 2010. *Corn and Soybean Field Guide – 2010 Edition*.

- Gerber, C. K., S. M. Brouder, J. J. Camberato, T. Creswell, J. Faghihi, B. C. Joern, W. G. Johnson, C. H. Krupke, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, G. C. Steinhardt, and K. A. Wise. 2009. Corn and Soybean Field Guide – 2009 Edition.
- Gerber, C. K., S. M. Brouder, J. J. Camberato, J. Faghihi, B. C. Joern, W. G. Johnson, C. H. Krupke, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, G. E. Shaner, G. C. Steinhardt, and A. Westphal. 2008. Corn and Soybean Field Guide – 2008 Edition.
- Gerber, C. K., S. M. Brouder, J. J. Camberato, J. Faghihi, B. C. Joern, W. G. Johnson, C. H. Krupke, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, G. E. Shaner, G. C. Steinhardt, and A. Westphal. 2007. Corn and Soybean Field Guide – 2007 Edition.
- Gerber, C. K., S. M. Brouder, J. J. Camberato, S. P. Conley, J. Faghihi, B. C. Joern, W. G. Johnson, C. H. Krupke, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, K. K. Rane, G. E. Ruhl, G. E. Shaner, G. C. Steinhardt, and A. Westphal. 2006. Corn and Soybean Field Guide – 2006 Edition.
- Gerber, C. K., S. M. Brouder, E. P. Christmas, J. Faghihi, B. C. Joern, W. G. Johnson, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, G. E. Shaner, G. C. Steinhardt, and A. Westphal. 2005. Corn and Soybean Field Guide – 2005 Edition.
- Gerber, C. K., S. M. Brouder, E. P. Christmas, J. Faghihi, B. C. Joern, W. G. Johnson, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, G. E. Shaner, G. C. Steinhardt, and A. Westphal. 2004. Corn and Soybean Field Guide – 2004 Edition.
- Gerber, C. K., S. M. Brouder, E. P. Christmas, J. Faghihi, B. C. Joern, W. G. Johnson, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, G. E. Shaner, G. C. Steinhardt, and A. Westphal. 2004. Corn and Soybean CD Field Guide – 2004 Edition.
- Gerber, C. K., S. M. Brouder, E. P. Christmas, J. Faghihi, B. C. Joern, W. G. Johnson, J. S. Loven, G. R. W. Nice, R. L. Nielsen, J. L. Obermeyer, G. E. Ruhl, G. E. Shaner, G. C. Steinhardt, and A. Westphal. 2003. Corn and Soybean CD Field Guide – 2003 Edition.
- Gerber, C., C. R. Edwards, and J. Kiss. 2001. Economic thresholds for WCR adults in soybean to predict subsequent damage to corn in Indiana. pp. 97–105. In XXI IWGO Conference; VIII Diabrotica Subgroup Meeting; Proceedings Book.
- Gerber, C. K., M. E. Gray, K. L. Steffey, C. R. Edwards, and L. W. Bledsoe. 1998. Illinois/Indiana areawide rootworm pest management program. In 1998 Update, Corn Rootworm Areawide 2 pages. (Website: <http://www.aces.uiuc.edu/~ipm/field/corn/insect/wcr.html>) (Interactive Web site: [www.aces.uiuc.edu/~ipm/field/corn/imr/wcrsout/wcrscout.html](http://www.aces.uiuc.edu/~ipm/field/corn/imr/wcrsout/wcrscout.html))
- Gerber, C., C. R. Edwards, L. Bledsoe, M. Gray, and K. Steffey. 1999. Areawide management of corn rootworms: was 1998 a success? pp. 37–39. In Proceedings of the Illinois Crop Protection.
- Developed 6 issues of the Areawide Pest Management Connection Newsletter. (1998-2001). (Website: [http://www.entm.purdue.edu/Entomology/ext/ext\\_newsletters.html](http://www.entm.purdue.edu/Entomology/ext/ext_newsletters.html))

#### **Awarded Grants:**

- Edwards, C. R., R. E. Foster, and C. K. Gerber. 2002. Survey Designed to Obtain Information on Pest Management and Production Practices Utilized in Various Cucurbit Cropping Systems. (\$60,073)
- Edwards, C. R., R. E. Foster, and C. K. Gerber. 2001. Prairie States Pest Management Alliance to Support the North Central Region Pest Management Center – Indiana. (\$59,421)

**Honors and awards:**

ACE – Association for Communication Excellence – Gold Award (2013) for the Midwest Cover Crops Field Guide  
ASA Educational Materials Awards Program – Certificate of Excellence (2013) for the Wheat Field Guide  
ASA Educational Materials Awards Program – Certificate of Excellence (2013) for the Corn and Soybean Field Guide App  
ACE – Association for Communication Excellence – Gold Award (2011) for the Forage Field Guide  
ACE – Association for Communication Excellence – Silver Award (2009) for the 2009 Corn and Soybean Field Guide  
2008 Purdue Agriculture TEAM Award (2008). Purdue University Crop Diagnostic Training and Research Center.  
Entomology Educational Project Award, 2007  
ACE – Association for Communication Excellence – Silver Award (2007) for the 2007 Corn and Soybean Field Guide  
ASA Educational Materials Awards Program – Certificate of Excellence (2006) for the 2006 Corn and Soybean Field Guide  
PUCESA Soybean Rust Team Award, 2005  
ASA Educational Materials Awards Program – Certificate of Excellence (2005) for the Forage Field Guide  
ACE – Association for Communication Excellence – Gold Award (2005) for the 2005 Corn and Soybean Field Guide  
ACE – Association for Communication Excellence – Gold Award (2004) for the Forage Field Guide  
ASA Educational Materials Awards Program – Certificate of Excellence (2004) for the 2004 Corn and Soybean CD Field Guide  
Entomology Educational Project Award, 2001  
USDA-ARS Technology Transfer Award, 1999  
Rouse UCLAF Scholarship, 1994  
J.J. Davis Scholarship, 1993  
Robert Oakes Scholarship, 1992  
Bioquip Scholarship, 1991  
National Pest Control Scholarship, 1991  
Elsie L. Gruel Scholarship, 1990  
J.T. Eaton Scholarship, 1990  
Marquardt Scholarships, 1989-1992  
Indiana State 4-H Entomology Sweepstakes Champion, 1987

**Teaching Experience:**

August 2000 - December 2007

Guest Lecturer: Entomology 510, a graduate level field crops IPM course. Department of Entomology. Purdue University, West Lafayette, IN. Lectures focused on the biology of the western corn rootworm, as well as the wide range of management techniques and strategies implemented throughout history to manage this pest.

August 1995 - December 1995

Teaching Assistant: Department of Entomology, Purdue University, West Lafayette, IN, under the direction of Dr. Christian Y. Oseto. Duties included: Assisting with the development and teaching of Entomology 295 - "How to Know Insects." Subject: General taxonomy in entomology.

August 1990 - May 1991

Teaching Assistant: Department of Biology, Purdue University, West Lafayette, IN, under the direction of Dr. Robert Hurst. Duties included: Teaching biology concepts to undergraduate students. Subject: General biology of plants and animals.

### **Additional Training Opportunities:**

In 2002, I accepted an invitation to travel to the University of Guelph, Canada, to utilize molecular tools in determining the gene frequency of the western corn rootworm located in Indiana (wild-type versus variant), Canada, and in different parts of Europe.

### **Research Presentations:**

Indiana/Illinois areawide rootworm pest management program. Corey K. Gerber, C. Richard Edwards, Larry W. Bledsoe, Michael E. Gray, and Kevin L. Steffey. Corn Rootworm Areawide Management Final Program Meeting, Las Vegas, NV, February 11-13, 2003.

An economic threshold and injury level for the rotation resistant WCR adult variant in soybean to predict subsequent damage to corn in Indiana, USA. Corey K. Gerber, C. Richard Edwards, and Larry W. Bledsoe. International Symposium on the Ecology and Management of Western Corn Rootworm, Göttingen, Germany, January 19-23, 2003.

Impact on yield and profit/loss of soil insecticides applied for control of western corn rootworm larvae in Indiana, USA. (Poster presentation) C. Richard Edwards, Larry W. Bledsoe, J. L. Obermeyer, and Corey K. Gerber. International Symposium on the Ecology and Management of Western Corn Rootworm, Göttingen, Germany, January 19-23, 2003.

Economic thresholds for WCR adults in soybean to predict subsequent damage to corn in Indiana. Corey K. Gerber, C. Richard Edwards, and Jozsef Kiss. XXI IWGO Conference; VIII Diabrotica subgroup meeting, Venice, Italy, October 27-November 3, 2001.

Indiana/Illinois areawide rootworm pest management program. Corey K. Gerber, C. Richard Edwards, Larry W. Bledsoe, Michael E. Gray, and Kevin L. Steffey. Corn Rootworm Areawide Management Program 2000 Annual Meeting, San Antonio, TX, October 24-26, 2000.

Indiana/Illinois areawide rootworm pest management program. Corey K. Gerber, C. Richard Edwards, Larry W. Bledsoe, Michael E. Gray, and Kevin L. Steffey. Corn Rootworm Areawide Management Program 1999 Annual Meeting, Kansas City, MO, October 13-15, 1999.

Application of the areawide concept for managing western corn rootworm in the eastern Midwest corn/soybean cropping system. Corey K. Gerber, C. Richard Edwards, Larry W. Bledsoe, Michael E. Gray, and Kevin L. Steffey. NCB Meetings, Des Moines, IA, March 28-31, 1999.

Areawide management of corn rootworms: Was 1998 a success? Corey K. Gerber, C. Richard Edwards, Larry W. Bledsoe, Michael E. Gray, and Kevin L. Steffey. 1999 Illinois agricultural pesticides

conference, Cooperative Extension Service, University of Illinois at Urbana-Champaign, Illinois, January 6, 1999.

Illinois/Indiana areawide rootworm pest management program. Corey K. Gerber, C. Richard Edwards, Larry W. Bledsoe, Michael E. Gray, and Kevin L. Steffey. Corn Rootworm Areawide Management Program 1998 Annual Meeting, Minneapolis, MN, October 13-15, 1998.

Western corn rootworm injury to corn following soybean in northwest Indiana: 1997 results. (Poster presentation) Corey K. Gerber, C. Richard Edwards, Larry W. Bledsoe, and George Barna. ESA meetings, Nashville, TN, December 14-18, 1997.

### **Extension Presentations:**

- 114 presentations highlighting major agricultural pest and crop problems, presented at the Purdue University Crop Diagnostic Training and Research Center. Audiences included producers, industry personnel, farm managers, and other agricultural professionals. (2003-2014).
- 5 presentations introducing the Corn and Soybean Field Guide app, and how this app will better enable agricultural professionals to make environmentally and economically sound crop production and crop and pest management input decisions and/or recommendations, presented at the Purdue University Crop Management Workshop. Audiences included producers, industry personnel, farm managers, and other agricultural professionals. The total audience included 980 individuals. (January, 2013).
- 5 presentations covering the major pest and crop problems encountered in 2010, presented at the Purdue University Crop Management Workshop. Audiences included producers, industry personnel, farm managers, and other agricultural professionals. The total audience included 960 individuals. (January, 2011).
- 9 presentations covering arrested ear development (5) and general crop diagnostic scenarios (4), presented at the Purdue University Crop Management Workshop. Audiences included producers, industry personnel, farm managers, and other agricultural professionals. The total audience included 885 individuals. (January, 2009).
- 5 presentations covering major agronomic pests and how these pests overwinter, presented at the Purdue University Crop Management Workshop. Audiences included producers, industry personnel, farm managers, and other agricultural professionals. The total audience included 885 individuals. (January, 2007).
- 5 presentations covering the major pest and crop problems encountered in 2005, presented at the Purdue University Crop Management Workshop. Audiences included producers, industry personnel, farm managers, and other agricultural professionals. The total audience included 885 individuals. (January, 2006).
- 5 presentations covering infield diagnostic approaches, presented at the Purdue University Crop Management Workshop. Audiences included producers, industry personnel, farm managers, and other agricultural professionals. The total audience included 874 individuals. (January, 2004).
- 6 meetings to present/discuss results of the Illinois/Indiana corn rootworm areawide management project. Audiences included producers, industry personnel, farm managers, and other agricultural professionals. (1998-2002).
- 4 meetings to present/discuss results on western corn rootworm populations and injury to corn following soybean in northwest Indiana. Audiences included producers, industry personnel, farm managers, and other agricultural professionals. (1997-2000).

**Certifications and Licenses Held:**

Indiana Pesticide Applicator license, 1 (agricultural)

**Membership in Professional/Scholarly Societies:**

American Society of Agronomy 2004  
Indiana Certified Crop Advisor Board 2004  
Entomological Society of America, 1991  
Phi Eta Sigma, National Honorary Fraternity, 1991  
Alpha Lambda Delta, National Honorary Fraternity, 1990