

CURRICULUM VITAE

Raymond Allen Cloyd

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Work Address:
Kansas State University
Department of Entomology
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Date of Appointment at Kansas State University: August 1, 2006.

Appointment Responsibilities: 70% Extension and 30% Research.

Title: Professor and Extension Specialist in Horticultural Entomology/Plant Protection.

BACKGROUND

1. Education

Doctor of Philosophy Degree (Ph.D) in Entomology; Purdue University, West Lafayette, IN. March 1999.
Dissertation: Effects of plant architecture on the attack rate of *Leptomastix dactylopii* (Howard) (Hymenoptera: Encyrtidae), a parasitoid of the citrus mealybug, *Planococcus citri* (Risso) (Homoptera: Pseudococcidae).

Master of Science Degree in Entomology; Purdue University, West Lafayette, IN. June 1995. Thesis: Evaluation of trichome density levels and bean leaf beetle, *Cerotoma trifurcata* (Forster), feeding preference on soybean pods.

Bachelor of Science Degree in Ornamental Horticulture; California Polytechnic State University—San Luis Obispo, CA. June 1990. Senior Project: Fungicide efficacy on *Pythium ultimum* of bedding plant seedlings. Minor Degree in Plant Protection/Pest Management.

Associate of Science Degree in Ornamental Horticulture; Monterey Peninsula College, Monterey, CA. June 1985.

2. Professional Employment

Owner/Manager: Ray Cloyd Landscape Gardeners and Horticultural Consultants. Monterey, CA. 1982-1992. Responsibilities: landscape maintenance, installation, designing, and horticultural consulting for commercial and residential clients.

Landscape Maintenance Supervisor: Sonora Hills Retirement Community. Sonora, CA. 1990-1992. Responsibilities: landscape and irrigation maintenance; insect, disease, and weed management; supervise and designate work-crew responsibilities.

Nursery Technician: Millards Garden Center. Sonora, CA. 1990-1991. Responsibilities: customer sales, greenhouse repair, plant material inventory, maintenance of nursery stock plants, and consulting for customers.

Greenhouse Manager/Pesticide Applicator: California Polytechnic State University—San Luis Obispo, Department of Ornamental Horticulture. San Luis Obispo, CA. 1988-1990. Responsibilities: coordinate operations for greenhouse facilities, designate work-crew responsibilities, and maintain greenhouse environmental control systems. Application of herbicides, insecticides, and fungicides in greenhouse, landscape, and nursery crop production systems. Implement integrated pest management strategies.

Assistant Professor/Associate Professor: Extension Specialist in Ornamental Entomology/Integrated Pest Management; University of Illinois, Department of Natural Resources and Environmental Sciences, Urbana, IL. 1999-2006. Appointment: Extension (70%) and Research (30%). Responsibilities: Extension and research associated with pest management of greenhouses, nurseries, landscapes, turfgrass, conservatories, and interiorscapes. Extension specialist in ornamental entomology for the state of Illinois. Major clientele: homeowners, master gardeners, and professional and commercial operators.

AWARDS AND HONORS

1. Undergraduate Awards

Outstanding Senior in Ornamental Horticulture 1990.
 Outstanding Achievement in Ornamental Horticulture 1988-90.
 Joseph Shinoda Memorial Scholarship 1987-89.
 Presidents Honor List 1987 and 1989.
 CAN (California Association of Nurserymen) Scholarship 1985, 1987-90.
 Certificate of Achievement in Ornamental Horticulture 1985.
 Deans Honor List 1982-90.

2. Graduate Awards

Robert O. and Norma Y. Williams Pest Control Conference Award 1994, 1995, and 1997.
 Bedding Plants Foundation, Inc., John Carew Memorial Scholarship 1997.
 Dow AgroSciences Graduate Scholarship 1998.

3. Professional Awards

University of Illinois Extension Outstanding/Innovative Program Team Award (“Insect Identification Series”) 2001.
 Southern Illinois Bedding Plant School Outstanding Service Award 2003.
 College of Agricultural, Consumer, and Environmental Sciences Faculty Award for Excellence in Extension 2003.
 Indiana Flower Growers Association Appreciation Award 2003.
 Visionary Leadership Award, Epsilon Sigma Phi Extension Fraternity 2003.
 American Society of Horticultural Science, Outstanding Extension Publication Award (Outstanding Primarily Visual Award) 2003.
 University of Illinois Excellence in Extension Campus Award for Less than 10 Years of Service 2004.
 Entomological Society of America Outstanding Service Award, *Arthropod Management Test* Editorial Board (Chairperson and Member) 2005.
 Early Career Extension Award, Epsilon Sigma Phi Extension Fraternity (Illinois Alpha Nu Chapter) 2006.
 North Central Region, Epsilon Sigma Phi Early Career Extension Award 2007.
 Epsilon Sigma Phi, Alpha Rho State Early Career Extension Award 2008.
 Extension Length of Service Award—10 years: Epsilon Sigma Phi Alpha Rho Chapter 2009.
 Kansas State Research and Extension 10 Years of Service Award; Kansas State University 2009.
 Ohio Florists’ Association Bulletin Author of the Year Award, Ohio Florists’ Association 2010.
 American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: Dormant oils—Everything you ever wanted to know. The Nashville Rose Leaf) 2010.
 American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: Defusing misconceptions about thrips. The Nashville Rose Leaf) 2010.
 American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: What rose growers should know about colony collapse disorder. The Nashville Rose Leaf) 2010.
 Entomological Society of America North Central Branch Award of Excellence in Integrated Pest Management 2010.

- American Society for Horticultural Science Outstanding Extension Publication Award (Outstanding Leaflet Award; Resistance Management: Resistance, Mode of Action, and Pesticide Rotation) 2010.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: Pesticide resistance. The Nashville Rose Leaf) 2011.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: Imidacloprid (Merit[®]). The Nashville Rose Leaf) 2011.
- Society of American Florists Alex Laurie Award for Research and Extension 2011.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: Rose rosette disease. The Nashville Rose Leaf) 2012.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: What are pesticide Metabolites? The Nashville Rose Leaf) 2012.
- American Society for Horticultural Sciences Outstanding Extension Educator Award 2012.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: Japanese beetles: What can you do? The Nashville Rose Leaf) 2013.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: Two spotted spider mites on roses. The Nashville Rose Leaf) 2013.
- Epsilon Sigma Phi Alpha Rho Chapter Mid-Career Extension Award 2013.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: METI Miticides: What are they? The Nashville Rose Leaf) 2014.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: Rose aphid—Beware of this ‘sucker.’ The Nashville Rose Leaf) 2014.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: Soaps and detergents: Should they be used on roses? The Nashville Rose Leaf) 2014.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: What is insecticide hormoligosis? The Nashville Rose Leaf) 2014.
- American Society for Horticultural Science Extension Division; Outstanding Education Materials Award (Outstanding Leaflet Award: Rose Rosette Disease) 2014.
- K-State Research and Extension 2014 Team Award; Extension Integrated Pest Management 2014.
- Alpha Rho Chapter, Epsilon Sigma Phi: National Honor Extension Fraternity; Tenure Award (15 years: Cooperative Extension Service, Kansas State University, Manhattan, KS) 2014.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: Translaminar pesticides: Factors that may impact effectiveness. The Nashville Rose Leaf) 2015.
- American Rose Society Award of Merit Bulletin/Newsletter Contest (Article: What are adjuvants? The Nashville Rose Leaf) 2015.
- American Society for Horticultural Science Extension Division; Outstanding Education Materials Award (Outstanding Leaflet Award: Spotted Wing Drosophila) 2015.
- National Association of County Agricultural Agents (NACAA) Communications Contest [Publication: ‘Commercially available biological control agents for common greenhouse insect pests.’ Authors: Heidi Wollaeger and David Smitley (Michigan State University), and Raymond Cloyd (Kansas State University)] 2016.
- Professional Performance Award (Department of Entomology; College of Agriculture, Kansas State University, Manhattan, KS) 2017.
- State Association Leader Award for Kansas (Western Nursery and Landscape Association; Kansas City, MO) 2017.
- American Society for Horticultural Science Extension Division; Outstanding Education Materials Award (Outstanding Leaflet Award: Squash Bug) 2017.

EXTENSION

1. Publications: Extension-Related

- Midwest vegetable production guide for commercial growers. 2017. Kansas State University Research and Extension. Collaboration with Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, and Ohio. Entomology: Raymond Cloyd (contributing Editor). 230 pgs (revised annually).
- Midwest fruit pest management guide. 2017. Kansas State University Research and Extension. Collaboration with Arkansas, Illinois, Indiana, Iowa, Kentucky, Minnesota, Missouri, Nebraska, Ohio, Oklahoma, West Virginia, and Wisconsin. Entomology: Raymond Cloyd. 179 pgs (revised annually).
- Cloyd, R. July 2017. Shore fly. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF3384. Kansas State University, Manhattan, KS. 2 pgs.
- Rebek, E. J., and R. A. Cloyd. 2017. Management of insects and mites in greenhouse floral crops. Oklahoma Cooperative Extension Service. CR-6718. Division of Agricultural Sciences and Natural Resources, Oklahoma State University, Stillwater, OK. 16 pgs.
- Kennelly, M. M., R. A. Cloyd, J. O'Mara, and J. J. Griffin. January 2016. Tree and shrub problems in Kansas: diseases, insects, and environmental stresses. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF3132. Kansas State University, Manhattan, KS. 72 pgs.
- Midwest vegetable production guide for commercial growers. 2016. Kansas State University Research and Extension. Collaboration with Illinois, Indiana, Iowa, Minnesota, Missouri, and Ohio. Entomology: Raymond Cloyd (contributing Editor). 212 pgs (revised annually).
- Midwest small fruit and grape spray guide. 2016. Kansas State University Research and Extension. Collaboration with Arkansas, Illinois, Indiana, Iowa, Kentucky, Minnesota, Missouri, Nebraska, Ohio, Oklahoma, West Virginia, and Wisconsin. Entomology: Raymond Cloyd. 89 pgs (revised annually).
- Midwest tree fruit spray guide. 2016. Kansas State University Agricultural Experiment Station and Cooperative Extension Service S-146. Collaboration with Arkansas, Illinois, Indiana, Iowa, Kentucky, Missouri, Ohio, and Wisconsin. Entomology: Raymond Cloyd. 72 pgs (revised annually).
- Cloyd, R. A. and J. R. Nechols. July 2016. Squash vine borer. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF3309. Kansas State University, Manhattan, KS. 2 pgs.
- Cloyd, R. A., and J. R. Nechols. July 2016. Squash bug. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF3308. Kansas State University, Manhattan, KS. 4 pgs.
- Cloyd, R. A. May 2016. Brownheaded ash sawfly. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF3297. Kansas State University, Manhattan, KS. 2 pgs.
- McKernan, M., and R. Cloyd. May 2016. Oak vein pocket gall. Kansas State University Agricultural Experiment Station and Cooperative Extension Service; Kansas State University, Manhattan, KS. 2 pgs.
- Wollaeger, H. D. Smitley, and R. Cloyd. 2015. Commercially available biological control agents for common greenhouse insect pests. Michigan State University Extension and Kansas State University. 6 pgs.
- Cloyd, R., M. Kennelly, C. Lee, W. Upham, and J. Hoyle. 2015. Ornamental pest control (Category 3A). Kansas State University Agricultural Experiment Station and Cooperative Extension Service. S11 (April 2015). Kansas State University, Manhattan, KS. 73 pgs.
- Rebek, E. J., and R. A. Cloyd. 2015. Management of insects and mites in greenhouse floral crops. Oklahoma Cooperative Extension Service. CR-6718. Division of Agricultural Sciences and Natural Resources, Oklahoma State University, Stillwater, OK. 16 pgs.
- Cloyd, R. A. December 2015. Effect of water and spray solution pH on pesticide activity. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-3272. Kansas State University, Manhattan, KS. 2 pgs.
- Cloyd, R. A. May 2015. Common asparagus beetle. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-3231. Kansas State University, Manhattan, KS. 2 pgs.

- Cloyd, R. A., and C. Copeland. April 2014. Spotted wing drosophila. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-3158. Kansas State University, Manhattan, KS. 4 pgs.
- Cloyd, R. A. June 2014. Harlequin bug. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-3135. Kansas State University, Manhattan, KS. 4 pgs.
- Kennelly, M. M., R. A. Cloyd, J. O'Mara, and J. J. Griffin. February 2014. Tree and shrub problems in Kansas: diseases, insects, and environmental stresses. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-3132. Kansas State University, Manhattan, KS. 66 pgs.
- Miller, F. L., B. Bauernfeind, R. A. Cloyd, S. Keeley, M. Kennelly, C. Lee, and W. Upham. September 2013. Turf pest control. Kansas State University Agricultural Experiment Station and Cooperative Extension Service Category 3B. S-20. Kansas State University, Manhattan, KS. 64 pgs.
- Cloyd, R. A. April 2013. Insect growth regulators for use in greenhouses. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-3094. Kansas State University, Manhattan, KS. 2 pgs.
- Cloyd, R. A. April 2013. Rose rosette disease. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2974. Kansas State University, Manhattan, KS (revised from March 2011). 2 pgs.
- Hale, F. A., and R. A. Cloyd. 2013. Insect and mite management in greenhouses. The University of Tennessee, Institute of Agriculture. The University of Tennessee Extension PB 1594, Knoxville, TN (extensive revision since 2001). 21 pgs.
- Cloyd, R. A. 2012. Pesticide metabolites. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-3070. Kansas State University, Manhattan, KS. 2 pgs.
- Cloyd, R. A. 2012. Pesticide mixtures: Understanding their use in horticultural production systems. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-3045. Kansas State University, Manhattan, KS. 4 pgs.
- Cloyd, R. A. 2012. Management of insects and mites in greenhouse floral crops. Rebeck, E. J. [ed.]. Oklahoma Cooperative Extension Service. CR-6718. Division of Agricultural Sciences and Natural Resources, Oklahoma State University, Stillwater, OK. 8 pgs.
- Cloyd, R., and M. Kennelly. 2011. Interior landscape pest management. Kansas State University Agricultural Experiment Station and Cooperative Extension Service Category 3C. S-33. Kansas State University, Manhattan, KS. 35 pgs.
- Bauernfeind, B., R. Cloyd, E. DeWolf, W. Fick, D. Jardine, M. Kennelly, D. Peterson, J. Whitworth, and R. E. Wolf. 2011. Agricultural plant pest control. Kansas State University Agricultural Experiment Station and Cooperative Extension Service Category 1A. S-19. Kansas State University, Manhattan, KS. 126 pgs.
- Cloyd, R. A. 2011. Mealybug: Management in greenhouses and nurseries. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-3001. Kansas State University, Manhattan, KS. 4 pgs.
- Cloyd, R. A. 2011. Twospotted spider mite: Management in greenhouses and nurseries. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2997. Kansas State University, Manhattan, KS. 8 pgs.
- Cloyd, R. A. 2011. Rose rosette disease. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2974. Kansas State University, Manhattan, KS. 2 pgs.

- M. Kushad, E. Wahle, M. Ogutu, R. Weinzierl, M. Babadoost, J. Masiunas, P. Domoto, G. Nonnecke, D. Lewis, M. Gleason, T. Carey, R. Cloyd, M. Kennelly, J. Strang, T. Jones, R. Bessin, J. Hartman, M. Warmund, B. Barrett, K. Striegler, M. Kaps, L. Kovacs, M. Pszolkowski, P. Read, F. Baxendale, J. Chaky, L. Sandell, I. Dami, S. Wright, D. Doohan, C. Welty, R. Williams, M. Ellis, E. Stafne, P. Mulder, D. Smith, B. Bordelon, R. Foster, J. Beckerman, S. Weller, J. Jett, J. Baniecki, R. Harbut, B. Smith, P. McManus, D. Mahr, and J. Colquhoun. 2010. Midwest small fruit and grape spray guide. Bordelon, B., M. Ellis, and C. Welty [eds.]. Kansas State University, Agricultural Experiment Station and Cooperative Extension Service. S-145. 74 pgs.
- Cloyd, R. A. 2010. Broad mite and cyclamen mite: Management in greenhouses and nurseries. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2938. Kansas State University, Manhattan, KS. 4 pgs.
- Cloyd, R. A. 2010. Bulb mites: Management in greenhouses and nurseries. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2939. Kansas State University, Manhattan, KS. 2 pgs.
- Cloyd, R. A. 2010. Fungus gnats: Management in greenhouses and nurseries. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2937. Kansas State University, Manhattan, KS. 4 pgs.
- Davis, H., J. R. Whitworth, R. A. Cloyd, and C. Otte. 2010. Bed bugs. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2926. Kansas State University, Manhattan, KS. 4 pgs.
- Marr, C. W., T. Carey, R. Cloyd, and M. Kennelly. 2010. Kansas Garden Guide. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. S-51 (Rev.). Kansas State University, Manhattan, KS. 76 pgs.
- Cloyd, R. A. July 2010. Management of insects and mites in greenhouse floral crops. Rebek E. J., and T. A. Royer [eds.]. Oklahoma Cooperative Extension Service. CR-6718. Division of Agricultural Sciences and Natural Resources, Oklahoma State University, Stillwater, OK. 8 pgs.
- Cloyd, R. A. 2010. Western flower thrips: Management on greenhouse-grown crops. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2922. Kansas State University, Manhattan, KS. 8 pgs.
- Cloyd, R. A., and R. S. Cowles. 2009. Resistance management: Resistance, mode of action, and pesticide rotation. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2905. Kansas State University, Manhattan, KS. 8 pgs.
- Quinn, J., D. Trinklein, and R. A. Cloyd. 2009. Integrated pest management in greenhouses and nurseries. University of Missouri Extension. IPM 1026. United States Department of Agriculture; Cooperative Extension, University of Missouri, Columbia, MO. 8 pgs.
- Cloyd, R. A. 2009. Mulches and living organisms. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2900. Kansas State University, Manhattan, KS. 2 pgs.
- Cloyd, R. A., J. Quinn, and D. Trinklein. 2009. Integrated pest management in greenhouses and herbaceous nurseries. Kansas State University Agricultural Experiment Station and Cooperative Extension Service. MF-2892. Kansas State University, Manhattan, KS. 7 pgs.
- Cranshaw, W. S., and R. A. Cloyd. 2009. Fungus gnats as houseplant and indoor pests. Insect Series Home & Garden, no. 5.5584. Colorado State University, Fort Collins, CO. 3 pgs.
- Byrne, J., and R. A. Cloyd. 2007. A pocket guide for IPM scouting in herbaceous perennials. Michigan State University Extension Bulletin E-2981; Lansing, MI. 105 pgs.
- Cloyd, R. 2006. Greenhouse floral crops: Insect and mite control suggestions, pp. 469-475. In: Oklahoma State University Extension Agents' Handbook of Insect, Plant Disease, and Weed Control E-832. Oklahoma Cooperative Extension Service, Division of Agricultural Sciences and Natural Resources, Oklahoma State University, Stillwater, OK. 537 pgs.

- Cloyd, R. A., and C. S. Sadof. 2003. Western flower thrips. Purdue Cooperative Extension Service Bulletin E-110-W. Purdue University; West Lafayette, IN. 4 pgs.
- Cloyd, R. A., and C. S. Sadof. 2003. Fungus gnats and shore flies. Purdue Cooperative Extension Service Bulletin E-111-W. Purdue University; West Lafayette, IN. 4 pgs.
- Williamson, R. C., R. A. Cloyd, and S. C. Hong. 2003. Integrated pest management in greenhouses A3744 (poster). Cooperative Extension of the University of Wisconsin—Extension, Madison, WI.
- Cloyd, R. A., C. S. Sadof, K. K. Rane, G. E. Ruhl, and E. T. Maynard. 2002. Spring greenhouse bedding plants: Insect, mite, and disease management ID-218. Purdue University Cooperative Extension Service: Purdue University; West Lafayette, IN. 11 pgs.
- Hale, F. A., R. A. Cloyd, and E. E. Burgess. 2001. Using pesticides in greenhouses. The University of Tennessee Agricultural Extension Service Publication 1595. University of Tennessee; Knoxville, TN. 14 pgs.
- Paulsrud, B. E., R. A. Cloyd, J. D. Kindhart, R. Weinzierl, J. Masiunas, M. Babadoost, D. I. Edwards, and B. E. Branham. 2001. Soil Fumigation. Illinois Pesticide Applicator Training Manual 39-18. College of Agricultural, Consumer and Environmental Sciences; University of Illinois Extension, Champaign-Urbana, IL. 20 pgs.
- Tips on selecting pest management strategies. Second edition. June 2001. Ohio Florists' Association Services, Inc., Columbus, OH (extensive revision bi-annually since 1999). Contributing authors: J. Bethke, M. Casey, W. E. Chaney, R. A. Cloyd, D. Colbert, T. W. Davis, B. M. Drees, S. A. Gill, D. Gilrein, A. H. Hara, T. Y. Hara, K. M. Heinz, C. Jacobsen, P. C. Krauter, R. Lindquist, D. G. Nielsen, R. D. Oetting, R. A. Redak, R. Reeser, C. S. Sadof, L. Siracusano, D. R. Smitley, S. A. Tjosvold, S. P. Thompson, and J. A. Yogi-Chun.
- Cloyd, R., P. Nixon, M. Weisbrook, B. Paulsrud, and M. Mohr. 2001. Integrated pest management and pesticide safety, pp. 139-163. In: Home, Yard, and Garden Pest Guide: University of Illinois Extension, Circular 1374. University of Illinois; Champaign-Urbana, IL. 163 pgs.
- Cloyd, R. A., and P. L. Nixon. 2000. Slugs. Entomology Fact Sheet, NHE-84. Department of Natural Resources and Environmental Sciences; University of Illinois Extension, Champaign-Urbana, IL. 2 pgs.
- Cloyd, R. A. 2000. Earwigs. Entomology Fact Sheet, NHE-142. Department of Natural Resources and Environmental Sciences; University of Illinois Extension, Champaign-Urbana, IL. 2 pgs.
- Cloyd, R. A., and P. L. Nixon. 2000. Multicolored Asian lady beetle. Entomology Fact Sheet, NHE-161. Department of Natural Resources and Environmental Sciences; University of Illinois Extension, Champaign-Urbana, IL. 2 pgs.
- Cloyd, R. A., and P. L. Nixon. 2000. Gypsy moth. Entomology Fact Sheet, NHE-153. Department of Natural Resources and Environmental Sciences; University of Illinois Extension, Champaign-Urbana, IL. 4 pgs.
- Cloyd, R. 2000. Integrated pest management, pp. H3-H8. In: Illinois Master Gardener Manual. University of Illinois Extension, Champaign-Urbana, IL.
- Gibson, J. L., B. E. Whipker, and R. Cloyd. 2000. Success with container production of twelve herb species. Horticulture Information Leaflet 509. North Carolina State University, Raleigh, NC. 8 pgs.
- Whipker, B. E., J. L. Gibson, R. A. Cloyd, C. R. Campbell, and R. Jones. 1998. Success with ornamental cabbage and kale. Horticulture Information Leaflet 507. North Carolina State University, Raleigh, NC. 9 pgs.
- Whipker, B. E. and R. A. Cloyd. 1998. Guide to successful outdoor garden mum production. Horticulture Information Leaflet 506. North Carolina State University, Raleigh, NC. 8 pgs.
- Lerner, B. R., M. N. Dana, C. Sadof, R. Cloyd, and P. Pecknold. 1998. Roses. Department of Horticulture. Purdue Coop. Ext. Serv. Bull; Purdue University, West Lafayette, IN. HO-128. 10 pgs.

2. Publications: Books/Book Chapters

- Cloyd, R. A. 2017. Biological control and pesticides: integration in greenhouse production systems. pp. 73-112. In: *Biological Control: Methods, Applications, and Challenges*; Davenport, L. [ed.]. Nova Science Publishers, Inc.; New York, NY. 150 pgs. ISBN no 978-1-53612-416-3
- Cloyd, R. A. 2017. Insect management for disease control in florist's crops, pp. 1-17. In: *Handbook of Florists' Crops Diseases*; McGovern, R. J., and W. Elmer [eds.]. Springer International Publishing; New York, NY. ISBN no 978-3-319-323474-9.
- Cloyd, R. A. 2016. *Greenhouse pest management*. CRC Press, Taylor & Francis Group; Boca Raton, FL. 196 pgs. ISBN no. 978-1-4822-2778-9
- Cloyd, R. A. 2015. Biological control of whiteflies, pp. 81-96. In: *Whiteflies and Aphids: Natural Occurrences, Biological Control and Plant Responses*; Reeves, D. L. [ed.]. Nova Science Publishers, Inc.; New York, NY. 102 pgs. ISBN no. 978-1-63482-507-8
- Whipker, B. E., R. Cloyd, and C. Warfield. 2012. *Troubleshooting Petunia Disorders (Second Edition)*. 68 pgs. ID 11037792 (www.lulu.com)
- Cloyd, R. A. 2012. Chapter 4: Systemic insecticides, pp. 105-126. In: Daniels, J. A. [ed.]. *Advances in Environmental Research Volume 24*. Nova Science Publishers, Inc.; New York, NY. 254 pgs. ISBN no. 978-1-61942-171-4
- Cloyd, R. A. 2012. Indirect effects of pesticides on natural enemies, pp. 127-150. In: Soundararajan, R. P. [ed.]. *Pesticides—Advances in Chemical and Botanical Pesticides*. InTech; Rijeka, Croatia. 382 pgs. ISBN no. 978-953-51-0680-7
- Cloyd, R. A. 2012. Chapter 13: Insect and mite management in greenhouses, pp. 391-441. In: Nelson, P. V. [ed.]. *Greenhouse Operation and Management (7th edition)*. Pearson Prentice Hall; Upper Saddle River, NJ. 605 pgs. ISBN no. 978-0-13-243936-7
- Kennelly, M. M., and R. A. Cloyd. 2012. Chapter 14: Disease management in greenhouses, pp. 443-462. In: Nelson, P. V. [ed.]. *Greenhouse Operation and Management (7th edition)*. Pearson Prentice Hall; Upper Saddle River, NJ. 605 pgs. ISBN no. 978-0-13-243936-7
- Cloyd, R. A., and M. L. Daughtrey 2011. Resistance mitigation, pp. 137-142. In: Nau, J. [ed.]. *Ball Redbook Volume 2: Crop Production (18th Edition)*. Ball Publishing; West Chicago, IL. 785 pgs. ISBN no. 978-1-883052-68-3
- Cloyd, R. A. 2011. Managing insect and mite pests, pp. 107-119. In: Nau, J. [ed.]. *Ball Redbook Volume 2: Crop Production (18th Edition)*. Ball Publishing; West Chicago, IL. 785 pgs. ISBN no. 978-1-883052-68-3
- Cloyd, R. A. 2011. EPA worker protection standards, pp. 194-196. In: Beytes, C. [ed.]. *Ball Redbook Volume 1: Greenhouses and Equipment (18th Edition)*. Ball Publishing; West Chicago, IL. 263 pgs. ISBN no. 978-1-883052-67-6
- Cloyd, R. A. 2011. The basics of greenhouse pest control, pp. 183-185. In: Beytes, C. [ed.]. *Ball Redbook Volume 1: Greenhouses and Equipment (18th Edition)*. Ball Publishing; West Chicago, IL. 263 pgs. ISBN no. 978-1-883052-67-6
- Cloyd, R. A. 2011. Pesticide mixtures, pp. 69-80. In: *Pesticides—Formulations, Effects, Fate*. Stoytcheva M. [ed.]. InTech; Rijeka, Croatia. 808 pgs. ISBN no. 978-953-307-532-7
- Nixon, P., and R. Cloyd. 2010. Managing insects and mites on woody ornamental plants, pp. 35-51. In: *Commerical Landscape and Turfgrass: Pest Management Handbook*. University of Illinois Extension. College of Agricultural, Consumer and Environmental Sciences; University of Illinois, Urbana-Champaign, IL. 110 pgs. ISBN no. 978-978-1-883095
- Wiesbrook, M., P. Nixon, S. Bretthauer, J. Shuster, and R. Cloyd. 2008. Integrated pest management and pesticide safety, pp. 151-178. In: *Home, Yard, and Garden Pest Guide, Circular C1391-08*. University of Illinois Extension: College of Agricultural, Consumer and Environmental Sciences; University of Illinois, Champaign-Urbana, IL. ISBN no. 1-883097-61-4.
- Cloyd, R. A. 2007. *Plant protection: Managing greenhouse insect and mite pests*. Ball Publishing; Batavia, IL. 88 pgs. ISBN no. 978-1-883052-60-7

- Horst, R. K., and R. A. Cloyd. 2007. *Compendium of rose diseases and pests* [second edition]. The American Phytopathological Society; St. Paul, MN. 82 pgs. ISBN no. 978-0-89054-355-9
- Cloyd, R. A., and P. L. Nixon. 2007. *Managing insects and mites on woody ornamental plants*, pp. 37-53. In: *Commercial Landscape and Turfgrass Pest Management Handbook*. University of Illinois Extension. College of Agricultural, Consumer, and Environmental Sciences; University of Illinois, Champaign-Urbana, IL. 118 pgs. ISBN no. 1-883097-56-8
- Gill, S., R. A. Cloyd, J. R. Baker, D. L. Clement, and E. Dutky. 2006. *Pests and diseases of herbaceous perennials: The biological approach* [second edition]. Ball Publishing; Batavia, IL. 422 pgs. ISBN no. 1-883052-50-5
- Cloyd, R. A., and C. A. Casey. 2006. Chapter 10: Insect, mite, and slug management, pp. 115-133. In: *Cutting Propagation: A Guide to Propagating and Producing Floriculture Crops*. Dole, J. M., and J. L. Gibson [eds.]. Ball Publishing; Batavia, IL. 385 pgs. ISBN no. 1-883052-48-3
- Weinzierl, R., and R. A. Cloyd. 2006. *Insect pest management for commercial vegetable crops*, pp. 197-234. In: *Illinois Agricultural Pest Management Handbook*. University of Illinois Extension. College of Agricultural, Consumer, and Environmental Sciences; University of Illinois, Champaign-Urbana, IL. 356 pgs. ISBN no. 1-883097-55-X
- Gill, S. A., and R. A. Cloyd. 2004. *Biological control in bedding plants*, pp. 409-417. In: *BioControl in Protected Culture*, K. M. Heinz, R. G. Van Driesche, and M. P. Parrella [eds.]. Ball Publishing; Batavia, IL. 552 pgs. ISBN no. 1-883052-39-4
- Cloyd, R. A., P. L. Nixon, and N. R. Pataky. 2004. *IPM for Gardeners: A Guide to Integrated Pest Management*. Timber Press; Portland, OR. 204 pgs. ISBN no. 0-88192-647-7
- Nixon, P., and R. Cloyd. 2004. *Managing insect pests in the home, yard, and garden*, pp. 1-35. In: *Home, Yard, and Garden Pest Guide*, University of Illinois Extension. College of Agricultural, Consumer, and Environmental Sciences Circular 1391. University of Illinois; Champaign-Urbana, IL. 181 pgs. ISBN no. 1-883097-47-9
- Cloyd, R. A. 2003. *Managing insects and mites*, pp. 113-125. In: *Ball Redbook Crop Production, Volume 2, 17th edition*, D. Hamrick [ed.]. Ball Publishing; Batavia, IL. 724 pgs. ISBN no. 1-883052-35-1
- Cloyd, R. A., and M. L. Daughtrey. 2003. *Managing resistance*, pp. 145-149. In: *Ball Redbook Crop Production, Volume 2, 17th edition*, D. Hamrick [ed.]. Ball Publishing; Batavia, IL. 724 pgs. ISBN no. 1-883052-35-1
- Cloyd, R. A. 2003. *Worker protection standards*, pp. 209-211. In: *Ball Redbook Greenhouses and Equipment, volume 1, 17th edition*, C. Beytes [ed.]. Ball Publishing; Batavia, IL. 260 pgs. ISBN no. 1-883052-34-1
- Cloyd, R. A. 2003. *The basics of greenhouse pest control*, pp. 195-197. In: *Ball Redbook Greenhouses and Equipment, Volume 1, 17th edition*, C. Beytes [ed.]. Ball Publishing; Batavia, IL. 260 pgs. ISBN no. 1-883052-34-1

3. Books: Contributions and Mini-Articles

- Cloyd, R. A. 2014. *Biological control*, pp. 113-113. In: *Compendium of Rhododendron and Azalea Diseases and Pests (second edition)*, Linderman, R. G., and D. M. Benson [eds.]. The American Phytopathological Society; St. Paul, MN. 135 pgs. ISBN no. 978-89054-436-5
- Cloyd, R. A. 2014. *Pesticides*, pp. 112-113. In: *Compendium of Rhododendron and Azalea Diseases and Pests (second edition)*, Linderman, R. G., and D. M. Benson [eds.]. The American Phytopathological Society; St. Paul, MN. 135 pgs. ISBN no. 978-89054-436-5
- Cloyd, R. A. 2014. *Implementing an integrated pest management program*, pp. 109-112. In: *Compendium of Rhododendron and Azalea Diseases and Pests (second edition)*, Linderman, R. G., and D. M. Benson [eds.]. The American Phytopathological Society; St. Paul, MN. 135 pgs. ISBN no. 978-89054-436-5

GrowerTalks on Pest Control. 2001. R. Blanchette [ed.]. Ball Publishing; Batavia, IL. 298 pgs.
ISBN no. 1-883052-26-2

* Cloyd, R. A. Success with smokes/fumigants and aerosols; pgs 90-92.

* Cloyd, R. A., and C. S. Sadof. Simple ways to reduce insect and disease risks; pgs 105-107.

* Cloyd, R. A., and K. K. Rane. Pest connection; pgs 156-159.

* Cloyd, R. A., and H. A. J. Hoitink. Update on disease-suppressive potting mixes; pgs 213-214.

4. Publications: Manuals/Guides

Cloyd, R. A., K. E. Kalmowitz, J. Browning. 2017-2018. Insecticide, miticide, & fungicide guide.

GrowerTalks; West Chicago, IL. Sponsored by BASF. 31 pgs. Supplemental articles and information:

a. Cloyd, R. A. Pesticide rotation; 4.

b. Cloyd, R. A. Pesticide mixtures; 6-7.

c. Cloyd, R. A. How to maximize the effectiveness of pesticides; 8-9.

d. Cloyd, R. A. 2017 pest control materials for managing insect and mite pests of greenhouse-grown horticultural crops; 10-17.

Cloyd, R. A., and A. Chase. 2016-2017. Insecticide, miticide, & fungicide guide. GrowerTalks; West Chicago, IL. Sponsored by BASF. 23 pgs. Supplemental articles and information:

a. Cloyd, R. A. Pesticide rotation; 4.

b. Cloyd, R. A. Pesticide mixtures; 6-7.

Cloyd, R. 2015/2016. Pest control guide. Supplement to: Greenhouse Management. Sponsored by BASF. 23 pgs.

Berg Stack, L., R. Cloyd, J. Dill, R. McAvoy, L. Pundt, R. Raudales, C. Smith, and T. Smith. 2015. New England greenhouse floriculture guide: a management guide for insects, diseases, weeds, and growth regulators 2015-2016. New England Floriculture, Inc. and the New England State Universities. 290 pgs (revised every two years).

Cloyd, R. A. 2012. Pest control guide. Greenhouse Management 32(1): 12 pgs.

Cloyd, R. A. 2011. Insect and mite pests, pp. 7.1-7.22. In: Sakata® Gerbera Manual. Sakata Ornamentals. Sakata Seed America, Inc., Morgan Hill, CA.

Whipker, B. E., R. Cloyd, and C. Warfield. 2011. Troubleshooting petunia disorders: a pictorial guide for identification and correction. Ball Publishing; Batavia, IL. 68 pgs.

Cloyd, R. A. 2011. Pest control guide. Greenhouse Management 31(1). 16 pgs.

Cloyd, R., and C. Warfield. 2008. Insecticide and fungicide guide 2009. GrowerTalks, West Chicago, IL. 30 pgs.

Cloyd, R. A., and M. Ryba-White. 2008. Pest Control Materials for K-State Plant Pathology Greenhouses (2-page laminated chart). Kansas State University, Manhattan, KS.

Osborne, L., R. Cloyd, R. Oetting, and W. Hudson. 2006. Stop pests from eating your profits: Management of four major insect pests on greenhouse crops. Southwest Greenhouse Conference Workshop; Greenville, SC (June 22, 2006). 22 pgs.

Cloyd, R. A., B. E. Whipker, and W. Buhler [eds]. 2006. Picture (PICT) Insect and Mite Pest Guide of Herbaceous Annuals and Perennials. North Carolina Commercial Flower Growers' Association; North Carolina State University, Raleigh, NC. 50 pgs.

Whipker, B. E., B. Krug, C. Y. Warfield, R. A. Cloyd, and W. Buhler [eds]. 2006. Picture (PICT) geranium disorder guide. North Carolina Commercial Flower Growers' Association; North Carolina State University, Raleigh, NC. 50 pgs.

Lindquist, R. K., and R. A. Cloyd. 2005. Identification of insects and related pests of horticultural plants. Ohio Floriculture Association Services, Inc.; Columbus, OH. 46 pgs.

Williams, K. A., and R. A. Cloyd. 2005. Calculating the costs of pest management, pp. 47-55. In: Tips on Operating a Profitable Greenhouse Business. Ohio Floriculture Association Services, Inc.; Columbus, OH. 88 pgs.

- Cloyd, R. A. 2004. Management of insect-vectored diseases, pp. 37-39. In: Integrated Pest Management of Midwest Landscapes. Cooperative Project of NCR-193, North Central Committee on Landscape IPM, Minnesota Agricultural Experiment Station SB-07645. 315 pgs.
- Cloyd, R. A. 2004. Pesticide characteristics and use, pp. 40-41. In: Integrated Pest Management of Midwest Landscapes. Cooperative Project of NCR-193: North Central Committee on Landscape IPM; Minnesota Agricultural Experiment Station SB-07645. 315 pgs.
- Cloyd, R. A., and R. K. Lindquist. 2004. Insect and mite management chart for greenhouse ornamentals, pp. 7-21. In: Tips on Managing Floriculture Crop Problems. Ohio Floriculture Association Services, Inc.; Columbus, OH. 140 pgs.
- Cloyd, R. A., and R. K. Lindquist. 2004. Insect and mite management chart for interior plantscapes, pp. 22-29. In: Tips on Managing Floriculture Crop Problems. Ohio Floriculture Association Services, Inc.; Columbus, OH. 140 pgs.
- Cloyd, R. A., and R. K. Lindquist. 2004. Insect and mite management using biological agents, pp. 30-32. In: Tips on Managing Floriculture Crop Problems. Ohio Floriculture Association Services, Inc.; Columbus, OH. 140 pgs.
- Cloyd, R. A. 2004. Weed management, pp. 45-47. In: Tips on Managing Floriculture Crop Problems. Ohio Floriculture Association Services, Inc.; Columbus, OH. 140 pgs.
- Cloyd, R. A., and C. C. Powell. 2004. Understanding and effectively using pesticides, pp. 88-92. In: Tips on Managing Floriculture Crop Problems. Ohio Floriculture Association Services, Inc.; Columbus, OH. 140 pgs.
- Cloyd, R. A., and R. K. Lindquist. 2004. Products registered for insect and mite management, pp. 93-98. In: Tips on Managing Floriculture Crop Problems. Ohio Floriculture Association Services, Inc.; Columbus, OH. 140 pgs.
- Cloyd, R. A., and R. K. Lindquist. 2004. Tips for increasing pesticide efficiency on greenhouse crops and interior landscape plants, pp. 109-110. In: Tips on Managing Floriculture Crop Problems. Ohio Floriculture Association Services, Inc.; Columbus, OH. 140 pgs.
- Cloyd, R. A., and R. K. Lindquist. 2004. Pesticide application methods and equipment for disease and insect management, pp. 111-114. In: Tips on Managing Floriculture Crop Problems. Ohio Floriculture Association Services, Inc.; Columbus, OH. 140 pgs.
- Cloyd, R. A., and S. G. P. Nameth. 2004. Difficult-to-manage disease and insect problems, pp. 115-119. In: Tips on Managing Floriculture Crop Problems. Ohio Floriculture Association Services, Inc.; Columbus, OH. 140 pgs.
- Whipker, B. E., B. Krug, C. Y. Warfield, R. A. Cloyd, and W. Buhler [eds]. 2004. Picture (PICT) guide of pansy disorders. North Carolina State University, Raleigh, NC. 53 pgs.
- Whipker, B. E., J. L. Gibson, B. Krug, C. Y. Warfield, C. Casey, R. A. Cloyd, and W. Buhler [eds]. 2003. Picture (PICT) guide of vegetative annual disorders. North Carolina State University, Raleigh, NC. 53 pgs.
- Oetting, R., W. Hudson, R. Cloyd, F. Hale, L. Osborne, and B. McCaffrey. 2002. Insect and related pest identification and diagnosis. Southwest Greenhouse Conference & Trade Show Workshop; Greenville, SC. June 19, 2002. 23 pgs.
- Whipker, B. E., T. J. Cavins, J. L. Gibson, C. Y. Warfield, R. A. Cloyd, and W. Buhler [eds]. 2002. Picture (PICT) guide of bedding plant disorders. North Carolina State University, Raleigh, NC. 53 pgs.
- Whipker, B. E., T. J. Cavins, J. L. Gibson, C. Y. Warfield, R. A. Cloyd, and W. Buhler [eds]. 2002. Picture (PICT) guide of poinsettia disorders. North Carolina State University, Raleigh, NC. 53 pgs.
- Mahr, S. E. R., R. A. Cloyd, D. L. Mahr, and C. S. Sadof. 2001. Biological control of insects and other pests of greenhouse crops. North Central Regional Publication 581: University of Wisconsin; Madison, WI. 100 pgs.
- Cloyd, R. A. 2001. Guidelines for successful use of biological control agents, pp. 30. In: Tips on Managing Problems in Interior Plantscapes. Ohio Florists' Association Services, Inc.; Columbus, OH. 41 pgs.

- Cloyd, R. A., and R. K. Lindquist. 2001. Insect and mite pests, pp. 18-29. In: Tips on Managing Problems in Interior Plantscapes. Ohio Florists' Association Services, Inc.; Columbus, OH. 41 pgs.
- Lindquist, R. K., and R. A. Cloyd. 2001. Pesticide application methods and equipment for disease and insect management, pp. 13-17. In: Tips on Managing Problems in Interior Plantscapes. Ohio Florists' Association Services, Inc.; Columbus, OH. 41 pgs.
- Whipker, B. E., J. L. Gibson, T. J. Cavins, C. Y. Warfield, and R. A. Cloyd [eds]. 2001. Picture (PICT) guide of fall crop disorders. North Carolina State University, Raleigh, NC. 47 pgs.
- Cloyd, R. A., and C. S. Sadof. 1999. Compare western flower thrips control using Conserve[®] in a greenhouse and outdoor nursery situation, pp. 38. In: Tips on Selecting Pest Management Strategies. Ohio Florists' Association Services, Inc.; Columbus, OH. 52 pgs.
- Bailey, D., J. Baker, M. Benson, R. Cloyd, R. Eddy, W. Fonteno, P. Hammer, R. Jones, R. Larson, P. Nelson, and B. Whipker. 1999. Picture (PICT) guide for poinsettia disorders. North Carolina State University, Raleigh, NC. 56 pgs.

5. Publications: Proceedings Articles

- Herrick, N., and R. Cloyd. 2017. Direct and indirect effects of pesticides and pesticide mixtures on the insidious flower bug, *Orius insidiosus*, under laboratory conditions. In: Integrated Control of Protected Crops, Temperate Climate IOBC-WPRS Bulletin 124: 99-104. 254 pgs.
- Cloyd, R. A. 2017. Managing aphids on floriculture crops, pp. 43-44. In: 59th Annual Horticulture Growers' Short Course 2017 Proceedings. Kabaluk, T., L. Frey, and M. Dossett [eds.]. Lower Mainland Horticultural Improvement Association; British Columbia, Canada.
- Cloyd, R. A. 2015. Replacing neonicotinoids in the greenhouse, pp. 154-156. In: Proceedings for the Vegetable, Potato, Greenhouse, Small Fruit & General Sessions. Hershey, PA; January 27-29, 2015. Pennsylvania Vegetable Growers Association, Richfield, PA. 270 pgs.
- Cloyd, R. A. 2015. How to best manage fungus gnats, pp. 162-164. In: Proceedings for the Vegetable, Potato, Greenhouse, Small Fruit & General Sessions. Hershey, PA; January 27-29, 2015. Pennsylvania Vegetable Growers Association, Richfield, PA. 270 pgs.
- Cloyd, R. 2015. Western flower thrips: is the game over? pp. 57-58. In: Proceedings of the 57th Annual Horticultural Growers' Short Course. Abbotsford, British Columbia, Canada; January 29-31, 2015. Lower Mainland Horticultural Improvement Association, Abbotsford, British Columbia, Canada. 165 pgs.
- Cloyd, R. A. 2014. Hard to resist: understanding issues associated with resistance in insect populations, pp.39-43. In: Proceedings for the Vegetable, Potato, Greenhouse, Small Fruit & General Sessions. Hershey, PA; January 28-30, 2014. Pennsylvania Vegetable Growers Association, Richfield, PA. 263 pgs.
- Cloyd, R. A. 2014. Don't get "broad-sided" by broad mites, pp. 36-37. In: Proceedings for the Vegetable, Potato, Greenhouse, Small Fruit & General Sessions. Hershey, PA; January 28-30, 2014. Pennsylvania Vegetable Growers Association, Richfield, PA. 263 pgs.
- Wilson, M., J. J. Griffin, and R. A. Cloyd. 2012. Feeding preference of Southern pine sawyer beetle on four species of pine, pp. 100-102. In: Proceedings of the Southern Nursery Association Research Conference. 57th Annual Report, Volume 57. Mobile, AL.
- Cloyd, R. A. 2012. Fundamentals of tank mixing, pp. 175-178. In: Mid-Atlantic Fruit & Vegetable Convention Proceedings for the Vegetable, Potato, Greenhouse, Small Fruit, & General Sessions. Hershey, PA; January 31-February 2, 2012. Pennsylvania Vegetable Growers Association, Richfield, PA. 220 pgs.
- Cloyd, R. A. 2012. Western flower thrips management: is the game over? pp.179-183. In: Mid-Atlantic Fruit & Vegetable Convention Proceedings for the Vegetable, Potato, Greenhouse, Small Fruit, & General Sessions. Hershey, PA; January 31-February 2, 2012. Pennsylvania Vegetable Growers Association, Richfield, PA. 220 pgs.

- Cloyd, R. A. 2010. Practices you need to know to effectively deal with mites, pp. 83-86. In: Mid-Atlantic Fruit & Vegetable Convention Proceedings for the Vegetable, Potato, Flower, Small Fruit & General Sessions. Hershey, PA; February 2-4, 2010. Pennsylvania Vegetable Growers Association, Richfield, PA. 212 pgs.
- Cloyd, R. A. 2010. Get them suckers: aphid and whitefly management, pp. 87-90. In: Mid-Atlantic Fruit & Vegetable Convention Proceedings for the Vegetable, Potato, Flower, Small Fruit & General Sessions. Hershey, PA; February 2-4, 2010. Pennsylvania Vegetable Growers Association, Richfield, PA. 212 pgs.
- Cloyd, R. A. 2010. Chew away: dealing with caterpillars and grasshoppers, pp. 187-190. In: Mid-Atlantic Fruit & Vegetable Convention Proceedings for the Vegetable, Potato, Flower, Small Fruit & General Sessions. Hershey, PA; February 2-4, 2010. Pennsylvania Vegetable Growers Association, Richfield, PA. 212 pgs.
- Cloyd, R. A. 2010. Resistance management and pesticide rotations, pp. 191-195. In: Mid-Atlantic Fruit & Vegetable Convention Proceedings for the Vegetable, Potato, Flower, Small Fruit & General Sessions. Hershey, PA; February 2-4, 2010. Pennsylvania Vegetable Growers Association, Richfield, PA. 212 pgs.
- Cloyd, R. A. 2010. Alternative pest control, pp. 5-22. In: Proceedings of the 26th Annual Pest and Production Management Conference. Orlando, FL; February 25-27, 2010. Society of American Florists, Alexandria, VA. 87 pgs.
- Cloyd, R. A. 2009. Pesticide resistance, pp. 174-180. In: Proceedings of the 27th Gateway Green Industry Conference, February 24-25, 2009. University of Illinois Extension. Collinsville, IL. 192 pgs.
- Cloyd, R. A. 2009. Dealing with arthropod pests organically, pp. 83-89. In: Proceedings of the 27th Gateway Green Industry Conference, February 24-25, 2009. University of Illinois Extension. Collinsville, IL. 192 pgs.
- Cloyd, R. A. 2008. Plant-essential oils: are they viable pest control materials? pp. 9-16. In: Proceedings of the 24th Annual Conference on Pest and Disease Management in Ornamentals, Atlanta, GA; February 28-March 1, 2008. Society of American Florists, Alexandria, VA. 130 pgs.
- Hogendorp, B. K., and R. A. Cloyd. 2008. Silicon applications: a new pest management strategy, pp. 55-65. In: Proceedings of the 24th Annual Conference on Pest and Disease Management in Ornamentals, Atlanta, GA; February 28-March 1, 2008. Society of American Florists, Alexandria, VA. 130 pgs.
- Cloyd, R. A. 2008. Compatibility of pest control materials with natural enemies, pp. 90-97. In: Proceedings of the 24th Annual Conference on Pest and Disease Management in Ornamentals, Atlanta, GA; February 28-March 1, 2008. Society of American Florists, Alexandria, VA. 130 pgs.
- Cloyd, R. A. 2008. Fundamental of tank mixtures, pp. 112-124. In: Proceedings of the 24th Annual Conference on Pest and Disease Management in Ornamentals, Atlanta, GA; February 28-March 1, 2008. Society of American Florists, Alexandria, VA. 130 pgs.
- Caamano, E. X., R. A. Cloyd, L. F. Solter, and D. J. Fallon. 2007. Evaluation of the quality of two commercially available species of entomopathogenic nematodes, *Steinernema feltiae* and *Heterorhabditis indica*, pp. 20-23. In: Proceedings of 11th Meeting of the Working Group Arthropod Mass Rearing and Quality Control, International Organization for Biological Control of Noxious Animals and Plants (IOBC). van Lenteren, J. C., P. DeClercq, and M. W. Johnson [eds.]. Bulletin IOBC Global No. 3. Montreal, Canada. 117 pgs.
- Cloyd, R. A. 2007. Insect control II: control of chewers and suckers with organic, soft, and hot products, pp. 111-115. In: Proceedings for the Vegetable, Potato, Flower, Small Fruit and General Sessions; 2007 Mid-Atlantic Fruit and Vegetable Convention, February 1, 2007. Hershey, PA. 167 pgs.
- Cloyd, R. A. 2007. Insect control I: Japanese beetle, corn rootworm, and other miscellaneous "bugs," pp. 105-108. In: Proceedings for the Vegetable, Potato, Flower, Small Fruit and General Sessions; Mid-Atlantic Fruit and Vegetable Convention, February 1, 2007. Hershey, PA. 167 pgs.

- Birken, E. M., and R. A. Cloyd. 2006. Feeding behavior of the rove beetle, *Atheta coriaria* (Coleoptera: Staphylinidae) under laboratory conditions. *Integrated Control of Protected Crops, Mediterranean Climate. International Organization for Biological and Integrated Control/ West Palaearctic Regional Section (IOBC/WPRS) Bulletin 29(4): 201-206. 367 pgs.*
- Cloyd, R. A. 2006. How to de-bug your turfgrass, pp. 102-110. In: *Proceedings of the 24th Annual Southern Illinois Grounds Maintenance School and Trade Show, February 21-22, 2006. University of Illinois Extension. Collinsville, IL. 126 pgs.*
- Cloyd, R. A. 2006. Biorational pest control materials: what are they and are they effective, pp. 150-152. In: *Proceedings for the Vegetable, Potato, Flower, Small Fruit and General Sessions; Mid-Atlantic Fruit and Vegetable Convention, February 2, 2006. Hershey, PA. 171 pgs.*
- Cloyd, R. A. 2006. Bug-B-Gone: why it is important to understand modes of action, pp. 145-149. In: *Proceedings for the Vegetable, Potato, Flower, Small Fruit and General Sessions; Mid-Atlantic Fruit and Vegetable Convention, February 2, 2006. Hershey, PA. 171 pgs.*
- Cloyd, R. 2005. Compatibility conflict: is the use of biological control agents with pesticides a viable management strategy? pp. 546-554. In: *Proceedings for the Second International Symposium on Biological Control of Arthropods, September 12-16, 2005. Davos, Switzerland. 734 pgs.*
- Cloyd, R. A. 2005. Insecticide classifications, modes of action, efficacies, and rotations-and why modes of action and rotations are important, pp. 40-43. In: *Proceedings for the Vegetable, Potato, Flower, Small Fruit, and General Sessions, Volume II. Pennsylvania Vegetable Growers Association, Richfield, PA. 68 pgs.*
- Cloyd, R. A. 2005. Why and how insects and mites feed on your plants and flowers and how to identify them, pp. 39-40. In: *Proceedings for the Vegetable, Potato, Flower, Small Fruit, and General Sessions, Volume II. Pennsylvania Vegetable Growers Association, Richfield, PA. 68 pgs.*
- Cloyd, R. A. 2004. Scale insects on trees and shrubs, pp. 42-47. In: *Proceedings of the 22nd Annual Southern Illinois Grounds Maintenance School. University of Illinois Extension. Collinsville, IL. 113 pgs.*
- Cloyd, R. A. 2003. Calculation and calibration with pesticide application equipment, pp. 15-23. In: *Proceedings for the Society of American Florists' 19th Annual Conference on Insect and Disease Management on Ornamentals. Society of American Florists, Alexandria, VA. 129 pgs.*
- Cloyd, R. A. 2003. Tank mixing the right way, pp. 26-35. In: *Proceedings for the Society of American Florists' 19th Annual Conference on Insect and Disease Management on Ornamentals. Society of American Florists, Alexandria, VA. 129 pgs.*
- Cloyd, R. A. 2003. Borer problems in trees and shrubs, pp. 32-44. In: *Proceedings of the 21st Annual Southern Illinois Grounds Maintenance School. Arboretum Series 03:01 University of Illinois Extension. Collinsville, IL. 87 pgs.*
- Cloyd, R. A. 2002. Plant galls: are they a concern? pp. 9-16. In: *Proceedings of the 20th Annual Southern Illinois Grounds Maintenance School. Illinois Cooperative Extension Service, University of Illinois Extension. Collinsville, IL. 82 pgs.*
- Cloyd, R. A. 2001. Major insect problems of deciduous trees, pp. 58-60. In: *Proceedings of the 19th Annual Southern Illinois Grounds Maintenance School. Illinois Cooperative Extension Service, University of Illinois Extension. Collinsville, IL. 84 pgs.*
- Cloyd, R. A. 2000. Insect and plant interactions in the landscape, pp. 65-68. In: *Proceedings of the 18th Annual Southern Illinois Grounds Maintenance School. Illinois Cooperative Extension Service, University of Illinois Extension. Collinsville, IL. 68 pgs.*
- Nixon, P., and R. Cloyd. 2000. Japanese beetle management on ornamentals, pp. 27-28. In: *Proceedings of the 18th Annual Southern Illinois Grounds Maintenance School. Illinois Cooperative Extension Service, University of Illinois Extension. Collinsville, IL. 68 pgs.*
- Cloyd, R. A. 2000. Fungus gnat and shore fly management strategies: panel discussion, pp. 57-59. In: *Proceedings for the 16th Conference on Insect and Disease Management on Ornamentals. Society of American Florists, Alexandria, VA. 227 pgs.*

Cloyd, R. A. [ed]. 1999. Proceedings of the first workshop on pest management in greenhouses. University of Illinois Extension; University of Illinois Champaign-Urbana. 21 pgs.

6. Publications: Programs

- Nixon, P. L., and R. A. Cloyd. 2002. Insect reports, pp. 33-36. In: Program 2002 University of Illinois Turfgrass and Landscape Field Day. Horticulture Series No. 8. Natural Resources and Environmental Sciences: University of Illinois; Urbana-Champaign, IL. 64 pgs.
- Cloyd, R. A., and P. L. Nixon. 2000. Up-date on turfgrass and landscape pest control materials, pp. 29-33. In: Program 2000 University of Illinois Turfgrass and Landscape Field Day. Horticulture Series No. 4. Natural Resources and Environmental Sciences: University of Illinois; Urbana-Champaign, IL. 72 pgs.
- Cloyd, R. A., and P. L. Nixon. 1999. Japanese beetle and other insects on ornamentals and turf, pp. 50-53. In: Program 1999 University of Illinois Turfgrass and Landscape Field Day. Turfgrass Series Number 2. Cooperative Extension Service: University of Illinois; Urbana-Champaign, IL. 70 pgs.

7. Publications: Trade Journal Articles

- Cloyd, R. A. December 2017. Lipid biosynthesis inhibitors (IRAC Group 23). *Greenhouse Product News* 27(12): 16.
- Cloyd, R. December 2017. Understanding insect and mite pest ‘leftovers.’ *Produce Grower* 26-28.
- Cloyd, R. A. November 2017. A breakdown of aphid parasitoids & predatory mites. *GrowerTalks* 81(7): 80-84.
- Konjoian, P., and R. Cloyd. October 2017. Outreach education: universities adapt to a changing landscape and new audience. *The Cut Flower Quarterly* 29(3): 20-21.
- Cloyd, R. A. September 2017. Biological control of aphids using parasitoids. *Greenhouse Product News* 27(9): 14-15.
- Cloyd, R. Fall 2017. Dormant oils. *Hobby Greenhouse* 39(4): 21.
- Cloyd, R. A. Fall 2017. Mealybugs: what can you do? *Hobby Greenhouse* 39(4): 14-15.
- Cloyd, R. August 2017. 5 ways to beat pests. *Produce Grower* 24-26.
- Cloyd, R. August 2017. 7 strategies to scouting success. *Nursery Management* 33(8): 60.
- Cloyd, R. A. July 2017. Mealybugs: what can you do? *GrowerTalks* 81(3): 96-100.
- Cloyd, R. A. July 2017. Why biological control fails: encapsulation—what is that? *Greenhouse Grower* 35(7): 64-66.
- Cloyd, R. July 2017. Mealybugs and insecticide resistance. *Greenhouse Management* 37(7): 38-41.
- Cloyd, R. A. June 2017. Dealing with broad mite. *Greenhouse Product News* 27(6): 16.
- Cloyd, R. A. May 2017. Steps to avoiding aphids. *GrowerTalks* 81(1): 82-83.
- Cloyd, R. May 2017. Sucking insect basics. *Greenhouse Management* 37(5): 28-30.
- Cloyd, R. April 2017. Shedding the label. *Greenhouse Management* 34(4): 30-32.
- Cloyd, R. A. April 2017. Predatory mites that eat western flower thrips. *Greenhouse Product News* 27(4): 16.
- Cloyd, R. March 2017. Maximize the efficacy of pesticides. *Greenhouse Management* 37(3): 62-65.
- Konjoian, P., and R. Cloyd. February 2017. Outreach education: universities adapt to a changing landscape and new audience. *Greenhouse Product News* 27(2): 16-17.
- Cloyd, R. January/February 2017. Dormant oils. *Garden & Greenhouse* 15(1): 45-46.
- Cloyd, R. January 2017. Sticky card success. *Greenhouse Management* 37(1): 40-42.
- Cloyd, R. December 2016. Cut down cucumber pest pressure. *Produce Grower*: 10-13.
- Cloyd, R. A. November 2016. Beneficials and biologicals. *Greenhouse Product News* 26(11): 14.
- Cloyd, R. November 2016. 7 strategies to scouting success. *Greenhouse Management* 36(11): 34-40.
- Cloyd, R. October 2016. Protect your peppers. *Produce Grower*: 27-31.
- Cloyd, R. October 2016. Surface-level control. *Greenhouse Management* 36(10): 44-48.
- Cloyd, R. A. September 2016. What impacts the effectiveness of translaminar pesticides? *GrowerTalks* 80(5): 84-88.
- Cloyd, R. A. August 2016. Don’t get “weighed-down” by scales. *GrowerTalks* 80(4): 70-77.

- Cloyd, R. August 2016. Stop aphids by understanding their interactions with plants. *Greenhouse Grower* 34(8): 71-74.
- Cloyd, R. August 2016. Protect your poinsettias. *Greenhouse Management* 36(8): 24-28.
- Cloyd, R. A. August 2016. Testing alternative solutions. *Produce Grower*: 16-20.
- Cloyd, R. A. August 2016. Mosquitoes: how to avoid getting “bitten.” *Garden & Greenhouse* 14(7): 32-34.
- Cloyd, R., and P. Konjoian. July 2016. Meeting the challenges of grower education. *Greenhouse Grower* 34(7): 20-22.
- Cloyd, R. A. July 2016. Effects of pH on pesticides. *Greenhouse Product News* 26(7): 16-17.
- Cloyd, R. June 2016. Twospotted pest pressure. *Greenhouse Management* 36(6): 32-38.
- Cloyd, R. A. May 2016. Selective feeding blockers. *Greenhouse Product News* 26(5): 14.
- Cloyd, R. A. April 2016. Bees and pesticides: an overview. *Greenhouse Product News* 26(4): 22-27.
- Cloyd, R. April 2016. Keep a clean house. *Produce Grower*: 28-29.
- Cloyd, R. April 2016. Help them help you. *Greenhouse Management* 36(4): 42-46.
- Cloyd, R. April 2016. Three ingredients for pesticide success. *GardenCenter* 22(4): 60-64.
- Cloyd, R. March 2016. Don’t let pests prevail. *Greenhouse Management* 36(3): 30-33.
- Cloyd, R. A. March 2016. Pinpoint plant problems. *Nursery Management* 32(3): 46-50.
- Cloyd, R. February 2016. Tomato trouble? *Produce Grower*: 33-35.
- Cloyd, R. A. February 2016. Western flower thrips & resistance. *Greenhouse Product News* 26(2): 16.
- Cloyd, R. January 2016. Three ingredients for pesticide success. *Greenhouse Management* 36(1): 28-30.
- Cloyd, R. January 2016. Lending a helping bug. *Greenhouse Management* 36(1): 32-36.
- Cloyd, R. A. January 2016. Multiple pest complexes: dealing with more than one insect or mite pest. *GrowerTalks* 79(9): 92-96.
- Cloyd, R. December 2015. Biological control agents guide. *Greenhouse Management* 35(12): 48-49.
- Cloyd, R. December 2015. More than a nuisance 35(12): 50-51.
- Cloyd, R. A. November/December 2015. How to improve performance of pesticides: timing, coverage, and frequency. *American Rose* 43(6): 106-107.
- Cloyd, R. A. November/December 2015. Azadirachtin and neem: what is the difference? *Garden & Greenhouse* 13(9): 28.
- Cloyd, R. December 2015. The case of the growing medium pest. *Produce Grower*: 16-17.
- Cloyd, R. A. November 2015. Explaining azadirachtin and neem. *Greenhouse Product News* 25(11): 10.
- Cloyd, R. November 2015. Sanitation: the first line of defense. *Greenhouse Management* 35(11): 50-54.
- Cloyd, R. October 2015. Using beneficials to stop black vine weevil. *Greenhouse Management* 35(10): 56-57.
- Cloyd, R. October 2015. The case of the crafty caterpillar. *Produce Grower*: 28-29.
- Cloyd, R. A. September 2015. Mixtures & resistance. *Greenhouse Product News* 25(9): 14.
- Cloyd, R. August 2015. The case of the non-growing pest. *Greenhouse Management* 35(8): 42-43.
- Cloyd, R. August 2015. The case of the destroyed fruit. *Produce Grower*: 28-29.
- Cloyd, R. A. June 2015. How “might” you avoid problems with the twospotted spider mite? *Greenhouse Management* 35(6): 62-63.
- Cloyd, R. A. May 2015. The “sneaky insect pest.” *Greenhouse Management* 35(5): 38-39.
- Cloyd, R. A. May 2015. Insect and mite: bug quiz bowl. *Greenhouse Product News* 25(5): 10.
- Cloyd, R. April 2015. Organic management of spotted wing drosophila. *Growing For Market* 24(4): 8-9.
- Cloyd, R. A. April 2015. PSI’s most wanted: western flower thrips. *Greenhouse Management* 35(4): 20-21.
- Cloyd, R. A. March 2015, New on the market. *Greenhouse Product News* 25(3): 12.
- Cloyd, R. February 2015. A new look at biological control: can plants affect the performance of natural enemies? *Greenhouse Grower* 33(2): 26-30.
- Cloyd, R. A. February 2015. The case of the sucking pest. *Produce Grower*: 46-47.
- Williams, K. A., and R. A. Cloyd. February 2015. An American perspective: learning about the hydroponics industry down under. *Practical Hydroponics & Greenhouses*: 21-23.
- Cloyd, R. A. January 2015. The case of the damaging larva. *Greenhouse Management* 35(1): 40-42.

- Cloyd, R. A. January 2015. Secrets of the “big bugs.” *Pest Control Technology* 43(1): 32-40.
- Cloyd, R. A. January 2015. Neonic alternatives. *GrowerTalks* 78(9): 88-92.
- Cloyd, R. A. January 2015. Effective biological control : understanding the relationship between natural enemies and prey. *Tree Care Industry* 26(1): 38-40.
- Cloyd, R. January 2015. Weeding out the weevil. *Greenhouse Management* 35(1): 34-38.
- Cloyd, R. A. December 2014. Agents of control. *Produce Grower*: 15-16.
- Cloyd, R. A. October 2014. Knowing and stopping hungry caterpillars. *Produce Grower*: 28-29.
- Cloyd, R. A. September 2014. The basics of pesticide resistance. *Australian Flower Industry* 44: 8-9.
- Cloyd, R. A. September 2014. Understanding adjuvants. *GrowerTalks* 78(5): 84-86.
- Cloyd, R. August 2014. Small pest, big damage. *American Vegetable Grower* 62(8): 24-25.
- Cloyd, R. A. August 2014. Battling pests with IGRs. *Greenhouse Management* 34(8): 24-26.
- Cloyd, R. A. July/August 2014. Understanding the proper use of adjuvants. *Garden and Greenhouse* 12(6): 34.
- Cloyd, R. July 2014. Suppress those twospotted spider mites. *Nursery Management* 30(7): 48-51.
- Cloyd, R. A. July 2014. Controlling fungus gnats. *Greenhouse Product News* 24(7): 12.
- Cloyd, R. A. June 2014. Suppressing twospotted spider mites. *Greenhouse Management* 34(6): 50-52.
- Cloyd, R. A. June 2014. Stem the spread of rose rosette disease before it’s too late. *Fine Gardening* 157: 18.
- Cloyd, R. June 2014. Systemic insecticides and bees: are we revisiting “Silent Spring?” *Greenhouse Grower* 32(7): 20-21.
- Cloyd, R. June 2014. Protecting veggies from mites. *Produce Grower*: 20-22.
- Cloyd, R. A. May/June 2014. What is insecticide hormoligosis? *American Rose* 42(9): 63.
- Cloyd, R. A., and A. E. Whitfield. April 2014. What you should know about western flower thrips. *Greenhouse Management* 34(4): 40-45.
- Cloyd, R. A. April 2014. The basics of biologicals. *GrowerTalks* 77(12): 56-58.
- Cloyd, R. A. April 2014. Voracious thrips can be managed. *Produce Grower*: 29-31.
- Cloyd, R. A. February 2014. Systemic insecticides; 1-9 (link below):
(<http://americanhort.theknowledgecenter.com/AmericanHortNews/index.cfm?Srch=systemic&submit=Search&searchType=Collection&view=search&CFID=889833&CFTOKEN=3a2bff15115d941-ECE0E477-913B-3373-D3C59220C05E7A879>)
- Cloyd, R. A. January 2014. Controlling whiteflies. *InsideGrower*: 30-31.
- Cloyd, R. A. January 2014. Suckers from the deep. *Greenhouse Management* 34(1): 14-16.
- Cloyd, R. A., and J. R. Nechols. November 2013. Intraguild predation: disruption of biological control? *Greenhouse Product News* 23(11): 12-20.
- Cloyd, R. A. October 2013. Pyrethrins & pyrethroids: what’s the difference? *GrowerTalks* 77(6): 84-88.
- Cloyd, R. A. October 2013. Identifying and dealing with aster yellows. *Garden and Greenhouse* 11(8): 38-39.
- Cloyd, R. October 2013. Black vine weevil. *Greenhouse Management* 33(10): 57-58.
- Cloyd, R. October 2013. Caterpillars. *Produce Grower*: 16-19.
- Cloyd, R. A. September 2013. Insecticide hormoligosis. *Garden and Greenhouse* 11(7): 30.
- Cloyd, R. A. September 2013. Insecticide resistance. *Greenhouse Canada* 33(9): 34-40.
- Willmott, A. L., and R. A. Cloyd. August 2013. Mealybugs and systemic insecticides. *Greenhouse Product News* 23(8): 12-18.
- Cloyd, R. August 2013. IGR know-how. *Greenhouse Management* 33(8): 57-58.
- Cloyd, R. A. August 2013. Insect growth regulators. *Orchids* 82(8): 491-493.
- Cloyd, R. A. July 2013. Control of thrips with systemic insecticides. *Greenhouse Grower* 31(8): 50-52.
- Miller, C., R. Cloyd, K. Williams, A. Stevens, M. Kennelly, J. O’Mara, and S. McElwain. July 2013. Floriculture at Kansas State University. *Greenhouse Product News* 23(7): 26-32.
- Cloyd, R. June 2013. Striking the two-spotted spider mite. *Produce Grower*: 24-25.
- Cloyd, R. A. June 2013. How climate change may affect arthropod pests. *American Nurseryman*: 14-17.
- Cloyd, R. May/June 2013. How insect growth regulators for use in greenhouse production systems work. *Ohio Florists’ Association Bulletin* 939: 18-19.

- Cloyd, R. A. Spring 2013. Effect of pesticide mixtures on the western flower thrips (*Frankliniella occidentalis*) associated with cut flowers. *The Cut Flower Quarterly* 25(2): 24-25.
- Cloyd, R. A. April 2013. How long do pesticides last? *GrowerTalks* 76(12): 66-68.
- Cloyd, R. A. April 2013. Lime-sulfur: A broad-spectrum pesticide. *Garden and Greenhouse* 11(3): 30-31.
- Cloyd, R. A. April 2013. The trouble with thrips. *Greenhouse Management* 32(4): 56.
- Cloyd, R. A., and T. D. Anderson. March 2013. Fungus gnats & insecticide resistance. *GrowerTalks* 76(11): 82-84.
- Cloyd, R. A. January 2013. Fungus gnats: the “critters” from below. *Greenhouse Management* 32(1): 16.
- Cloyd, R. A. January 2013. Understanding one of the few insecticides for organic growers. *Growing for Market* 22(1): 19.
- Cloyd, R. A. November 2012. Reduce destruction. *American Vegetable Grower* 60(11): 35-36.
- Cloyd, R. A. November 2012. Predators and pesticides. *Greenhouse Grower* 30(13): 6-7.
- Cloyd, R. November 2012. Leafminers. *Greenhouse Management* 31(11): 16.
- Cloyd, R. A. September/October 2012. Mealybug & scale management: how can you deal with them? *Ohio Florists' Association Bulletin* 935: 18-20.
- Cloyd, R. August 2012. Insect growth regulators. *Greenhouse Management* 31(8): 15.
- Cloyd, R. A. July/August 2012. Rotenone: a botanical insecticide. *Garden and Greenhouse* 10(7): 34-35.
- Cloyd, R. A. July/August 2012. Translaminar pesticides: what can impact effectiveness? *Ohio Florists' Association Bulletin* 934: 24-26.
- Cloyd, R. July/August 2012. Pesticide resistance: what it is and how to avoid it. *American Rose* 41(10): 68-69.
- Cloyd, R. A. July 2012. Developing an effective western flower thrips management program. *Greenhouse Product News* 22(7): 42-48.
- Cloyd, R. A., and A. E. Whitfield. July 2012. Insects & diseases: the western flower thrips & INSV complex. *GrowerTalks* 76(3): 62-66.
- Cloyd, R. May/June 2012. Conserve[®]: what is the future of this insecticide? *Ohio Florists' Association Bulletin* 933: 25-27.
- Cloyd, R. A., and R. Martin. May/June 2012. Timing fungicides and PGRs to control greenhouse pests. *International Pest Control* 54(3): 170-171.
- Cloyd, R. A., and R. Martin. May 2012. How fungicides & PGRs impact greenhouse pests. *Greenhouse Grower* 30(5): 34-40.
- Cloyd, R. May 2012. Hard to control. *Greenhouse Management* 32(5): 14-15.
- Cloyd, R. May 2012. Pest management in greenhouses: a historical and current perspective. *GrowerTalks* 76(1): 68-69.
- Cloyd, R. March 2012. Pesticide-resistant pests: can they become susceptible again? *GrowerTalks* 75(11): 64-65.
- Cloyd, R. A., and J. D. Gillespie. April 2012. Enhancing insecticides with sugar-based compounds. *Greenhouse Product News* 22(4): 22-30.
- Cloyd, R. March 2012. The impact of insect feeding. *American Vegetable Grower* 60(3): 44-45.
- Cloyd, R. A. February 2012. Biopesticides: are they immune to resistance? *Greenhouse Grower* 30(2): 22-28.
- Cloyd, R. February 2012. Combating caterpillars. *Greenhouse Management* 32(2): 22-25.
- Cloyd, R. Winter 2012. Pesticide mixtures. *The Cut Flower Quarterly* 24(1): 59-60.
- Cloyd, R. November/December 2011. Effect of silicon-based fertilizer applications on reproduction and development of arthropod pests associated with horticultural crops. *Ohio Florists' Association Bulletin* 930: 22-23.
- Cloyd, R. November 2011. What to consider when mixing pesticides. *Greenhouse Management* 31(11): 57-59.
- Cloyd, R. A. September 2011. Twospotted spider mite and resistance. *Australian Flower Industry* 32: 30-31.

- Cloyd, R. July/August 2011. Mealybug management in greenhouses & interiorscapes. Ohio Florists' Association Bulletin 928: 19-22.
- Cloyd, R. A., K. A. Marley, R. A. Larson, and B. Arieli. July 2011. Repelling fungus gnats with dryer sheets. Greenhouse Product News 21(7): 62-68.
- Cloyd, R. July 2011. Watch out for spider mites. Greenhouse Management 31(7): 86-87.
- Cloyd, R. June 2011. Identification & control of tomato russet mite. Garden and Greenhouse 9(5): 32.
- Cloyd, R. A. May/June 2011. What rose growers should know about colony collapse disorder. American Rose 41(3): 68-69.
- Cloyd, R. Spring 2011. Pesticide mixtures: a review. Ohio Produce Growers & Marketers Association Today: 14-17.
- Cloyd, R. May/June 2011. Twospotted spider mite management in greenhouses. Ohio Florists' Association Bulletin 927: 4-7.
- Cloyd, R. April 2011. New or unfamiliar pest control materials. Greenhouse Product News 21(4): 12-15.
- Cloyd, R. A. April 2011. Chemical crash course: pesticide metabolites. GrowerTalks 74(12): 64-65.
- Cloyd, R. A. March 2011. How they eat can hurt them. Australian Flower Industry 26: 36.
- Cloyd, R. A. March 2011. Twospotted spider mite and resistance. GrowerTalks 75(3): 96-98.
- Cloyd, R. A. March 2011. Be prepared to deal with fungus gnats. Greenhouse Management 31(3): 62-63.
- Cloyd, R. A. February 2011. Breaking down pesticide resistance. Greenhouse Grower 29(2): 24-25.
- Cloyd, R. A. February 2011. Don't get broad (mite)-sided. GrowerTalks 74(10): 64-68.
- Cloyd, R. January/February 2011. Pesticide mixtures: a review. Ohio Florists' Association Bulletin 925: 19-22.
- Cloyd, R. A. January/February 2011. How to deal with caterpillar pests using *Bacillus thuringiensis* spp. *kurstaki*. Garden and Greenhouse 9(1): 26-27.
- Cloyd, R. January 2011. Bug-Zilla: dealing with hard-to-control pests. Greenhouse Management 31(1): 74-76.
- Cloyd, R. A. November 2010. Do biologicals and chemicals mix? American Vegetable Grower 58(11): 20.
- Cloyd, R. November 2010. Impact of pesticide mixtures on natural enemies. Greenhouse Management & Production 30(11): 50-52.
- Cloyd, R. A. November 2010. Systemic insecticides 101. American Nurseryman 210 (10): 18-21.
- Cloyd, R. A. October 2010. Understanding METI miticides. GrowerTalks 74(6): 74-76.
- Cloyd, R. A., and R. S. Cowles. September/October 2010. Pesticide rotations & mixtures: which is best for resistance mitigation? Ohio Florists' Association Bulletin 923: 19-20.
- Cloyd, R. A. September 2010. Managing caterpillars organically. Growing For Market 19(8): 12-13.
- Cloyd, R. A. July/August 2010. The identification & management of sowbugs and pillbugs. Garden and Greenhouse 8(6): 30.
- Cloyd, R. A., K. A. Marley, R. A. Larson, and B. Arieli. July 2010. Fungus gnat adults and growing media. Greenhouse Product News 20(7): 24-27.
- Cloyd, R. July 2010. What's new in pest control materials? Greenhouse Management & Production 30(7): 75-76.
- Cloyd, R. A. May/June 2010. How does water and spray solution pH impact pesticide activity? Ohio Florists' Association Bulletin 921: 19-21.
- Cloyd, R. A. April 2010. What is a synergist? GrowerTalks 73(12): 66-68.
- Cloyd, R. A. April 2010. Alternative pest control. GrowerTalks 73(12): 46-48.
- Cloyd, R. March/April 2010. Effect of moisture and fertility on insect and mite pests. Ohio Florists' Association Bulletin 920: 14-17.
- Cloyd, R. March 2010. Pesticide mixtures can impact pest resistance. Greenhouse Management & Production 30(3): 32-33.
- Bethke, J. A., and R. A. Cloyd. February 2010. Making the case for pesticide use. Greenhouse Grower 28(2): 24-30.

- Cloyd, R., and R. Cowles. January/February 2010. Resistance management: Principles of resistance, mode of action, and pesticide rotation. *Ohio Florists' Association Bulletin* 919: 17-23
- Cloyd, R. A., N. R. Timmons, J. M. Goebel, and K. E. Kemp. January 2010. Pesticides and rove beetles: are they compatible? *Greenhouse Product News* 20(1): 26-32.
- Cloyd, R. A. January 2010. How they eat can hurt them. *GrowerTalks* 73(9): 84-86.
- Cloyd, R. November/December 2009. Western flower thrips management: have we reached an impasse? *Ohio Florists' Association Bulletin* 918: 24-29.
- Cloyd, R. December 2009. Thwart grasshopper attacks with cultural practices and well-timed insecticides. *Nursery Management & Production* 25(12): 28-30.
- Cloyd, R. November 2009. Dealing with pests on herbs. *Greenhouse Management & Production* 29(11): 30-31.
- Cloyd, R. A., and R. S. Cowles. October 2009. Resistance management of arthropod pests. *American Nurseryman* 209(10): 36-45.
- Cloyd, R. September/October 2009. Sanitation: keep it clean to keep the "bugs" away. *Ohio Florists' Association Bulletin* 917: 1-8
- Cloyd, R. September 2009. Pesticides of essential oils sound great, but do they work? *Growing for Market* 18(8): 16
- Cloyd, R. A. 2009. Insect and mite pest identification and management. *Perennial Plants: The Journal of the Perennial Plant Association*: 21-42.
- Cloyd, R. August 2009. Silicon-based fertilizers and insect pests. *Greenhouse Product News* 19(8): 34-38.
- Cloyd, R. July/August 2009. Combating broad and cyclamen mites. *Ohio Florists' Association Bulletin* 916: 14-15.
- Cloyd, R. A. July 2009. Water pH and pesticide activity. *GrowerTalks* 73(3): 60-64.
- Cloyd, R. July 2009. Pests can develop resistance to alternative pesticides. *Greenhouse Management & Production* 29(7): 49-51.
- Cloyd, R. A. June 2009. Taking out spider mites. *Greenhouse Grower* 27(7): 40-41.
- Cloyd, R. May/June 2009. Fungus gnats and shore flies: not just nuisance pests. *Ohio Florists' Association Bulletin* 915: 20-21.
- Cloyd, R. A. 2009. Use pesticides judiciously to reduce resistance. *Fruit & Veg Tech* 9(1): 14-15.
- Cloyd, R. A. May 2009. Mites and miticides. *GrowerTalks* 73(1): 72-76.
- Cloyd, R. March/April 2009. Get them while they are young: fundamentals of insect growth regulators. *Ohio Florists' Association Bulletin* 914: 20-28.
- Cloyd, R. A. March/April 2009. Biologically battling bugs. *Greenhouse World* 2(2): 16-18.
- Cloyd, R. March 2009. Know your organic pest control materials. *Greenhouse Management & Production* 29(3): 40-42.
- Cloyd, R. A. February 2009. Choose the right organic pest controls. *Growing for Market* 18(2): 17-18.
- Cloyd, R. A. February 2009. Does dew do it? *GrowerTalks* 72(10): 76-79.
- Cloyd, R. January/February 2009. Why should you implement a scouting program? *Ohio Florists' Association Bulletin* 913: 16-18.
- Cloyd, R. December 2008. Tank mixing revisited. *Greenhouse Product News* 18(12): 24-31.
- Cloyd, R. November/December 2008. OFA fact sheet: caterpillar pests. *Ohio Florists' Association Bulletin* 912: 11-13.
- Cloyd, R. A. November 2008. Factors affect efficacy of systemic insecticides. *Greenhouse Management & Production* 28(11): 44-48.
- Cloyd, R. A. October 2008. Western flower thrips pupae. *GrowerTalks* 72(6): 82.
- Caamano, E. X., R. A. Cloyd, L. F. Solter, and D. J. Fallon. October 2008. Quality does matter. *Greenhouse Product News* 18(10): 26-32.
- Cloyd, R. A. October 2008. Fact sheet: greenhouse weed management. *Ohio Florists' Association Bulletin* 910: 14-15.

- Cloyd, R. A. September 2008. Key to pest control: Mode of action. *GrowerTalks* 72(5): 86-88.
- Cloyd, R. A. September 2008. What's up with the honeybees? *Nursery Management & Production* 24(9): 46-47.
- Cloyd, R. A. July/August 2008. Not all intruders are bad. *Ohio Florists' Association Bulletin* 909: 27.
- Cloyd, R. A. July 2008. Put the brakes on thrips resistance. *Greenhouse Management & Production* 28(7): 92-96.
- Cloyd, R. A. July 2008. Bulb mites: the critters from the deep. *GrowerTalks* 73(3): 102-104.
- Cloyd, R. A. July 2008. Soaps and detergents. *Orchids* 77(7): 502-504.
- Cloyd, R. A. May/June 2008. Effect of systemic insecticides on the brown soft scale, *Coccus hesperidum*. *Ohio Florists' Association Bulletin* 908: 24-27.
- Cloyd, R. A. 2008. Twospotted spider mite. *The Journal of the Perennial Plant Association*, Spring 2008: 57-59.
- Cloyd, R. March/April 2008. Why is it important to know mode of action? *Ohio Florists' Association Bulletin* 907: 21-23
- Cloyd, R. A. March 2008. Impact of pesticides on twospotted spider mite. *GrowerTalks* 71(10): 82-85.
- Cloyd, R. A. March 2008. Organics really includes more IPM methods. *Greenhouse Management & Production* 28(3): 58-60.
- Cloyd, R. A., C. L. Galle, S. R. Keith, and K. E. Kemp. February 2008. Effect of translaminar miticides on twospotted spider mites. *Greenhouse Product News* 18(2): 42-48.
- Cloyd, R. January/February 2008. OFA fact sheet: fungus gnats. *Ohio Florists' Association Bulletin* 906: 26.
- Cloyd, R. January 2008. All predatory mites are not created equal. *Greenhouse Grower* 26(1): 48-54.
- Cloyd, R. A. November 2007. Mixed up about tank mixing? *American Nurseryman* 206(9): 26-28.
- Cloyd, R. A. November 2007. Twospotted spider mites. *GrowerTalks* 71(7): 64-66.
- Cloyd, R. A. November 2007. Use recommended label rates. *Greenhouse Management & Production* 27(11): 62-65.
- Cloyd, R. September/October 2007. Pesticide resistance case study. *Ohio Florists' Association Bulletin* 904: 4-5.
- Cloyd, R. A. September 2007. Mite-B-Gone: understanding miticides. *Greenhouse Product News* 17(9): 28-35.
- Cloyd, R. September 2007. Impact of fungicides on natural enemies. *Greenhouse Grower* 25(10): 76-80.
- Cloyd, R. A. September 2007. Azadirachtin and tank mixtures. *GrowerTalks* 71(5): 66-67.
- Cloyd, R. July/August 2007. OFA fact sheet: mites. *Ohio Florists' Association Bulletin* 903: 14-15.
- Cloyd, R. A. July 2007. Relationship between plant stress and arthropod pest susceptibility in urban landscapes. *The Michigan Landscape* 50(7): 25-27.
- Cloyd, R. A. July 2007. Rotate-paks could save money, waste. *Greenhouse Management & Production* 27(7): 94-96.
- Cloyd, R. A., and K. K. Rane. June 2007. Broad mite: the "sneaky" mite. *Greenhouse Business* 13(3): 25-26.
- Cloyd, R. A. May/June 2007. OFA fact sheet: whiteflies. *Ohio Florists' Association Bulletin* 902: 20-21.
- Gill, S., and R. Cloyd. Spring 2007. Wipe it out? *The Cut Flower Quarterly* 19(2): 14-19.
- Cloyd, R. A. April 2007. De-bugging your turfgrass. *Landscape Management* 46(4): 74-82.
- Cloyd, R. March/April 2007. Label restrictions: why should you read them? *Ohio Florists' Bulletin* 901: 13-14.
- Cloyd, R. A. March 2007. Light affects pests, beneficials. *Greenhouse Management & Production* 27(3): 52-53.
- Cloyd, R. A. March 2007. Mitey resistant. *GrowerTalks* 70(11): 74A.
- Cloyd, R., C. Galle, and S. Keith. February 2007. Getting stirred up about tank mixing. *Greenhouse Product News* 17(2): 32-38.
- Cloyd, R. A. January 2007. How insects and mites obtain food from plants, and how this impacts management. *Greenhouse Business* 13(1): 15-16.

- Cloyd, R. January/February 2007. OFA fact sheet: western flower thrips. Ohio Florists' Association Bulletin 900: 15-16.
- Cloyd, R. A. December 2006. Aphids and IGRs. GrowerTalks 70(8): 66.
- Cloyd, R. A. November 2006. Growers bank on biologicals. Greenhouse Management & Production 26(11): 61-62
- Cloyd, R. A. October 2006. What's new in bug control? Greenhouse Management & Production 26(10): 49-54.
- Cloyd, R. A. October 2006. How insects and mites obtain food from plants, and how this impacts management. Greenhouse Business 12(10): 25-26.
- Cloyd, R. September/October 2006. Insect growth regulators 101. Ohio Florists' Association Bulletin 898: 1-6.
- Fisher, P., A. Eaton, and R. Cloyd. September 2006. Fungus gnat management. Greenhouse Grower 24(11): 20-24.
- Cloyd, R. A., K. A. Williams, M. Kennelly, and J. O'Mara. September 2006. Don't get "burned" using a pre-emergent herbicide in your greenhouse. Greenhouse Business 12(9): 27-28.
- Hogendorp, B., and R. Cloyd. August 2006. Sanitation's place in an IPM program. Greenhouse Product News 16(8): 38-44.
- Cloyd, R. A. July 2006. Whole lotta sucking going on: what are selective blockers? Greenhouse Business 12(7): 45-46.
- Cloyd, R. 2006. Spot treating may, or may not, help target specific pests. Greenhouse Management & Production 26(7): 98-101.
- Cloyd, R. A. June 2006. Fungus gnats and IGRs. GrowerTalks 70(2): 114-116.
- Cloyd, R. April 2006. Compatibility of biorationals and natural enemies matters. Greenhouse Management & Production 26(4): 63-64.
- Cloyd, R. A. April 2006. Dealing with twospotted spider mites on roses. American Rose 38(16): 31-32.
- Cloyd, R. March 2006. Are biorationals compatible with most natural enemies? Greenhouse Management & Production 26(3): 65-67.
- Cloyd, R. March/April 2006. Biological control: "quality" makes all the difference. Ohio Florists' Association Bulletin 895: 25-26.
- Cloyd, R. A. April 2006. Systemic insecticides: how do they work? GrowerTalks 69(12): 74-76.
- Cloyd, R. A. February 2006. Consider alternative products for pest control. Greenhouse Management & Production 26(2): 48-49.
- Cloyd, R. A. January 2006. How well do you know them? GrowerTalks 69(9): 120-122.
- Meers, T., and R. Cloyd. January 2006. Female fungus gnats' favorite places. Greenhouse Product News 16(1): 38-44.
- Cloyd, R. A. November/December 2005. Bedding plant pest management. Ohio Florists' Association Bulletin 893: 15-18.
- Cloyd, R. A. November/December 2005. Mode of action chart and pest activity. Ohio Florists' Association Bulletin 893: 26-27.
- Cloyd, R. November 2005. Achieving your goal with pest control. Greenhouse Product News 15(12): 16-19.
- Cloyd, R. November 2005. Do surfactants kill insects and mites? Greenhouse Management & Production 25(11): 62.
- Cloyd, R. A. October 2005. How insects and mites obtain food from plants...and how it impacts management. Greenhouse Business 11(10): 25-26.
- Hogendorp, B., and R. Cloyd. October 2005. Too much of a good thing. Greenhouse Product News 15(10): 32-36.
- Cloyd, R. A. September/October 2005. Pesticides and natural enemies: are biorational insecticides and miticides compatible with biological control agents? Southeastern Floriculture 15(5): 18-21.

- Cloyd, R. A. September/October 2005. Resistance management: mode of action and principles of pesticide rotation. *Ohio Florists' Association Bulletin* 892: 11-15.
- Cloyd, R. A. September/October 2005. Future of extension...challenges and concerns related to extension programming. *Ohio Florists' Association Bulletin* 892: 2-4.
- Cloyd, R. A. September 2005. Twospotted spider mite: how "mite" you deal? *Greenhouse Business* 11(9): 25-26.
- Cloyd, R. A. September 2005. Are fungus gnats making you squirm? *GrowerTalks* 69(5): 106-112.
- Cloyd, R. A. September 2005. Conserve: a perspective. *Greenhouse Grower* 23(10): 106-110.
- Cloyd, R. A. July 2005. Are shoreflies more than just a nuisance? *Greenhouse Business* 11(7): 25-26.
- Cloyd, R. July 2005. Are you familiar with the 'mighty' miticides available? *Greenhouse Management & Production* 25(7): 93-95.
- Cloyd, R. A. June 2005. The new arsenal. *GrowerTalks* 69(2): 120-122.
- Cloyd, R. A. June 2005. Fungus gnats and diatomaceous earth. *Greenhouse Product News* 15(6): 82-84.
- Whipker, B. E., J. L. Gibson, I. McCall, T. J. Cavins, C. Warfield, and R. Cloyd. May/June 2005. Success with ornamental peppers. *Southeastern Floriculture* 15(3): 24-26.
- Cloyd, R. A. May/June 2005. Why controlling weeds helps avoid insect and mite pest problems. *Ohio Florists' Association Bulletin* 890: 1-7.
- Cloyd, R. A. May/June 2005. Biorational pest control materials and natural enemies: are they compatible? *Ohio Florists' Association Bulletin* 890: 12-15.
- Cloyd, R. April 2005. Weed management: getting to the "root" of the problem. *Greenhouse Business* 11(4): 23-24.
- Cloyd, R. A. April 2005. Phytotoxicity: don't burn your plants. *GrowerTalks* 68(12): 70-72.
- Cloyd, R. A. March/April 2005. Pesticide rotation: why it is important to understand mode of action in order to effectively deal with insect and mite pests. *Southeastern Floriculture* 16(2): 11-13.
- Cloyd, R. March 2005. How insects and mites feed. *Greenhouse Management & Production* 25(3): 62-63.
- Cloyd, R. March 2005. Added benefits of insect growth regulators. *Greenhouse Business* 11(3): 29-30.
- Cloyd, R. March 2005. Truth behind resistance management. *Greenhouse Product News* 15(3): 40-43.
- Cloyd, R. A. February 2005. The retail greenhouse pest challenge. *American Nurseryman* 201(3): 26-30.
- Cloyd, R. February 2005. Weed management: getting to the "root" of the problem. *Greenhouse Business* 11(2): 25-26.
- Cloyd, R. A. January 2005. Tiny mite, big problem. *Nursery Management & Production* 21(1): 55-56.
- Cloyd, R. A. January 2005. Apply the right amount of pest control. *Greenhouse Management & Production* 25(1): 51-58.
- Cloyd, R. A. January/February 2005. Insect growth regulators: are they compatible with biological control agents? *Ohio Florists' Association Bulletin* 888: 26-28.
- Cloyd, R., and M. Bell. November/December 2004. They're called "soft," but they carry a "big stick." *Ohio Florists' Association Bulletin* 887: 26-27.
- Cloyd, R. November/December 2004. Soaps and detergents: should they be used in interior plantscapes? *Southeastern Floriculture* 14(6): 22-23.
- Cloyd, R. A. November 2004. Pesticide phytotoxicity. *Orchids* 73(11): 860-861.
- Cloyd, R. November 2004. Leafminers. *GrowerTalks* 68(7): 70-72.
- Cloyd, R. November 2004. Rove beetle may be an option for fungus gnat control. *Greenhouse Management & Production* 24(11): 74-75.
- Cloyd, R. October 2004. Mode of activity and rotation: a breakdown. *Greenhouse Product News* 14(10): 68-73.
- Cloyd, R. A. September/October 2004. Mode of action and principles of pesticide rotation. *Ohio Florists' Association Bulletin* 886: 4-6.
- Cloyd, R. A. September/October 2004. Perennial pest management. *Southeastern Floriculture* 14(5): 10-16

- Cabrera, A. R., R. A. Cloyd, and E. R. Zaborski. September 2004. The spuds have it. *Greenhouse Grower* 22(10): 48-54.
- Cloyd, R. A. September 2004. Don't feed the bugs. *GrowerTalks* 68(5): 92.
- Cloyd, R. A. August 2004. Part II: insect pests of trees and shrubs. *Growing Trends*: 7-10.
- Cloyd, R., and D. Warnock. August 2004. Tank-mixing and pesticide performance. *Greenhouse Product News* 14(8): 34-37.
- Cloyd, R. A. July/August 2004. Western flower thrips management: where are we? And where are we going? *Ohio Florists' Association Bulletin* 885: 14-15.
- Cloyd, R. July 2004. Watch out for mealybugs. *Greenhouse Management & Production* 24(7): 83-85.
- Cloyd, R. A. July 2004. Natural instincts. *American Nurseryman* 200(2): 38-41.
- Cloyd, R. July 2004. Rotating your miticides. *GrowerTalks* 68(3): 112-114.
- Cloyd, R. A. July 2004. Part 1: insect pests of trees and shrubs. *Growing Trends*: 7-10.
- Cloyd, R. A. May/June 2004. Modifying your tank mixes for maximum pesticide performance. *Ohio Florists' Association Bulletin* 884: 4-8.
- Cloyd, R. A. April 2004. Mixing it up. *American Nurseryman* 199(7): 48-52.
- Cloyd, R. A. April 2004. Don't get washed up using soaps. *GrowerTalks* 67(12): 54 and 65.
- Cloyd, R. April/May 2004. Insect growth regulators do more than kill young insects. *Greenhouse Business* 10(4): 43-45.
- Cloyd, R. A. March/April 2004. Keeping up with insect management. *Ohio Florists' Association Bulletin* 883: 3-16.
- Cloyd, R. March 2004. What you should know about chloronicotinyl insecticides. *Greenhouse Management & Production* 24(3): 60.
- Cloyd, R. A. January/February 2004. Effective use of insecticides to manage this year's most voracious insects. *Ohio Florists' Association Bulletin* 882: 1-10.
- Cloyd, R. A. January 2004. Are shoreflies more than just a nuisance? *Greenhouse Business* 10(1): 23-24.
- Cloyd, R., and C. Sadof. December 2003. Scouting effects on application. *Greenhouse Product News* 13(13): 30-32.
- Cloyd, R. November 2003. New controls help growers. *Greenhouse Management & Production* 23(11): 56.
- Cloyd, R. A. November 2003. Do beneficial nematodes really work? *GrowerTalks* 67(7): 72-74.
- Cloyd, R. September 2003. Food for thought: Insect feeding behaviors and management. *Greenhouse Business* 9(9): 21-22.
- Cloyd, R. A. September 2003. Tank mixing 101. *GrowerTalks* 67(5): 92-94.
- Cloyd, R. July/August 2003. Pest control materials: what's new? What's effective? *Ohio Florists' Association Bulletin* 879: 1-9.
- Cloyd, R. July/August 2003. "Soaps" and detergents: should they be used in interior plantscapes? *Ohio Florists' Association Bulletin* 879: 14-15.
- Cloyd, R. A. July 2003. Buying in fungus gnats. *GrowerTalks* 67(3): 144.
- Cloyd, R. July 2003. Store pesticides properly. *Greenhouse Management & Production* 23(7): 94.
- Warfield, C., B. Whipker, C. Casey, R. Cloyd, J. Gibson, and B. Krug. June 2003. Top ten problems of vegetative annuals. *Greenhouse Product News* 3(6): 22-28.
- Cloyd, R. A. June 2003. Better pest control. *Nursery Management & Production* 19(6): 43-46.
- Cloyd, R. May/June 2003. Behind enemy lines. *Interior Business* 4(3): 36-42.
- Cloyd, R., and N. Cycholl. April 2003. Pest control and herbs. *Greenhouse Product News* 13(4): 22-24.
- Cloyd, R. April 2003. Western flower thrips. *GrowerTalks* 66(12): 68.
- Cloyd, R. A. March/April 2003. Perennial pest management. *Ohio Florists' Association Bulletin* 877: 1-18.
- Cloyd, R. March 2003. Taking care of a tough slug infestation. *Greenhouse Business* 9(3): 27-41.
- Cloyd, R. March 2003. Research helps growers understand fungus gnats. *Greenhouse Production & Management* 23(3): 60-62.

- Cloyd, R. A. January/February 2003. Spring bedding plant and plug production: Pest management. *Ohio Florists' Association Bulletin* 876: 1-17.
- Cloyd, R. December 2002. Sound cultural practices reduce problems with wood-boring insects. *Growing Trends*: 17.
- Cloyd, R. A. December 2002. Rotation plans that work. *GrowerTalks* 66(8): 68.
- Cloyd, R. November 2002. Pest defenses against biological controls. *Greenhouse Management & Production* 22(11): 60-62.
- Cloyd, R. October 2002. Resistance training. *GrowerTalks* 66(6): 46-48.
- Cloyd, R. September/October 2002. The good bugs. *Interior Business* 3(5): 46-51.
- Cloyd, R. A. September 2002. Ten ways to make pest control materials work better. *Ohio Florists' Association Bulletin* 872: 1-8.
- Cloyd, R. A. September 2002. Beneficials require special handling. *Greenhouse Business* 8(9): 27-29.
- Cloyd, R. A. August 2002. "Natural" pesticides II. *GrowerTalks* 66(4): 116-118.
- Cloyd, R. July 2002. Fighting fungus gnats with IGRs. *Greenhouse Grower* 20(8): 98-102.
- Whipker, B. E., C. Warfield, R. Cloyd, J. L. Gibson, and T. J. Cavins. July 2002. Avoiding top problems of poinsettias. *Greenhouse Product News* 12(7): 24-29.
- Cloyd, R. A. July 2002. Action thresholds influence pest management decisions. *Greenhouse Management & Production* 22(7): 107-108.
- Cloyd, R. A. June 2002. Defining systemics. *GrowerTalks* 66(2): 94-96.
- Whipker, B. E., J. L. Gibson, I. McCall, T. J. Cavins, C. Warfield, and R. Cloyd. June 2002. Ornamental pepper production tips. *Greenhouse Product News* 12(6): 18-24.
- Cloyd, R. A. April 2002. Why aren't my pests dying? *GrowerTalks* 65(12): 68-70.
- Cloyd, R. A. April 2002. Are shoreflies more than just a nuisance? *Greenhouse Business* 8(4): 23-24.
- Cloyd, R. A. March 2002. Learn how pest control materials hit their target. *Greenhouse Management & Production* 22(3): 64-65.
- Cloyd, R. A. February 2002. The seven deadly sins.....of thrips. *GrowerTalks* 65(10): 74-76.
- Cloyd, R. January 2002. Insect and mite problems on bedding plants. *Ohio Florists' Association Bulletin* 865: 1-4.
- Cloyd, R. A., and S. Nameth. November/December 2001. Growing insect and mite-free interior plants. *Southeastern Floriculture* 11(6): 21-22.
- Cloyd, R. A. December 2001. Better IPM. *GrowerTalks* 65(8): 74-76.
- Cloyd, R. A. November 2001. The dilemma of tank mixing. *Greenhouse Management & Production* 21(11): 66-67.
- Cloyd, R. A. November 2001. The issue of invasive species. *Growing Trends*: 10-11.
- Cloyd, R. A. October 2001. Caterpillar pests. *Greenhouse Product News* 11(10): 36-40.
- Cloyd, R. A. October 2001. Plant breeding and pest management. *Greenhouse Business* 7(10): 33-34.
- Cloyd, R. A. September 2001. Mealybug menace. *GrowerTalks* 64(5): 114-116.
- Cloyd, R. A. August 2001. "Natural" pesticides. *GrowerTalks* 65(4): 126.
- Cloyd, R. A. July 2001. A break in the action. *Greenhouse Grower* 19(8): 144-150.
- Cloyd, R. A. July 2001. Be aware of eriophyid mites. *Greenhouse Management & Production* 21(7): 83-85.
- J. L. Gibson, B. E. Whipker, R. A. Cloyd, and C. Y. Warfield. June 2001. Avoiding the top production problems of ornamental cabbage and kale. *Greenhouse Product News* 11(6): 48-51.
- Cloyd, R. A. June/July 2001. Pest control: Mealybugs and scales. *Ohio Florists' Association Bulletin* 859: 6-7.
- Cloyd, R. A., and E. R. Zaborski. June 2001. Controlling fungus gnats. *Greenhouse Product News* 11(6): 74.
- Cloyd, R. A. April 2001. Thrips as virus vectors. *Greenhouse Business* 7(4): 25-26.
- Cloyd, R. A. April 2001. Aphids in the greenhouse. *North Carolina Flower Growers' Bulletin* 46(2): 4-5.
- Cloyd, R. A. March 2001. Resistance not always to blame for whitefly problems. *Greenhouse Management & Production* 21(3): 70-71.

- Cloyd, R. A. February 2001. Strategies for managing spring bedding plant pests. *North Carolina Flower Growers' Bulletin* 46(1): 8-9.
- Cloyd, R. A. Winter 2001. Fungus gnats and shorefly management strategies: panel discussion. *Floriculture Indiana* 15(1): 5-10.
- Cloyd, R. A. December 2000. Pest management: two-spotted spider mite. *Greenhouse Business* 6(12): 20-21.
- Cloyd, R. A. November 2000. Effect of water pH on pest control materials. *Greenhouse Management & Production* 20(11): 78-79.
- Cloyd, R. A. September/October 2000. Pest patrol. *Interior Business* 3(1): 20-25.
- Cloyd, R. A. 2000. Understanding and managing whiteflies. *FlowerTech* 3(5): 42-45.
- Cloyd, R. A., and K. K. Rane. August 2000. Pest connection. *GrowerTalks* 64(4): 128-131.
- Cloyd, R. A. August 2000. Know your friends: the fungus gnat parasitoid, *Synacra pauperi*. *Midwest Biological Control News* 7(2): 2.
- Cloyd, R. A. July 2000. New, future pest controls. *Greenhouse Management & Production* 20(7): 100-101.
- Cloyd, R. A., and R. Lindquist. June/July 2000. Resistance management: theory and practice. *Ohio Florists' Association Bulletin* 847: 14-16.
- Cloyd, R. A. June 2000. Plant stress favors pests in urban landscapes. *Grounds Maintenance* 35(6): 54-56.
- Cloyd, R. A., and H. A. J. Hoitnik. March 2000. Up-date on disease suppressive potting mixes. *GrowerTalks* 63(12): 104.
- Cloyd, R. A. March 2000. Shoreflies are more than just a nuisance. *Greenhouse Management & Production* 20(3): 70-71.
- Gibson, J. L., B. E. Whipker, and R. A. Cloyd. February 2000. Success with container production of twelve herb species. *North Carolina Flower Growers' Bulletin* 45(1): 1-9.
- Cloyd, R. December 1999. Know your friends: the entomopathogen *Verticillium lecanii*. *Midwest Biological Control News* 6(12): 3.
- Cloyd, R. A. November 1999. Fungus gnats: the phantom menace beneath the soil. *Greenhouse Management & Production* 19(11): 69-71.
- Cloyd, R. A. October 1999. Know your friends: *Delphastus pusillus*, whitefly predator. *Midwest Biological Control News* 6(10): 3.
- Cloyd, R. A. August 1999. The supplier side of biological control for greenhouses. *Midwest Biological Control News* 6(8): 1-7.
- Cloyd, R. A. July 1999. Know your friends: the entomopathogenic fungus *Metarhizium anisopliae*. *Midwest Biological Control News* 6(7): 3.
- Cloyd, R. A. July 1999. Making friends with enemies. *Greenhouse Grower* 17(8): 140-144.
- Cloyd, R. July 1999. How production practices can influence pest control. *Greenhouse Management & Production* 19(7): 97-98.
- Gibson, J. L., B. E. Whipker, R. Cloyd, and R. Jones. April 1999. Growing Asian vegetables as floricultural crops. *North Carolina Flower Growers' Bulletin* 44(2): 1-7.
- Cloyd, R. A. January/February 1999. Know your friends: *Amblyseius cucumeris*, predator of western flower thrips. *Midwest Biological Control News* 6(1/2): 3.
- Cloyd, R. A. 1999. Prevent pest problems early. *Greenhouse Management & Production* 19(3): 55-56.
- Cloyd, R. A. 1999. Geranium pest management. *Ohio Florists' Association Bulletin* 831: 9-11.
- Cloyd, R. A. 1998. Success with smokes/fumigants and aerosols. *GrowerTalks* 62(9): 72-74.
- Whipker, B. E., R. Jones, R. A. Cloyd, and C. R. Campbell. August 1998. Ornamental cabbage and kale production update. *North Carolina Flower Growers' Bulletin* 43(4): 6-8.
- Cloyd, R. A. September 1998. Citrus mealybug management in greenhouses and interiorscapes. *Ohio Florists' Association Bulletin* 827: 10-11.
- Cloyd, R. A. Summer 1998. Insect pests of greenhouse-grown pansy. *Floriculture Indiana* 12(3): 7-9.
- Cloyd, R. A., and C. S. Sadof. Spring 1998. Aphids: Biology and management. *Floriculture Indiana* 12(2): 3-7.

- Cloyd, R. A., and C. S. Sadof. February 1998. Peak pesticide performance. *Greenhouse Grower* 16(2): 50-54.
- Cloyd, R. A., and C. S. Sadof. Winter 1998. Good horticultural practices reduce risk of insect and disease problems. *Floriculture Indiana* 12(1): 7-9.
- Cloyd, R. A. December 1997. Pesticides for greenhouses. *North Carolina Flower Growers' Bulletin* 42(6): 16-18.
- Cloyd, R. A., and C. S. Sadof. 1997. Simple ways to reduce insect and disease pests. *Grower Talks* 61(9): 58.
- Cloyd, R. A. November 1997. Know your friends: *Leptomastix dactylopii*. *Midwest Biological Control News* 4(11): 3.
- Cloyd, R. A., and C. S. Sadof. Fall 1997. Western flower thrips: biology and management. *Floriculture Indiana* 11(3/4): 2-6.
- Cloyd, R. A., and C. S. Sadof. Summer 1997. Whiteflies: biology and management. *Floriculture Indiana* 11(3): 7-9.
- Whipker, B. E., and R. A. Cloyd. June 1997. Success with garden mums. *North Carolina Flower Growers' Bulletin* 42(3): 8-15.
- Cloyd, R. A., and C. S. Sadof. Spring 1997. Greenhouse pesticide update. *Floriculture Indiana* 11(2): 7.
- Cloyd, R. A. April 1997. Western flower thrips: biological controls can be effective if you know what, when & how to use them. *Greenhouse Management & Production* 17(4): 28-30.
- Cloyd, R. A. Winter 1997. Shore flies: nemesis or nuisance? *Floriculture Indiana* 11(1): 10-11.
- Cloyd, R. A. February 1997. Maximizing Marathon. *Greenhouse Business* 3(2): 35.
- Cloyd, R. A., and C. S. Sadof. February 1997. Scouting for pests. *Greenhouse Grower* 15(2): 24-25.
- Cloyd, R. A. Fall 1996. Weed management inside and outside greenhouses. *Floriculture Indiana* 10(4): 6-7.
- Cloyd, R. A., and C. S. Sadof. Fall 1996. Scouting for greenhouse pests. *Floriculture Indiana* 10(4): 4-5.
- Cloyd, R. A. August 1996. Weed management inside and outside greenhouses. *Ohio Florists' Association Bulletin* 802: 15-16.
- Sadof, C. S., R. A. Cloyd, and J. Yang. May 1996. The influence of plant architecture on biological control. *Midwest Biological Control News* 3(5): 1-2.
- Cloyd, R. A. Spring 1996. Naturalis-O. *Floriculture Indiana* 10(1): 4.
- Cloyd, R. A. March 1996. Western flower thrips management. *Ohio Florists' Association Bulletin* 797: 3-5.
- Cloyd, R. A. February 1996. Know your friends: *Hypoaspis miles*, a predatory mite. *Midwest Biological Control News* 3(2): 3.
- Cloyd, R. A. October 1995. Naturalis-O, a new mycoinsecticide. *Midwest Biological Control News* 2(10): 5.
- Cloyd, R. A. Fall 1995. Western flower thrips management. *Floriculture Indiana* 9(3/4): 3-6.
- Cloyd, R. A. Spring 1995. Tips on using Marathon 1G effectively. *Floriculture Indiana* 9(2): 3-4.
- Cloyd, R. A. and C. S. Sadof. Winter 1995. Citrus mealybug. *Floriculture Indiana* 9(1): 3-4.
- Cloyd, R. A. Fall 1994. *Delphastus pusillus*. *Floriculture Indiana* 8(4): 4-5.
- Cloyd, R. A. Summer 1994. Shoreflies. *Floriculture Indiana* 8(3): 4-5.
- Cloyd, R. A. Spring 1994. Aphids. *Floriculture Indiana* 8(2): 3-6.
- Cloyd, R. A. Winter 1994. Fungus gnats. *Floriculture Indiana* 8(1): 3-5.
- Cloyd, R. A. Summer 1993. Whiteflies. *Floriculture Indiana* 7(3): 4-7.
- Cloyd, R. A. Spring 1993. Western flower thrips. *Floriculture Indiana* 7(2): 14-18.
- 8. Publications: Newsletter Articles/Updates/Reports**
- Cloyd, R. Winter 2017. What is the difference between azadirachtin and neem oil? *Association of Education and Research Greenhouse Curators Newsletter* 28(3): 9.
- Cloyd, R. A. June 2016. Mosquitoes: how to avoid getting “bitten” by this “sucking” insect. *The Clay Digger Newsletter (Northland Garden Club)*: 1-2.
- Cloyd, R. Spring 2016. How to deal with mealybugs using insecticides. *Association of Education and Research Greenhouse Curators Newsletter* 28(1): 9-10.

- Cloyd, R. A. September 2015. Mealybugs & scale management in interior plantscapes. Connect, AmericanHort Newsletter (<http://americanhort.theknowledgecenter.com/AmericanHortNews/index.cfm?view=detail&colid=147&cid=1440&mid=8541>): September 11, 2015.
- Cloyd, R. A. April 2015. Diagnostics: what is the problem? Connect, AmericanHort Newsletter (<http://americanhort.theknowledgecenter.com/AmericanHortNews/index.cfm?view=detail&colid=147&cid=1440&mid=8424&CFID=28324589&CFTOKEN=64fb>): August 28, 2015.
- Cloyd, R. Spring 2015. How do plants affect the performance of natural enemies? Association of Education and Research Greenhouse Curators 27(1): 9-10.
- Cloyd, R. A. May 2015. Translaminar pesticides: factors that may impact effectiveness. The Rose Gazette: 8-9.
- Cloyd, R. A. March 2015. Systemic insecticides and bees: are we re-visiting “Silent Spring?” The Bee Buzzer, Northeastern Kansas Beekeepers’ Association Newsletter 67(4): 5-6.
- Cloyd, R. A. Winter 2014. Natural pesticides: what are they? Nebraska Nursery News: 14-16.
- Cloyd, R. A., and J. R. Nechols. Winter 2014. Intraguild predation: what is the impact on biological control programs? Association of Education and Research Greenhouse Curators Newsletter 26(3): 1-3.
- Cloyd, R. A. Fall 2014. Translaminar pesticides: factors that may impact effectiveness. A Way We Grow (Cookville, TN Area Rose Society Newsletter) 7(4): 7-9.
- Cloyd, R. A. July 2014. Translaminar pesticides: factors that may impact effectiveness. Nashville Rose Leaf 47(6): 3.
- Cloyd, R. A. June 2014. What are adjuvants? Nashville Rose Leaf 47(5): 6.
- Cloyd, R. Spring 2014. Understanding the basic issues associated with insecticide resistance. Association of Education and Research Greenhouse Curators Newsletter 25(1): 1-4.
- Cloyd, R. Winter 2014. The difference between pyrethrins/pyrethrum and pyrethroids. Association of Education and Research Greenhouse Curators Newsletter 25(3): 1-2.
- Cloyd, R. January 2014. Pyrethrins & pyrethroids: what’s the difference? Wisconsin Master Gardener Association Newsletter 24(1): 1-2.
- Cloyd, R. A. November 2013. What is insecticide hormoligosis? Nashville Rose Leaf 46(10): 3.
- Cloyd, R. Summer 2013. Are systemic insecticides really effective against the western flower thrips? Association of Education and Research Greenhouse Curators Newsletter 25(2): 4-5.
- Cloyd, R. A. July 2013. “Soaps” and detergents: should they be used on roses? Nashville Rose Leaf 46(6): 6.
- Cloyd, R. A. June 2013. “Rose aphid—Beware of this “sucker” Nashville Rose Leaf 46(5): 6.
- Cloyd, R. Spring 2013. Systemic insecticides and western flower thrips. Online Ornamentals 1(2): 7-9 (Purdue University Extension, West Lafayette, IN).
- Cloyd, R. A. April 2013. METI miticides: what are they? Nashville Rose Leaf 46(3): 5-6.
- Cloyd, R. February 2013. How do plants defend themselves against insect pests? TurfNews. The Kansas Turfgrass Foundation Newsletter: 6.
- Cloyd, R. Fall 2012. Shifting into reverse: can resistant insect and mite pests become susceptible again? Association of Education and Research Greenhouse Curators Newsletter 24(2): 1-2.
- Cloyd, R. A. August 2012. Translaminar pesticides: what are they & what can impact effectiveness? Nashville Rose Leaf 45(7): 6.
- Cloyd, R. A. June 2012. Twospotted spider mite on roses. Nashville Rose Leaf 45(5): 3.
- Cloyd, R. A. May 2012. Japanese beetle: what can you do? Nashville Rose Leaf 45(4): 3.
- Cloyd, R. A. June 2012. Pesticide resistance: what is it and how to avoid it? Nashville Rose Leaf 44(5): 6.
- Cloyd, R. Summer 2012. Pesticide metabolites. Association of Education and Research Greenhouse Curators Newsletter 24(1): 6-7.
- Cloyd, R. A. April 2012. Pesticide resistance: Association with plant defenses and natural enemies. FloriBytes Newsletter 7(1): 10-12.

- Cloyd, R. A. December 2011. What are pesticide metabolites? Nashville Rose Leaf 44(11): 3.
- Cloyd, R. October 2011. New insecticide product for rose growers. Nashville Rose Leaf 44(9): 5.
- Cloyd, R. A. September 2011. Caterpillar pests. Branching Out—Kansas Nursery & Landscape Association Newsletter: 2-3.
- Cloyd, R. September 2011. Pesticide metabolites. FloriBytes Newsletter. Year VI (3): 12-13.
- Cloyd, R. June 2011. Sirocco™: a new insecticide/miticide. FloriBytes Newsletter. Year VI (2): 1.
- Cloyd, R. June 2011. Thrips rotation programs: which ones are appropriate...which ones are not! FloriBytes Newsletter. Year VI (2): 2-4.
- Cloyd, R. June 2011. Pesticide resistance: relationship with plant defenses and natural enemies. Nashville Rose Leaf 44(6): 8.
- Cloyd, R. A. Spring 2011. Broad mites in the greenhouse. The Indiana Flower Grower 5(1): 9-10 (Purdue University Extension, West Lafayette, IN).
- Cloyd, R. Spring 2011. Pesticide resistance: association with plant defenses and natural enemies. Association of Education and Research Greenhouse Curators Newsletter 23(1): 1-2.
- Cloyd, R. Spring 2011. What are METI miticides? Association of Education and Research Greenhouse Curators Newsletter 23(1): 2-4.
- Cloyd, R. A. May 2011. Pesticide resistance: what is it and how to avoid it? Skyscrapers & Roses (Newsletter of the Manhattan Rose Society) 11(4): 14-15.
- Cloyd, R. A. April-May 2011. The impact of horticultural practices on insect and mite pests. N.E.W. Horticulture 34(2): 7-8.
- Cloyd, R. A. April 2011. Rose rosette disease. Nashville Rose Leaf 44(3): 6.
- Cloyd, R. A. April 2011. Rose rosette disease. Skyscrapers & Roses (Newsletter of the Manhattan Rose Society) 11(3): 16-18.
- Cloyd, R. A. April 2011. How does pruning impact susceptibility to insect pests? Branching Out—Kansas Nursery & Landscape Association Newsletter: 1-2.
- Cloyd, R. A. April 2011. Imidacloprid (Merit®) and spider mites. Rose Rambler 17(8): 7-8.
- Cloyd, R. March 2011. Twospotted spider mite management in greenhouses. FloriBytes Newsletter. Year VI (1): 5-10.
- Cloyd, R. January 2011. Systemic insecticides 101. Wisconsin Master Gardener Association Newsletter 21(1): 1-4.
- Cloyd, R. A. December 2010. Systemic insecticides: what you need to know. N.E.W. Horticulture Newsletter 33(4): 4-14.
- Cloyd, R. A. November 2010. Impact of horticultural practices on insect and mite pests. Branching Out—Kansas Nursery & Landscape Association Newsletter 2(3): 1-6.
- Cloyd, R. November 2010. Pest profile: sowbugs and pillbugs. The Kansas City Gardener 15(11): 10.
- Cloyd, R. A. 2010. Imidacloprid (Merit®) and spider mites. Basal Breaks 24(3): 8.
- Cloyd, R. October 2010. The impact of horticultural practices on insect and mite pests. TURFNews: 5-6.
- Cloyd, R. October 2010. Broad mites. FloriBytes Newsletter. Year V (3): 13-15.
- Cloyd, R. September 2010. Dormant oils—everything you ever wanted to know but were afraid to ask. A Way We Grow 3(3): 2-3.
- Cloyd, R. A. July 2010. Beware of grasshoppers. Branching Out—Kansas Nursery & Landscape Association Newsletter 2(2): 5-7.
- Cloyd, R. July 2010. Impact of pesticide use on natural enemies: Secondary pest outbreaks & target pest resurgence. Nashville Rose Leaf 44(5): 9.
- Cloyd, R. Summer 2010. The importance of synergists for resistance mitigation. Association of Education and Research Greenhouse Curators Newsletter 22(2): 5.
- Cloyd, R. A. Summer 2010. Western flower thrips pupa: a difficult life stage to regulate. The Indiana Flower Grower 4(2): 11-12 (Purdue University Extension, West Lafayette, IN).

- Cloyd, R. June 2010. Miticides and the life stages of two spotted spider mites they are most effective on. FloriBytes Newsletter. Year V (2): 6-8.
- Cloyd, R. June 2010. Pest control materials that may be used on greenhouse-grown herbs. FloriBytes Newsletter. Year V (1): 11-12.
- Cloyd, R. June 2010. Western flower thrips pupa: a difficult life stage to regulate. FloriBytes Newsletter. Year V (1): 9-11.
- Cloyd, R. June 2010. Pesticide resistance: what is it and how to avoid it? Nashville Rose Leaf 44(5): 6.
- Cloyd, R. May 2010. Imidacloprid (Merit[®]) and spider mites. Nashville Rose Leaf 44(4): 10.
- Cloyd, R. A. April 2010. Problem spider mites. Branching Out—Kansas Nursery & Landscape Association Newsletter 2(1): 4-5.
- Cloyd, R. Spring 2010. Dealing with whitefly and spider mite infestations. The Scotts Exchange Newsletter 2: 3-4.
- Cloyd, R. A. Spring 2010. Pest control materials that may be used on greenhouse-grown herbs. The Indiana Flower Grower 4(1): 12 (Purdue University Extension, West Lafayette, IN).
- Cloyd, R. A. March 2010. Pesticide mixtures can impact pest resistance. WESTERN e-Newsletter (http://www.wnla.org/news_list.php?artic_idx=993).
- Cloyd, R. A. February 2010. “Sucking it up:” understanding how systemic insecticides kill insect pests. WESTERN e-Newsletter (http://www.wnla.org/news_list.php?artic_idx=883).
- Cloyd, R. Winter 2009. How does water and spray solution pH impact pesticide activity? Association of Education and Research Greenhouse Curators Newsletter 21(4): 5-7.
- Cloyd, R. A. December 2009. What rose grower’s should know about colony collapse disorder. Nashville Rose Leaf 43(11): 4.
- Cloyd, R. November 2009. Spinosad and western flower thrips. FloriBytes Newsletter. Year IV (7): 8-10.
- Cloyd, R. October 28, 2009. Benefits of using dormant oils to manage arthropod pests. Kansas State University Horticulture Newsletter 43: 3-4.
- Cloyd, R. A. Fall 2009. How does water and spray solution pH impact pesticide activity? The Indiana Flower Grower 3(3): 9-11 (Purdue University Extension, West Lafayette, IN).
- Cloyd, R. October 2009. How does water and spray solution pH impact pesticide activity? FloriBytes Newsletter. Year IV (6): 1-3.
- Cloyd, R. A. October 2009. What is the difference between soft and hard scales. Branching Out—Kansas Nursery & Landscape Association Newsletter 1(4): 2-3.
- Cloyd, R. Fall 2009. Calculation and calibration. Association of Education and Research Greenhouse Curators Newsletter 21(3): 1-3.
- Cloyd, R. August 2009. Pest control materials for greenhouse-grown herbs. FloriBytes Newsletter. Year IV (5): 1-3.
- Cloyd, R. A. Summer 2009. Kontos[™]: the first systemic miticide. The Indiana Flower Grower 3(2): 12-13 (Purdue University Extension, West Lafayette, IN).
- Cloyd, R. A. 2009. The benefits of systemic insecticides. Basal Breaks 23(3): 3.
- Cloyd, R. July 2009. Eriophyid mites. FloriBytes Newsletter. Year IV (4): 5-6.
- Cloyd, R. A. June 2009. How to avoid problems with wood-boring insects. WESTERN e-Newsletter (http://www.wnla.org/news_list.php?artic_idx=528).
- Cloyd, R. A. June 2009. Mulches and living organisms. Branching Out—Kansas Nursery & Landscape Association Newsletter 1(3): 2-3.
- Cloyd, R. A. June 2009. Defusing misconceptions about thrips. Nashville Rose Leaf 43(5): 9.
- Cloyd, R. June 2009. Are silicon-based fertilizer applications “really” effective against insect pests? FloriBytes Newsletter. Year IV (3): 1-9.
- Cloyd, R. May 2009. Kontos[™]: the first systemic miticide. FloriBytes Newsletter. Year IV (2): 8-9.
- Cloyd, R. A. May 2009. The benefits of systemic insecticides. Nashville Rose Leaf 43(4): 4.
- Cloyd, R. A. April 2009. Insecticides and beneficial insects. The Great Plains Cultivator: 4-5.

- Cloyd, R. Spring 2009. Don't get "lathered," understanding insecticidal soaps and detergents. Association of Education and Research Greenhouse Curators Newsletter 21(1): 4-5.
- Cloyd, R. A. Spring 2009. Impact of pesticides on twospotted spider mite (*Tetranychus urticae*). The Indiana Flower Grower 3(1): 7-9 (Purdue University Extension, West Lafayette, IN).
- Cloyd, R. A. Spring 2009. Overture[®]: a new insecticide for thrips control. The Indiana Flower Grower 3(1): 6-7 (Purdue University Extension, West Lafayette, IN).
- Cloyd, R. A. March 2009. Systemic insecticides: how do they work? Branching Out—Kansas Nursery & Landscape Association Newsletter 1(3): 3-4.
- Cloyd, R. February 2009. Dormant oils—everything you ever wanted to know, but were afraid to ask. Nashville Rose Leaf 43(1): 5.
- Cloyd, R. January 2009. Overture[®]: a new insecticide for thrips control. FloriBytes Newsletter. Year IV (1): 1-2.
- Cloyd, R. A. Winter 2008. Characteristics of systemic insecticides used in interior plantscapes. Association of Education and Research Greenhouse Curators Newsletter 19(4): 4-7.
- Cloyd, R. A. November 2008. Emerald ash borer: an alternative perspective. Branching Out—Kansas Nursery & Landscape Association Newsletter: 4.
- Cloyd, R. A. October 2008. Insect and plant-pathogen relationships. WESTERN e-Newsletter (http://www.wnla.org/news_list.php?artic_idx=264).
- Cloyd, R. A. Fall 2008. Arthropod pest and natural enemy interactions: can pests become resistant to natural enemies? Association of Education and Research Greenhouse Curators Newsletter 20(3): 1-6.
- Cloyd, R. A. Fall 2008. Understanding predatory mites: key to successful biological control. Association of Education and Research Greenhouse Curators Newsletter 19(3): 3-11.
- Cloyd, R. A. Summer 2008. Miticides and susceptible twospotted spider mite life stages. The Indiana Flower Grower 2(2): 7-9 (Purdue University Extension, West Lafayette, IN).
- Cloyd, R. May 2008. Gnatrol: What is it? FloriBytes Newsletter. Year III (2): 5-7.
- Cloyd, R. A. April 2008. Dormant oils: are they useful for controlling arthropod pests? Branching Out—Kansas Nursery & Landscape Association Newsletter: 4-5.
- Cloyd, R. March 2008. Be on the lookout for aphids. Northwest Ohio's Commercial Greenhouse Resource 4(2): 1.
- Cloyd, R. A. February 2008. Diverse assortment of plant material and preventative measures can combat emerald ash borer. WESTERN e-Newsletter (http://www.wnla.org/news_list.php?articidx=136).
- Cloyd, R. 2007. Emerald ash borer update. Branching Out—Kansas Nursery & Landscape Association Newsletter 1(1): 2.
- Cloyd, R. 2007. What to do about the Q-biotype whitefly? GreenCast Newsletter 1(5) [www.greencastonline.com].
- Cloyd, R. A. Spring 2007. Hard to resistant: how twospotted spider mite develops resistance to miticides. Association of Education and Research Greenhouse Curators Newsletter 19(1): 7.
- Cloyd, R. A. Spring 2007. Principles of mode of action and rotation. Association of Education and Research Greenhouse Curators Newsletter 19(1): 1-6.
- Cloyd, R. April/May 2007. Thrips and fungus gnat management. Northwest Ohio's Commercial Greenhouse Resource 3(4): 5.
- Cloyd, R. A. 2007. Plant stress and pest susceptibility. N.E.W. Horticultural Newsletter 30(5): 8-9.
- Cloyd, R. 2007. Two spotted spider mite and resistance to miticides. Basal Breaks 21(3): 8.
- Cloyd, R. A., and K. K. Rane. 2007. Broad mite: the "sneaky" mite. Ohio Floriculture Online [<http://floriculture.osu.edu/BroadMite.html>].
- Cloyd, R. A. 2007. The dilemma of tank-mixing. Ohio Floriculture Online [<http://floriculture.osu.edu/archive/sep02/TankMixing.html>].
- Canas, L., and R. Cloyd. September/October 2006. Whitefly identification and management. Northwest Ohio's Commercial Floriculture Resource 2(8): 6-7.

- Canas, L., and R. Cloyd. September 2006. Leafroller management. FIROO Bytes Newsletter. Year I (2): 3.
- Canas, L., and R. Cloyd. September 2006. Whitefly identification and management. FIROO Bytes Newsletter. Year I (2): 1-3.
- Cloyd, R. A. Spring 2006. The ABC's of IGR's. Association of Education and Research Greenhouse Curators Newsletter 18(2): 1-3.
- Cloyd, R. A. Fall 2005. Bug-Geta: new pest control materials for use in greenhouses. Association of Education and Research Greenhouse Curators Newsletter 17(3): 8.
- Canas, L., and R. Cloyd. 2005. The Q-biotype whitefly: a "new" whitefly in the USA. Northwest Ohio's Commercial Floriculture Resource: 2.
- Cloyd, R. A. July/August 2005. News—suburbanization influences pest problems. Virginia Nursery & Landscape Association Newsletter 75(4): 51-52.
- Cloyd, R. A. 2005. Control of spider mites on roses: are all miticides the same? Basal Breaks 19(3): 3 (http://www.chattanoogaarose.org/control_of_spider_mites_on_roses.htm)
- Cloyd, R. A. Summer 2005. How does suburbanization influence pest problems? Illinois Natural History Survey Reports 384: 4.
- Cloyd, R. A. Spring 2005. Are biorational insecticides and miticides compatible with biological control agents? Association of Education and Research Greenhouse Curators Newsletter 17(1): 1-5.
- Cloyd, R. A. Spring 2005. What is effective on mealybugs? HorTalk: 1-3.
- Cloyd, R. A. May 2005. How does suburbanization influence pest problems? Michigan State University Landscape Alert 20(7): 4-5.
- Cloyd, R. April 2005. New pest control materials. Country Folks Grower Midwest, Section B: 5.
- Cloyd, R. February 2005. Why should you be concerned about weeds? Country Folks Grower 14(3): 11-15.
- Cloyd, R. A. January-March 2005. Pesticide phytotoxicity: biorational pesticides are safe on *Phalaenopsis*. Orkid Noos 4(1): 4-6.
- Cloyd, R. A. Autumn 2004. Mode of action and principles of pesticide rotation. Association of Education and Research Greenhouse Curators Newsletter 16(3): 3-6.
- Cloyd, R. August 2004. All miticides are not created equal. Greenhouse Update 16(2): 1-2.
- Cloyd, R. July 2004. All miticides are not created equal. Michigan State University Landscape Alert 19(14): 2-4.
- Cloyd, R. A. Summer 2004. Understanding the neonicotinoid chemical class of insecticides. Association of Education and Research Greenhouse Curators Newsletter 16(2): 6-7.
- Cloyd, R. A. July 2004. Greenhouse pest management—leafminers. Illinois Fruit and Vegetable News 10(11): 100.
- Cloyd, R. A. May 2004. Managing slugs. Michigan State University Landscape Alert 19(2): 12-13.
- Cloyd, R. A. May 2004. Natural indeed: are natural insecticides safer and better than conventional insecticides? Illinois Pesticide Review 17(3): 1-3.
- Cloyd, R. A. Spring 2004. Why is water pH important when using pesticides? Association of Education and Research Greenhouse Curators Newsletter 16(1): 3-4.
- Bryan, R., and R. Cloyd. Fall 2003. Pesticide modes of activity: the importance of rotation. Basal Breaks 17(4): 2-4.
- Cloyd, R. A. September 2003. "Soaps" and detergents: should they be used on roses? Chattanooga Rose Society (<http://www.chattanoogaarose.org/Soaps%20and%20Detergents.htm>).
- Cloyd, R. A. June 2003. Tank mixing: why should you be concerned. Country Folks Grower Midwest 12(7): 26-27.
- Cloyd, R. A. May-June 2003. Plant breeding and pest management. Illinois State Florists' Association Bulletin 527: 19-20.
- Whipker, B. E., J. L. Gibson, I. McCall, T. J. Cavins, C. Warfield, and R. Cloyd. May 2003. Success with ornamental peppers. Country Folks Grower Midwest, Section A: 15-16.
- Cloyd, R. A. September 2002. The dilemma of tank-mixing. Ohio Floriculture 9(6): 1-2.

- Cloyd, R. A. September-October 2002. Defining systemics. Illinois State Florists' Association Bulletin 523: 9-10.
- Cloyd, R. A. July 2002. Systemic, local systemic, or translaminar: what's the difference? Illinois Pesticide Review 4: 1-2.
- Cloyd, R. A. May-June 2002. Plant breeding and pest management. Illinois State Florists' Association Bulletin 521: 14-15.
- Cloyd, R. A. January 2002. Factors that affect pesticides after application. Illinois Pesticide Review 1: 1-3.
- Cloyd, R. A. Fall 2001. Plant breeding and pest management. Association of Education and Research Greenhouse Curators Newsletter 14(2): 3-4.
- Cloyd, R. A. July 2001. Understanding the supplier side of biological control. Association of Zoological Horticulture Newsletter: 3-4.
- Cloyd, R. A. July 2001. Dealing with slugs. The GardenLink: 1-3.
- Cloyd, R. A. November-December 2000. Insects and how they affect your life. The Celebration 8(6): 6.
- Cloyd, R. A. Spring 2000. Biological control of mealybugs. Association of Education and Research Greenhouse Curators Newsletter 13(2): 4-5.
- Cloyd, R. A. March/April 2000. Plant stress-its relationship to arthropod pests in urban landscapes. Illinois Natural History Reports 362: 4.
- Cloyd, R. June 2000. Greenhouse pest management: shoreflies. The Illinois Fruit and Vegetable News 6(13): 10-11.
- Cloyd, R. A. May 2000. Greenhouse pest management: fungus gnats. The Illinois Fruit and Vegetable News 6(11): 12-13.
- Cloyd, R. A. Fall 1999. Biological control of thrips in conservatories and research/teaching greenhouses. Association of Education and Research Greenhouse Curators Newsletter 12(3): 2-3.
- Cloyd, R. Summer 1999. Supplier side of biological control. Association of Education and Research Greenhouse Curators Newsletter 12(2): 1-3.
- Cloyd, R., B. R. Lerner, K. Rane, G. Ruhl, and P. Sellers. August 1998. Rudbeckia. Down the Garden Path 135: 1-2.
- Cloyd, R. A. November 1997. Greenhouse weed management. Ohio Florists' Association Hotline No. 4.
- Cloyd, R. A., and C. S. Sadof. November/December 1997. Growers' Bits & Pieces. Greenhouse pests: citrus mealybug. Society of Iowa Florists & Growers Newsletter: 1-2.
- Cloyd, R. A., and C. S. Sadof. September 1997. Growers' Bits & Pieces. Greenhouse pests: western flower Thrips. Society of Iowa Florists & Growers Newsletter: 1-4.
- Cloyd, R. A. May 1997. Orchid pests and their management. Down the Garden Path 113: 3-4.
- Cloyd, R. A. March/April 1997. Growers' Bits & Pieces. Greenhouse pests: shore flies. Society of Iowa Florists & Growers Newsletter: 1-2.
- Cloyd, R. A. October 1996. Growers' Bits & Pieces. Using Marathon 1G effectively. Society of Iowa Florists & Growers Newsletter: 1-2
- Cloyd, R. A. July 1996. Growers' Bits & Pieces. Greenhouse pests: aphids. Society of Iowa Florists & Growers Newsletter: 1-3.
- Anwar, M. N., C. R. Edwards, L. W. Bledsoe, and R. A. Cloyd. 1994. Effects of soybean lines, growth stages, and feeding intervals on the feeding behavior of Mexican bean beetle. Annual Plant Resistance to Insects Newsletter 20: 18.

9. Kansas Insect Newsletter Articles (Department of Entomology; Kansas State University, Manhattan, KS)

- Cloyd, R. October 20, 2017. Cross-striped cabbageworm. No. 28: 1-3.
- Cloyd, R. September 21, 2017. Look at all the painted ladies. No. 25: 1-4.
- Cloyd, R. July 6, 2017. Japanese beetles are back? No. 15: 1-5.
- Cloyd, R. June 23, 2017. Bagworms are here! No. 13: 1-4.
- Cloyd, R. May 26, 2017. Rose sawflies. No. 10: 4-6.

- Cloyd, R. May 26, 2017. European fruit lecanium scale. No. 10: 3-4.
- Cloyd, R. May 26, 2017. Euonymus scale. No. 10: 1-3.
- Cloyd, R. May 12, 2017. European elm flea weevil. No. 8: 1-3.
- Cloyd, R. April 21, 2017. Clover mite. No. 7: 5-6.
- Cloyd, R. April 21, 2017. European pine sawfly. No. 7: 3-5.
- Cloyd, R. April 13, 2017. Ash/lilac borer: don't get "bored-down" by this caterpillar borer. No. 6: 4-6
- Cloyd, R. December 14, 2016. Dormant oils. No. 35: 1-3.
- Cloyd, R. November 3, 2016. Oak leaf itch mite. No. 32: 1-3.
- Cloyd, R. September 1, 2016. Mimosa webworm. No. 3-4.
- Cloyd, R. September 1, 2016. Fall webworm. No. 26: 1-3.
- Cloyd, R. August 25, 2016. Cicada killers. No. 25: 1-3.
- Cloyd, R. July 15, 2016. Geraniums and petunias beware of the tobacco budworm. No. 19: 3-5.
- Cloyd, R. July 15, 2016. Squash vine borer. No. 19: 1-3.
- Cloyd, R. July 8, 2016. Japanese beetles are back! No. 18: 2-5.
- Cloyd, R. July 8, 2016. Green June beetles: out-and-about. No. 18: 1-2.
- Cloyd, R. July 1, 2016. Twospotted spider mites: "hot and ready." No. 17: 3-4.
- Cloyd, R. July 1, 2016. Lace bugs: nothing to worry about? No. 17: 1-3.
- Cloyd, R. June 17, 2016. Bagworms are back! No. 15: 1-4.
- Cloyd, R. May 21, 2016. European fruit lecanium scale: adding a "decorative touch" to bald cypress. No. 12: 1-2.
- Cloyd, R. May 20, 2016. Spirea aphid: watch out for this "sucking" insect. No. 11: 4-5.
- Cloyd, R. May 20, 2016. Rose sawflies: out with a vengeance! No. 11: 2-4.
- Cloyd, R. May 20, 2016. Oak vein pocket gall: back with a vengeance! No. 11: 1-2.
- Cloyd, R. May 13, 2016. Mosquitoes: how to avoid getting "bitten" by this "sucking" insect. No. 10: 1-3.
- Cloyd, R. May 6, 2016. Euonymus scale. No. 9: 1-3.
- Cloyd, R. April 21, 2016. Ash/lilac borer: do not get "w-holed" down by this borer. No. 7: 1-3.
- Cloyd, R. April 14, 2016. European pine sawfly. No. 6: 1-3.
- Cloyd, R. November 13, 2015. Here comes the Asian ladybird beetle! No. 26: 1-2
- Cloyd, R. October 16, 2015. Wheel bug: Be on the look-out for this distinct "bug." No. 24: 5-7.
- Cloyd, R. October 16, 2015. Parsleyworm or black swallowtail caterpillars. No. 24: 4-5.
- Cloyd, R. October 16, 2015. Euonymus scale: What can you do? No. 24: 2-4.
- Cloyd, R. October 16, 2015. Emerald ash borer in Kansas: Another quarantined county. No. 24: 1-2.
- Cloyd, R. September 11, 2015. Be on the look-out for goldenrod soldier beetles. No. 21: 2-4.
- Cloyd, R. August 21, 2015. Elm leaf beetle. No. 18: 1-2
- Cloyd, R. June 4, 2015. Rose sawflies. No. 8: 1-3.
- Cloyd, R. May 22, 2015. Vein pocket gall. No. 7: 4-5.
- Cloyd, R. May 14, 2015. Brownheaded ash sawfly. No. 6: 1-3.
- Cloyd, R. May 1, 2015. Caterpillars and sawflies. No. 4: 2-3.
- Cloyd, R. May 1, 2015. Honey bees and bumble bees: What is the difference? No. 4: 1-2.
- Cloyd, R. April 16, 2015. How to improve performance of pesticides: timing, coverage, and frequency. No. 2: 3-4.
- Cloyd, R. April 16, 2015. Ash/lilac borer: do not get "bored" by this borer. No. 2, 1-3.
- Cloyd, R. April 16, 2015. Skip the detergent. No. 2: 1.
- Cloyd, R. July 25, 2014. Walnut caterpillar. No. 15: 1-2.
- Cloyd, R. July 3, 2014. Japanese beetles are here! No. 13: 2-4.
- Cloyd, R. July 3, 2014. Red milkweed beetle. No. 13: 1-2.
- Cloyd, R. July 3, 2014. Vein pocket gall. No. 13: 1.
- Cloyd, R. June 6, 2014. Now is time to "nail" those bagworms. No. 10: 2-4.
- Cloyd, R.A. May 9, 2014. Eastern tent caterpillar. No. 6: 2-3.

- Cloyd, R. A. May 9, 2014. European pine sawfly. No. 6: 1-2.
- Cloyd, R. April 25, 2014. Ash/lilac borer. No. 4: 1-2.
- Cloyd, R. September 6, 2013. Spotted wing drosophila: Another new insect pest! No. 22: 1-3.
- Cloyd, R. August 16, 2013. Harlequin bug...beautiful but destructive! No. 19: 3-5.
- Cloyd, R. August 2, 2013. Oh...no...Japanese beetles are here! No. 17: 1-2.
- Cloyd, R. July 12, 2013. Another mite pest? Yes, the boxwood spider mite. No. 14: 1-2.
- Cloyd, R. June 28, 2013. It is starting to “heat-up” so get ready to deal with the twospotted spider mite. No. 13: 1-3.
- Cloyd, R. June 14, 2013. What is that giant moth? No. 11: 1-2.
- Cloyd, R. June 7, 2013. Get ready for bagworms! No. 10: 1-3.
- Cloyd, R. May 24, 2013. Cherry fruit fly. No. 8: 4-5.
- Cloyd, R. May 24, 2013. Brownheaded ash sawfly. No. 8: 3-4.
- Cloyd, R. May 24, 2013. Rose aphid. No. 8: 1-2.
- Cloyd, R. May 9, 2013. Pine needle scale...don’t get “stung” by this insect pest. No. 6: 1-3.
- Cloyd, R. May 3, 2013. Sowbugs and pillbugs. No. 5: 2-4.
- Cloyd, R. May 3, 2013. Impact of “climate change” on arthropod pests. No. 5: 4-8.
- Cloyd, R. April 22, 2013. Don’t get “bored” by the ash or lilac borer. No. 3: 1-3.
- Cloyd, R. October 22, 2012. What is that insect? It is...the red-shouldered bug. No. 28: 3-6.
- Cloyd, R. September 21, 2012. Here come those “infamous” nuisance pests...boxelder bugs! No. 25: 1-3.
- Cloyd, R. August 29, 2012. Emerald ash borer: “Barking” at our door. No. 22: 1-4.
- Cloyd, R. July 27, 2012. What are those “huge” wasps flying around? These are cicada killers? No. 19: 1-2.
- Cloyd, R. July 13, 2012. Lace bugs: Ok...so what? No. 18: 3-4.
- Cloyd, R. July 13, 2012. Blister beetles are “irritating” insects. No. 18: 1-2.
- Cloyd, R. June 29, 2012. With the weather “heating-up” it is time for...the twospotted spider mite. No. 16: 3-4.
- Cloyd, R. June 29, 2012. Aster yellows. No. 16: 1-2.
- Cloyd, R. June 22, 2012. Japanese beetle on roses: What can you do? No. 15: 3-5.
- Cloyd, R. June 22, 2012. OH...NO!! Bagworms: What can you do? No. 15: 1-2.
- Cloyd, R. June 15, 2012. Lime-sulfur: A multi-use pesticide. No. 14: 1-2.
- Cloyd, R. June 1, 2012. Twospotted spider mite on roses. No. 12: 2-5.
- Cloyd, R. June 1, 2012. Genista caterpillar. No. 12: 1-2.
- Cloyd, R. May 24, 2012. Hollyhock weevil. No. 11: 1-2.
- Cloyd, R. May 19, 2012. How do plants defend themselves against insect pests? No. 10: 1-2.
- Cloyd, R. May 4, 2012. What are all those moths flying around? No. 8: 1-2.
- Cloyd, R. April 20, 2012. Rotenone: A botanical insecticide. No. 7: 1-2.
- Cloyd, R. April 13, 2012. Aphids on roses. No. 6: 1-2.
- Cloyd, R. April 6, 2012. Lilac or ash borer: Be ready for this “critter.” No. 5: 1-2.
- Cloyd, R. March 16, 2012. Scale crawlers: Be on the look-out! No. 2: 1-3.
- Cloyd, R. September 23, 2011. Caterpillar pests: Chewers that have the munchies! No. 24: 1-4.
- Cloyd, R. September 9, 2011. Mimosa webworm...There here and doing damage. No. 22: 1-2.
- Cloyd, R. August 19, 2011. Yellownecked caterpillar. No. 19: 1-3.
- Cloyd, R. August 4, 2011. How does “drought or heat stress” influence plant-insect interactions? No. 17: 1-3.
- Cloyd, R. July 21, 2011. Hey...what is that eating my sweet potato vine? No. 15: 1-2.
- Cloyd, R. July 1, 2011. Bagworms are out-and-about. No. 12: 1-2.
- Cloyd, R. June 17, 2011. Thrips on roses...What can you do? No. 10: 1-2.
- Cloyd, R. June 3, 2011. Dealing with caterpillar pests. No. 8: 2-3.
- Cloyd, R. June 3, 2011. Clover mites. No. 8: 1-2.
- Cloyd, R. May 20, 2011. Voles. No. 6: 2-3.

- Cloyd, R. May 20, 2011. Be on the look-out for spruce spider mite. No. 6: 1-2.
- Cloyd, R. May 6, 2011. Insecticides: What's new in the marketplace? No. 4: 4-5.
- Cloyd, R. April 22, 2011. Earthworms and pesticides. No. 3: 1-3.
- Cloyd, R. April 8, 2011. Tomato russet mite...oh no!! No. 1: 16-18.
- Cloyd, R. October 29, 2010. Time to be thinking about the use of dormant oils. No. 30: 2-4.
- Cloyd, R. October 29, 2010. Yellow collared scape moth. No. 30: 1-2.
- Cloyd, R. October 22, 2010. Put out the welcome mat: Here comes the Asian lady beetle! No. 29: 1-3.
- Cloyd, R. October 8, 2010. Parsleyworm or black swallowtail caterpillars. No. 28: 5-6.
- Cloyd, R. September 17, 2010. The impact of horticultural practices on insect and mite pests. No. 26: 4-8.
- Cloyd, R. September 10, 2010. Impact of pesticides on natural enemies: Secondary pest outbreak and target pest resurgence. No. 25: 1-3.
- Cloyd, R. August 20, 2010. Magnolia scale. No. 22: 1-2.
- Cloyd, R. August 6, 2010. Emerald ash borer and thousand cankers disease...Welcome to Tennessee!! No. 20: 3-4.
- Cloyd, R. August 6, 2010. Cicada killers. No. 20: 1-2.
- Cloyd, R. July 2, 2010. Twolined spittlebug...They are out-and-about! No. 15: 1.
- Cloyd, R. June 18, 2010. Slugs...With a bit of humor! No. 13: 1-3.
- Cloyd, R. June 11, 2010. What happened to my honeysuckle bush? No. 12: 3-5.
- Cloyd, R. June 11, 2010. Twospotted spider mite. No. 12: 2-3.
- Cloyd, R. June 11, 2010. Bagworms are here so beware!! No. 12: 1.
- Cloyd, R. May 28, 2010. Time to "weigh-in" on oystershell scale. No. 10: 1-2.
- Cloyd, R. May 20, 2010. Sowbugs and pillbugs. No. 9: 1-2.
- Cloyd, R. May 14, 2010. Spirea aphid. No. 8: 1-2.
- Cloyd, R. May 7, 2010. Squash vine borer. No. 7: 2-4.
- Cloyd, R. May 7, 2010. Euonymus scale. No. 7: 1-2.
- Cloyd, R. April 30, 2010. Get those caterpillar pests when they are young: how to effectively use *Bacillus thuringiensis* spp. *kurstaki*. No. 6: 3-5.
- Cloyd, R. April 16, 2010. What is that "bug" buzzing around me? It is March flies! No. 4: 1.
- Cloyd, R. April 9, 2010. Clover mite: The intrusive invader. No. 3: 11-12.
- Cloyd, R. April 9, 2010. Asian lady beetle: Just let them be. No. 3: 9-11.
- Cloyd, R. April 2, 2010. Homeowner products: Insecticides for use on vegetables and fruits. No. 2: 1-2.
- Cloyd, R. March 26, 2010. Organic disease control (ODC™): is this "stuff" for real and how does it work? No. 1: 9-11.
- Cloyd, R. October 23, 2009. Benefits of using dormant oils to manage arthropod pests. No. 30: 1-2.
- Cloyd, R. September 18, 2009. Parsleyworm or black swallowtail. No. 26: 1.
- Cloyd, R. September 4, 2009. Beneficial wasp: *Scolia dubia*. No. 24: 1.
- Cloyd, R. August 14, 2009. Yellownecked caterpillar. No. 22: 1-2.
- Cloyd, R. July 31, 2009. Honeysuckle aphid. No. 20: 3-4.
- Cloyd, R. A. July 17, 2009. Cicada killers. No. 18: 6-7.
- Cloyd, R. July 10, 2009. Japanese beetle adults. No. 17: 2-3.
- Cloyd, R. July 10, 2009. Mimosa webworm. No. 17: 1.
- Cloyd, R. July 2, 2009. What is the impact of drought stress on plant-insect interactions? No. 16: 5-6.
- Cloyd, R. July 2, 2009. Lace bugs. No. 16: 3-5.
- Cloyd, R. June 19, 2009. Aphids in greenhouses: what can be used in organic production systems? No. 14: 5-8.
- Cloyd, R. June 12, 2009. Twospotted spider mite. No. 13: 3-4.
- Cloyd, R. June 12, 2009. Bagworms. No. 13: 1-3.
- Cloyd, R. A. May 8, 2009. Mulches and living organisms. No. 8: 4-7.
- Cloyd, R. A. May 8, 2009. Pine tortoise scale. No. 8: 3-4.

- Cloyd, R. A. April 24, 2009. Spruce spider mite. No. 6: 1-2.
 Cloyd, R. A. April 10, 2009. New pest control materials. No. 4: 1-2.
 Cloyd, R. March 27, 2009. Clover mite. No. 2: 1-2.
 Cloyd, R. August 8, 2008. Emerald ash borer. No. 18: 2.
 Cloyd, R. August 8, 2008. Spider mites and pyrethroid-based pest control materials. No. 18: 1.
 Cloyd, R. August 5, 2008. Cicada killer wasps. No. 22: 3.
 Cloyd, R. August 5, 2008. Pine pitch moth. No. 22: 2.
 Cloyd, R. August 5, 2008. Bagworms: Is it too late to treat? No. 22: 1.
 Cloyd, R. July 25, 2008. Cicada killer. No. 16: 2-3.
 Cloyd, R. July 25, 2008. Walnut caterpillar. No. 16: 2.
 Cloyd, R. July 25, 2008. Sowbugs and pillbugs. No. 16: 1.
 Cloyd, R. July 11, 2008. Mimosa webworm is out-and-about. No. 14: 1-2.
 Cloyd, R. July 3, 2008. Golden tortoise beetle. No. 13: 2.
 Cloyd, R. July 3, 2008. Bagworms: What to use? No. 13: 1.
 Cloyd, R. A. June 20, 2008. Twospotted spider mite. No. 11: 1-2.
 Cloyd, R. A. May 2, 2008. Clover mites. No. 5: 2-3.
 Cloyd, R. A. April 18, 2008. Soft and hard scales: what is the difference? No. 3: 3-4.

10. Miscellaneous (Articles, Brochures, and APPS)

- Wollaeger, H., R. Cloyd, and D. Smitley. January 13, 2014. Bounce dryer sheets for fungus gnat control: more than household items?
http://msue.anr.msu.edu/news/bounce_dryer_sheets_for_fungus_gnat_control_more_than_household_items
- Raudenbush, Z., and R. Cloyd. July 17, 2014. Black cutworms (<http://www.ksuturf.org/blog/2014/07/black-cutworms/>)
- Thompson, C., and R. A. Cloyd. May 30, 2014. Planning for white grub control (<http://www.ksuturf.org/blog/2014/05/planning-for-white-grub-control/>)
- Insect and mite web app (<http://www.egro.mobi>) 2014.
- Thrips management program for ornamental horticulture. 2011. 2 pgs.
- Whitefly (*Bemisia tabaci*) management program for ornamental plants. 2011. 4 pgs.
- Mode of action chart & pest activity. BioWorks: Victor, NY. 2010. 2 pgs.
- Cloyd, R. A., and M. D. Epp. Working with insect and mite pests organically. Kansas State University and the Wichita Organic Garden Club. 2010. 2 pgs.
- Management program for whiteflies on propagated ornamentals with an emphasis on the Q-biotype; www.mrec.ifas.ufl.edu/LSO/bemisia/bemisia.htm. 2006. 8 pgs.

11. Presentations (General)

- An up-date on emerald ash borer and effectively using insecticides against grubs in turfgrass (December 18, 2017. Heartland Green Industry Expo: “Common Ground” Education Conference; Olathe, KS).
- “What’s biting me?” Understanding ekbom syndrome/delusory parasitosis (December 12, 2017. Horticulture Professional Faculty Training [PFT]; Manhattan, KS).
- Dealing with grubs in turfgrass (December 5, 2017. 67th Annual Kansas Turfgrass Conference; Topeka, KS).
- Don’t get “chewed-up” by caterpillars (December 5, 2017. 67th Annual Kansas Turfgrass Conference; Topeka, KS).
- Insect and mite pests of daylilies (December 3, 2017. Kansas City Daylily Organization Bi-Monthly Meeting; Kansas City, MO).
- Don’t get “mixed-up” using pesticide mixtures (November 30, 2017. Siflor 2017: Simposia Internacional de la Floricultura; Quito, Ecuador, South America).
- How to improve pesticide performance (November 29, 2017. Siflor 2017: Simposia Internacional de la Floricultura; Quito, Ecuador, South America).

- Integrating pesticides with natural enemies: is it possible? (October 25, 2017. Biological Control for Greenhouses and Interiorscapes Workshop; Stillwater, OK).
- Pests impacting landscapes in our area (October 10, 2017. Prairie Village Fall Tree Board Seminar; Prairie Village, KS).
- Tree insects (October 9, 2017. 44th Kansas Arborists Association Arborists Training Course; Manhattan, KS).
- “What’s with all these bugs?” Plant protection of greenhouse insect and mite pests (September 21, 2017. Department of Plant Pathology Seminar Series; Kansas State University, Manhattan, KS).
- Management of insect and mite vectors of plant diseases (September 7, 2017. ISE #79: Integrated Approaches of Managing Diseases on Vegetables, Berries, and Grapes; Jefferson City, MO).
- Understanding the fundamentals of insecticide and miticide resistance (September 7, 2017. ISE #79: Integrated Approaches of Managing Diseases on Vegetables, Berries, and Grapes; Jefferson, City, MO).
- Western flower thrips, aphids, mites, and whiteflies: what can be done to alleviate problems with these “bugs?” (August 31, 2017. Winfield Academy “Lunch and Learn” Event; Denver, CO).
- Plant protection of insect and mite pests on greenhouse-grown horticultural crops (August 30, 2017. International Managers Meeting [IMM]; Chicago, IL).
- Plant protection of greenhouse insect and mite pests (August 24, 2017. Farwest Show; Portland, OR).
- Scale management (August 23, 2017. Farwest Show; Portland, OR).
- Rose rosette disease (virus): background, vector, and management (August 21, 2017. Rose Rosette Disease Workshop; Kansas City, MO).
- Biological control in greenhouse production systems (August 8, 2017. Tessman Product Buying Show; Oakdale, MN).
- Turf & ornamental insect control (August 3, 2017. Turf & Ornamentals Field Day; Haysville, KS).
- Impact of neonicotinoid systemic insecticides on bees (August 2, 2017. BFG 2017 Expo; Brooklyn Center, MN).
- Pesticides and pollinators: greenhouse production perspective (July 31, 2017. Bailey Nurseries Educational Meeting for Sales Representatives; Minneapolis, MN).
- Plant protection of insect and mite pests associated with perennials (July 25, 2017. 35th Annual Perennial Plant Symposium; Denver, CO).
- When biocontrols aren’t an option: pest management answers (July 17, 2017. Cultivate’17; Columbus, OH).
- Mealybugs: arch nemesis no more (July 16, 2017. Cultivate’17; Columbus, OH).
- Pesticides & pollinators: greenhouse production perspective (July 15, 2017. Cultivate’17; Columbus, OH).
- How to succeed using biocontrols (July 15, 2017. Cultivate’17; Columbus, OH).
- Fly management (June 21, 2017. Fly Management Class for Homeowners in Blue Township; Manhattan, KS).
- Oak leaf itch mite: how can you avoid getting the “scratchies?” (July 13, 2017. Ward Meade Garden Club; Topeka, KS).
- Understanding how pesticides impact pollinators (July 12, 2017. Association of Education and Research Greenhouse Curators Annual Meeting; Ames, IA).
- Oak leaf itch mite: making it difficult to enjoy the outdoors (July 5, 2017. Manhattan Optimist Club; Manhattan, KS).
- Update on insect and mite pests in Kansas (June 16, 2017. Kansas Arborists Association Summer Field Day; Lenexa, KS).
- Direct and indirect effects of pesticides and pesticide mixtures on the insidious flower bug, *Orius insidiosus*, under laboratory conditions (June 6, 2017. IOBC-WPRS Working Group: Integrated Control in Protected Crops, Temperate Climate; Niagara Falls, Canada).
- Insect and mite pests of Christmas trees (June 3, 2017. Kansas Christmas Tree Growers Association Summer Meeting; Lawrence, KS).
- Pesticides and bees (May 18, 2017. Master Gardener Monthly Gathering; Wichita, KS).

- Pollinators and pesticides (May 13, 2017. Master Gardeners Garden Fair; Salina, KS).
- Diseases vectored by insects and mites (May 9, 2017. Topeka Rose Society Meeting; Topeka, KS).
- Gardening for pollinators (April 25, 2017. Kickapoo Gardening Workshop; Horton, KS).
- Why do my oak trees make me itch? (April 15, 2017. Blueville Nursery Educational Seminar; Manhattan, KS).
- Effects of pesticides on pollinators (April 12, 2017. Kansas Department of Agriculture Pesticide/Fertilizer Staff Meeting; Manhattan, KS).
- Pollinators and pesticides (March 11, 2017. Hutchinson Horticulture Club's Annual Gathering for Gardeners; Hutchinson, KS).
- Pesticide use and safety (March 11, 2017. Harvey County Home and Garden Show; Newton, KS).
- Butterflies in the garden (March 11, 2017. Harvey County Home and Garden Show; Newton, KS).
- Biological control and biopesticides: an integrated plant protection strategy that's time has come (March 2, 2017. BioControls USA West 2017 Conference and Expo; Reno, NV).
- Invasive and non-invasive pests in Kansas (February 27, 2017. Town and Country Garden Club; Manhattan, KS).
- Oak leaf itch mites: what can you do? (February 23, 2017. Gard'N Wise Clerk Training; Lenexa, KS).
- Pesticides and pollinators (February 23, 2017. Gard'N Wise Clerk Training; Lenexa, KS).
- Pesticides and pollinators (February 21, 2017. Gard'N Wise Clerk Training; Wichita, KS).
- Pesticides and pollinators (February 18, 2017. 2017 Design and Grow Gardening Workshop; Wichita, KS).
- Pesticides and pollinators (February 16, 2017. Gard'N Wise Clerk Training; Dodge City, KS).
- Insect and mite disease interactions (February 14, 2017. Wichita Rose Society Meeting; Wichita, KS).
- Oak leaf itch mites: how to avoid the "scratches" (February 10, 2017. Kansas Garden Show; Topeka, KS).
- Pesticides and pollinators (February 4, 2017. 8th Annual Central Kansas Market Grower and Vendor Workshop; Wichita, KS).
- Pollinators and pesticides: preventing impacts on non-target organisms (February 2, 2017. National Railroad Contractors Association Weed Control Seminar; Indianapolis, IN).
- Fundamentals of turf pest control (January 31, 2017. SiteOne University; Wichita, KS).
- Fundamentals of ornamental pest control (January 31, 2017. SiteOne University; Wichita, KS).
- Pesticides and pollinators (January 28, 2017. Olathe Community Winter Vegetable Workshop; Olathe, KS).
- Pesticide usage—conventional or "organic?" (January 28, 2017. Olathe Community Winter Vegetable Workshop; Olathe, KS).
- Plant protection—dealing with insects and mites in the vegetable garden (January 28, 2017. Olathe Community Winter Vegetable Workshop; Olathe, KS).
- Don't allow mealybugs to creep up on you (January 26, 2017. Lower Mainland Horticulture Improvement Association Horticultural Growers' Short Course; Abbotsford, British Columbia, Canada).
- Managing aphids on floriculture crops (January 26, 2017. Lower Mainland Horticulture Improvement Association Horticultural Growers' Short Course; Abbotsford, British Columbia, Canada).
- Best rotation programs to avoid resistance (January 25, 2017. BWI Grower Seminar; Tyler, TX).
- Plant protection of insect and mite pests (January 25, 2017. BWI Grower Seminar; Tyler, TX).
- Best rotation programs to avoid resistance (January 24, 2017. BWI Grower Seminar; Buda, TX).
- Plant protection of insect and mite pests (January 24, 2017. BWI Grower Seminar; Buda, TX).
- The effects of insecticides on pollinators: fact or fiction? (January 13, 2017. 62nd Annual Shade Tree Conference; Topeka, KS).
- Resistance management in greenhouse food crops (January 12, 2017. Great Plains Growers Conference and Trade Show; St. Joseph, MO).
- Managing greenhouse pests and mites for food crops (January 12, 2017. Great Plains Growers Conference and Trade Show; St. Joseph, MO).
- Oak leaf itch mite (December 15, 2016. Manhattan Men's Garden Club December Meeting; Manhattan, KS).

- Scale insects (December 13, 2016. Heartland Green Industry Expo [Educational Conference]; Olathe, KS).
- Pesticides and pollinators (December 7, 2016. Missouri Green Industry Conference; St. Charles, MO).
- Pesticides and pollinators (December 6, 2016. 66th Annual Kansas Turfgrass Conference; Topeka, KS).
- Review of insect and mite pests of horticultural crops and turfgrass (December 6, 2016. 66th Annual Kansas Turfgrass Conference; Topeka, KS).
- The basics of biological control (November 18, 2016. 4th Annual FFA Teachers Seminar: Sponsored by Hummert International; Manhattan, KS).
- Western flower thrips and non-neonicotinoid insecticides (November 17, 2016. 9th Annual Poinsettia Trial Open House; Millstadt, IL).
- Mealybug management: how to deal with this “fuzzy-sucking” insect pest (November 10, 2016. Northeast Greenhouse Conference and Expo; Boxborough, MA).
- Fundamentals of biological control (October 18, 2016. Kansas Greenhouse Growers Association Biological Control Workshop; Manhattan, KS).
- Integrating biological control and pesticides in horticultural production systems (October 12, 2016. Department of Entomology and Plant Pathology Seminar Series; Oklahoma State University, Stillwater, OK).
- Tree insects (October 10, 2016. 43rd Kansas Arborists Association Arborists Training Course; Manhattan KS).
- Plant protection up-date (October 6, 2016. Winfield Academy Innovation Tour; Kalamazoo, MI).
- Butterflies in the garden (October 5, 2016. Kansas Association for Family and Community Education State Conference; Topeka, KS).
- Plant protection up-date (October 4, 2016. Winfield Academy Innovation Tour; Rogers, MN).
- Pesticides and pollinators (October 1, 2016. Advanced Master Gardener Training; Manhattan, KS).
- What are the non-neonicotinoid options? (September 15, 2016. Carlin BuyerFest; West Bend, WI).
- Western flower thrips management (September 15, 2016. Carlin BuyerFest; West Bend, WI).
- Effect of systemic insecticides on pollinators (September 14, 2016. Carlin BuyerFest; West Bend, WI).
- Plant protection for rose growers (September 10, 2016. Illinois-Indiana Fall Meeting and Rose Show; Decatur, IL).
- Tank mixing pesticides (September 7, 2016. Siflor 2016: Simposio Internacional de la Floricultura; Medellin, Colombia, South America).
- Western flower thrips management (September 6, 2016. Siflor 2016: Simposio Internacional de la Floricultura; Medellin, Colombia, South America).
- Pesticides, bees, and monarch butterflies (August 25, 2016. Chattanooga Rose Society Meeting; Chattanooga, TN).
- Don't get “weighed down” by scales (August 11, 2016. 2016 MNLA and KNLA Border Tour and Conference; Ottawa, KS).
- Pesticides and pollinator protection (August 11, 2016. North Central Region PACT Workshop; Manhattan, KS).
- How to effectively use pesticides in your landscape and garden (June 11, 2016. Blueville Nursery Educational Seminar; Manhattan, KS).
- Western flower thrips: is the game over? (July 21, 2016. Association of Education and Research Greenhouse Curators Annual Meeting; Ithaca, NY).
- Insect pest update (June 24, 2016. Kansas Arborists Association Summer Field Day; Lawrence, KS).
- Issues associated with pollinators (June 16, 2016. Master Gardener Educational Training; Kansas City, KS).
- Is there really such-a-thing as an “organic” pesticide? (April 21, 2016. Extension Educational Meeting; Hays, KS).
- Pesticides and pollinators (April 21, 2016. Extension Educational Meeting; Hays, KS).

- Waterloo: is the battle against western flower thrips lost? (April 5, 2016. 100th Annual Meeting of the Pacific Branch of the Entomological Society of America. Symposium: Challenges and Solutions for the Floriculture and Nursery Industry's Exotic Pest Crisis; Honolulu, HI).
- Proper pesticide usage (April 2, 2016. Spring Open House: Horticultural Services Garden Center; Manhattan, KS).
- Pest identification and "organic" control (March 31, 2016. Kansas State University Farm Club, Kansas State University; Manhattan, KS).
- Life and times of the 17-year periodical cicada (March 28, 2016. Town and Country Garden Club; Manhattan, KS).
- Extension and diagnostics (March 24, 2016. PEC Professional Development Seminar: Department of Entomology; Kansas State University, Manhattan, KS).
- Insect and mite management (March 14, 2016. 2016 Growing Growers Insect, Disease, and Weed Management Workshop; Lawrence, KS).
- Top 10 pests for 2016 (March 11, 2016. By Monthly Pot Luck Educational Meeting; Manhattan, KS).
- Western flower thrips management: what does the future hold? (March 3, 2016. Penn State Extension Western Pennsylvania Nearly Spring Greenhouse Night-Lighter; Gibsonia, PA).
- Pest management down-under: Australia and New Zealand (February 29, 2016. Department of Entomology Spring 2016 Seminar: Kansas State University, Department of Entomology; Manhattan, KS).
- The ABC's of butterflies (February 23, 2016. 2016 Gard'N Wise Clerk Training; Dodge City, KS).
- The ABC's of butterflies (February 18, 2016. 2016 Gard'N Wise Clerk Training; Lenexa, KS).
- The ABC's of butterflies (February 16, 2016. 2016 Gard'N Wise Clerk Training; Wichita, KS).
- Butterflies in your garden and itch mites (February 12, 2016. Kansas Garden Show; Topeka, KS).
- Systemic insecticides and pollinators (February 4, 2016. RetailWorks Conference Spring Training For Garden Center Employees; Manhattan, KS).
- Systemic insecticides and pollinators: what is really going on? [January 29, 2016. Integrated Environmental Plant Management Association of Western Canada (IEPMA) 20th Anniversary And Annual Conference; Kelowna, British Columbia, Canada].
- Diagnostics: what is wrong with my plants? (January 28, 2016. City of Kelowna Parks And Recreation Education Meeting; Kelowna, British Columbia, Canada).
- Diagnostics: what is wrong with my plants? [January 28, 2016. Integrated Environmental Plant Management Association of Western Canada (IEPMA) 20th Anniversary And Annual Conference; Kelowna, British Columbia, Canada].
- Concerns associated with pollinators in horticultural cropping systems (January 23, 2016. 30th Annual Heartland Wine Conference: Kansas Grape Growers and Winemakers Association; Manhattan, KS).
- Biopesticides and reduced-risk insecticides (January 23, 2016. 30th Annual Heartland Wine Conference: Kansas Grape Growers and Winemakers Association; Manhattan, KS).
- Whiteflies: how to deal with these suckers (January 21, 2016. 2016 Southeast Greenhouse Growers Day: Shady Maple Smorgasbord; East Earl, PA).
- Western flower thrips: is the game over? (January 21, 2016. 2016 Southeast Greenhouse Growers Day: Shady Maple Smorgasbord; East Earl, PA).
- Interactions between pollinators and agricultural systems: what is really going on? (January 19, 2016. Winter Meeting: Agriculture and Bees; Concordia, KS).
- Organic insect pest management with an emphasis on biological control (January 9, 2016. Great Plains Growers Conference And Trade Show; St. Joseph, MO).
- Managing two-spotted spider mites in hoop-houses using biological control (January 8, 2016. Great Plains Growers Conference And Trade Show; St. Joseph, MO).
- Reduced-risk insecticides and biopesticides (January 8, 2016. 2016 Great Plains Growers Conference And Trade Show; St. Joseph, MO).
- Tree & shrub pest diagnostics (January 7, 2016. Montana Green Expo; Missoula, MT).

- Greenhouse pest management (January 6, 2016. Montana Green Expo; Missoula, MT).
- Effectively dealing with insect and mite pests (December 14, 2015. Heartland Green Industry Expo; Olathe, KS).
- Issues associated with pollinators (December 14, 2015. Heartland Green Industry Expo; Olathe, KS).
- Identification and management of greenhouse insect and mite pests (December 11, 2015. 3rd Annual FFA Teachers Seminar; Manhattan, KS).
- Is using good bugs a cost-effective strategy for controlling insect pests of spring crops? (December 9, 2015. Michigan Greenhouse Growers Expo; Grand Rapids, MI).
- Managing pests on poinsettia and other greenhouse crops (December 8, 2015. Poinsettia Short Course and Trail Field Day; Gainesville, FL).
- Managing insect and mite pests of ornamentals and turfgrass (December 3, 2015. Kansas Pest Control Association Winter Conference and Exposition; Kansas City, KS).
- Factors impacting effectiveness of pesticides applied to turf (December 1, 2015. 65th Annual Kansas Turfgrass Conference; Topeka, KS).
- What happened in 2015—"Bug wise?" (December 1, 2015. 65th Annual Kansas Turfgrass Conference; Topeka, KS).
- Systemic insecticides and pollinators, adjuvants, and how pesticides affect insect and mite pests (November 19, 2015. Kansas City Sales Meeting; Kansas City, MO).
- Western flower thrips management: Is the game over? (October 30, 2015. 2nd Annual Iowa State University Greenhouse Short Course; Ames, IA).
- How to go neonicotinoid-free (October 30, 2015. 2nd Annual Iowa State University Greenhouse Short Course; Ames, IA).
- Insect control strategies for greenhouse growers: Western flower thrips management—has an impasse been reached? (October 27, 2015. Greenhouse Product News Plant Health Management Conference; Springfield, MA).
- Diagnosing insect and mite pest problems (October 21, 2015. Kansas Greenhouse Growers Association Educational Workshop; Manhattan, KS).
- Butterflies in your garden (October 14, 2015. Broderick Family and Community Education Event; Westermoreland, KS).
- Tree insects (October 12, 2015. 42nd Kansas Arborists Association Arborists Training Course; Manhattan, KS).
- Managing insect and mite pests without pesticides (October 7, 2015. Commercial Flower Growers of Wisconsin 2015 Fall Greenhouse Conference; Denmark, WI).
- Neonicotinoid systemic insecticides and pollinators (October 7, 2015. Commercial Flower Growers of Wisconsin 2015 Fall Greenhouse Conference; Denmark, WI).
- Pest & disease management track—practicing effective integrated pest management II: Western flower thrips management: has an impasse been reached? (October 6, 2015. Greenhouse Product News Plant Health Management Conference; Grand Rapids, MI).
- Pest & disease management track—practicing effective integrated pest management I: Insect management without using neonicotinoid insecticides (October 6, 2015. Greenhouse Product News Plant Health Management Conference; Grand Rapids, MI).
- Effectively managing multiple-pest complexes (September 17, 2015. AmericanHort's GrowPro Series: Greenhouse Solutions; Pittsburgh, PA).
- Effective insect management using neonicotinoid alternatives (September 16, 2015. AmericanHort's GrowPro Series: Greenhouse Solutions; Pittsburgh, PA).
- Insect-disease interactions (September 16, 2015. AmericanHort's GrowPro Series: Greenhouse Solutions; Pittsburgh, PA).
- Butterflies in the garden (September 11, 2015. Riley County Extension Master Gardeners Meeting; Manhattan, KS).

- Systemic insecticides and bees (pollinators) (August 27, 2015. FarWest Show; Portland, OR).
- Alternatives to neonicotinoids (August 27, 2015. FarWest Show; Portland, OR).
- Diagnostics: what's wrong with my plants? (August 27, 2015. FarWest Show; Portland, OR).
- Diagnostics: what is going on with my plants? (August 25, 2015. BFG Hort Expo; Minneapolis, MN).
- Systemic insecticides and pollinators (August 25, 2015. BFG Hort Expo; Minneapolis, MN).
- Identification of greenhouse bugs (August 13, 2015. Carlin BuyerFest Annual Horticultural Trade Show; Minneapolis, MN).
- Systemic pesticides: getting "sucked-up" (August 13, 2015. Carlin BuyerFest Annual Horticultural Trade Show; Minneapolis, MN).
- What's going on in the bug world? (August 6, 2015. Kansas Turf & Ornamentals Field Day; Olathe, KS).
- How to manage insect pests without neonicotinoids (July 23, 2015. BWI Tulsa Summer Seminar; Tulsa, OK).
- Insect growth regulators: how do they work? (July 23, 2015. BWI Tulsa Summer Seminar; Tulsa, OK).
- Why it is important to read pesticide labels (July 22, 2015. Linnaeus Teaching Garden Volunteer Training; Tulsa, OK).
- Controlling harmful insects—is there really such a thing as an "organic" pesticide? (July 9, 2015. Shawnee County Training; Topeka, KS).
- Systemic insecticides and pollinators: What is really going on? (July 8, 2015. Summer 2015 Green Industry Conference Responsible Green Industry Practices: Recognizing and Supporting Pollinator Conservation; Kirkwood, MO).
- Understanding and dealing with pests of roses (June 27, 2015. A Rose Care Seminar: Everything You Wanted To Know About Growing Roses Bug Were Afraid To Ask—Kansas City Rose Society; Kansas City, MO).
- Insect and mite management in greenhouses (June 19, 2015. In-Service Education: Sustainable Management of Insect and Disease Pests of Ornamental Plants in Missouri; Springfield, MO).
- Overview of reduced-risk insecticides (June 18, 2015. In-Service Education: Sustainable Management of Insect and Disease Pests of Ornamental Plants in Missouri; Springfield, MO).
- Invasive insects threatening ornamental crops in the Midwest (June 18, 2015. In-Service Education: Sustainable Management of Insect and Disease Pests of Ornamental Plants in Missouri; Springfield, MO).
- Preserving butterflies in the garden (June 13, 2015. Blueville Nursery Educational Seminar; Manhattan, KS).
- Insect update (June 11, 2015. KAA and KNLA Summer Field Day; Haysville/Belle Plaine, KS).
- Western flower thrips management in greenhouse production systems (May 19, 2015. Xth International Symposium on Thysanoptera and Tospoviruses; Pacific Grove, CA).
- IPM, or "protecting plants" (May 9, 2015. Kansas City Area Butterfly Club, Idalia Society of Mid-American Lepidopterists; Prairie Village, KS).
- "Organic" methods of fungal control (April 28, 2015. Wichita Organic Garden Club; Wichita, KS).
- "Bugs" in the garden: both good and bad (April 23, 2015. FCE Spring Tea Recognition Day; Manhattan, KS).
- Impact of drought on insect populations (March 26, 2015. 39th Annual Tree City USA Recognition Event; Topeka, KS).
- The impact of systemic insecticides on pollinators (March 13, 2015. Spring Kansas Honey Producers Association Meeting; Manhattan, KS).
- Systemic insecticides and pollinators: the "real" story (February 24, 2015. Gard'N Wise Clerk Training; Dodge City, KS).
- Impact of invasive species on horticultural cropping systems (February 20, 2015. Horticultural Sciences Day, Johnson County Community College; Overland Park, KS).

- Systemic insecticides and pollinators: the “real” story (February 19, 2015. Gard’N Wise Clerk Training; Wichita, KS).
- Systemic insecticides and pollinators: the “real” story (February 17, 2015. Gard’N Wise Clerk Training; Lenexa, KS).
- Effective biological control: understanding the relationship between natural enemies and their prey (February 4, 2015. New England Grows; Boston, MA).
- Why read the label? (January 31, 2015. Spring Gardening Class; Wichita, KS).
- What’s happening to the bees? (January 31, 2015. Spring Gardening Class; Wichita, KS).
- What is all the “buzz:” systemic insecticides and pollinators (January 30, 2015. Horticultural Growers’ Short Course: Tradex, Abbotsford; British Columbia, Canada).
- Western flower thrips: is the game over? (January 29, 2015. Horticultural Growers’ Short Course: Tradex, Abbotsford; British Columbia, Canada).
- How to best manage fungus gnats (January 28, 2015. Mid-Atlantic Fruit & Vegetable Convention; Hershey, PA).
- Replacing neonicotinoid insecticides in the greenhouse (January 28, 2015. Mid-Atlantic Fruit & Vegetable Convention; Hershey, PA).
- Non-chemical ways to deal with pests [January 23, 2015. Integrated Environmental Plant Management Association of Western Canada (IEPMA) 19th Annual Conference; Kelowna, British Columbia, Canada].
- How insecticides (and miticides) work [January 22, 2015. Integrated Environmental Plant Management Association of Western Canada (IEPMA) 19th Annual Conference; Kelowna, British Columbia, Canada].
- Effective pest management in landscapes (January 21, 2015. Nebraska GREAT PLAINS Conference; Omaha, NE).
- Natural pesticides: what are these? (January 20, 2015. Nebraska GREAT PLAINS Conference; Omaha, NE).
- How to manage insect pests in rotation programs with and without neonicotinoid insecticides (January 15, 2015. BWI Grower Seminar; Buda, TX).
- New products for dealing with insect and mite pests (January 15, 2015. BWI Grower Seminar; Buda, TX).
- Wood-boring insects and Japanese beetle (January 8, 2015. Montana Green Expo; Billings, MT).
- Beneficial bugs and diseases (January 7, 2015. Montana Green Expo; Billings, MT).
- Horticulture and pest management (January 7, 2015. Montana Green Expo; Billings, MT).
- Insects and extension entomology: what’s bugging you? (December 18, 2014. Vocational Agricultural Teachers Program; LeRoy, KS).
- Ornamental pests and their control plus endangered species and where are the bees? (December 15, 2014. Heartland Green Industry Expo; Overland Park, KS).
- Turf & ornamental insect update (December 2, 2014. 64th Annual Kansas Turfgrass Conference; Topeka, KS).
- Integrating biological control and pesticides in horticultural production systems (September 30, 2014. Plant & Food Research Institute Seminar; Lincoln, New Zealand).
- Integrating biological control and pesticides in horticultural production systems (August 29, 2014. University of Queensland Seminar; University of Queensland, Brisbane, Australia).
- Western flower thrips management in greenhouse production systems in the 21st century: what does the future hold? (August 20, 2014. 29th International Horticultural Congress; Brisbane, Queensland, Australia).
- Rose garden pests (August 12, 2014. Topeka Rose Society Meeting; Topeka, KS).
- Turf & ornamental insect control update (August 7, 2014. Kansas Turfgrass Field Day; Manhattan, KS).
- Neonicotinoids, bees, our industry, and our options plus virus vector control (August 1, 2014. PlantPeddler Variety Day; Cresco, IA).

- Systemic insecticides and bees (July 24, 2014. BWI Summer Seminar; Tulsa, OK).
- Playing Sherlock holmes: how to effectively diagnose plant problems (July 24, 2014. BWI Summer Seminar; Tulsa, OK).
- “The best of both worlds:” integrating biological control with pesticides in pest management programs—is it realistic? (July 22, 2014. Association of Education Research Greenhouse Curators Annual Meeting; Victoria, British Columbia, Canada).
- Neonicotinoids and bee health (July 14, 2014. Cultivate’14: An American Experience; Columbus, OH).
- “Buggy wars:” managing thrips resistance to insecticides (July 13, 2014. Cultivate’14: An American Experience; Columbus, OH).
- Western flower thrips [July 13, 2014. Cultivate’14: An American Experience (BioWorks Booth); Columbus, OH].
- Biologicals and pesticides: can they be used together? (July 12, 2014. Cultivate’14: An American Experience; Columbus, OH).
- Understanding systemic insecticides and how they may impact pollinators (July 9, 2014. 2014 MLNA/KNLA Border Tour and Conference; Kansas City, MO).
- Dealing with “bug” problems on roses (July 8, 2014. Wichita Rose Society Meeting; Wichita, KS).
- Organic pest control (July 8, 2014. Kansas Community Garden Conference; Manhattan, KS).
- Dealing with rose pests (June 26, 2014. Chattanooga Rose Society Meeting; Chattanooga, TN).
- Plant galls: relationship between plants and insects (June 20, 2014. Kansas Arborist Association Summer Field Day; Leawood, KS).
- Insect and mite pests of Christmas trees (June 14, 2014. Kansas Christmas Tree Growers Association Summer Meeting; Wichita, KS).
- Butterflies: an overview (May 15, 2014. Family and Community Education District Day; Topeka, KS).
- Insects: pests and beneficials (April 26, 2014. Kansas Grape Growers and Winemakers Association Workshop; Topeka, KS).
- Bugs in the home (April 12, 2014. Harvey County Home and Garden Show; Newton, KS).
- “Organic control” of insect pests in the garden (April 12, 2014. Harvey County Home and Garden Show; Newton, KS).
- Pest-update—spotted wing drosophila (April 7, 2014. Growing Growers Kansas City Market Farming Workshop; Lawrence, KS).
- Pest management in vegetable gardens (March 26, 2014. Linnaeus Teaching Garden Volunteer Training; Tulsa, OK).
- Is there really such-a-thing as an “organic” pesticide? (March 25, 2014. Tulsa Garden Center Class; Tulsa, OK).
- Systemic insecticides (March 14, 2014. Oklahoma Nursery and Landscape Association Spring Fling; Sedan, KS).
- Pesticide mixtures, adjuvants, and systemic insecticides and pollinators (February 26, 2014. Gard’N-Wise Clerk Training; Dodge City, KS).
- Pest diagnosis and management workshop (February 22, 2014. Johnson County Community College Horticultural Sciences Day; Overland Park, KS).
- Pest management in urban horticultural systems (February 21, 2014. Johnson County Community College Horticultural Sciences Day; Overland Park, KS).
- Pesticide mixtures, adjuvants, and systemic insecticides and pollinators (February 20, 2014. Gard’N-Wise Clerk Training; Wichita, KS).
- Pesticide mixtures, adjuvants, and systemic insecticides and pollinators (February 18, 2014. Gard’N-Wise Clerk Training; Overland Park, KS).
- Insects—is there really such a thing as an organic pesticide (February 15, 2014. 2014 Kansas Garden Show; Topeka, KS).

- What's new in pests and control (February 8, 2014. Central Kansas Market Vegetable Growers Workshop; Wichita, KS).
- Understanding pesticides: organic or not? (January 29, 2014. RetailWorks Conference; Manhattan, KS).
- “Hard to resist:” understanding issues associated with resistance in insect populations (January 28, 2014. Mid-Atlantic Fruit and Vegetable Convention; Hershey, PA).
- Don't get “broad-sided” by broad mites (January 28, 2014. Mid-Atlantic Fruit and Vegetable Convention; Hershey, PA).
- “Don't get sucked-up:” understanding systemic insecticides (January 24, 2014. Idaho Horticulture Expo; Boise, ID).
- Pesticides and biological controls: can they be used together? (January 24, 2014. Idaho Horticulture Expo; Boise, ID).
- Effective pest management in landscapes: what does it mean? (January 23, 2014. Garden Center Symposium Midwest Perennial Conference; Waukesha, WI).
- Natural and organic pesticides—what are they? (January 22, 2014. Garden Center Symposium Midwest Perennial Conference; Waukesha, WI).
- Ornamental pests and their control (December 16, 2013. Heartland Green Industry Expo; Overland Park, KS)
- Biocontrol for ornamental spring crops in greenhouses workshop (December 12, 2013. Michigan Greenhouse Growers EXPO—in conjunction with the Great Lakes EXPO; Grand Rapids, MI).
- How turfgrass and ornamental pesticides work (December 6, 2013. Kansas Pest Control Association Winter Conference; Overland Park, KS).
- Top turfgrass insects and treatments (December 6, 2013. Kansas Pest Control Association Winter Conference; Overland Park, KS).
- Arthropod vectors of diseases (December 3, 2013. 63rd Annual Kansas Turfgrass Conference; Topeka, KS).
- Scales for dummies (December 3, 2013. 63rd Annual Kansas Turfgrass Conference; Topeka, KS).
- Thrips management: What does the future hold? (November 7, 2013. Penn State Extension Western PA Fall Greenhouse Meeting; Wexford, PA).
- Insecticidal modes of action (November 7, 2013. Penn State Extension Western PA Fall Greenhouse Meeting; Wexford, PA).
- Insect growth regulators: discovering the fountain of youth (October 28, 2013. Kansas Greenhouse Growers Association Educational Conference; Manhattan, KS).
- Bugs in bagged mixes—report on latest research results (October 22, 2013. SunGro Horticulture Seminar; Greenville, SC).
- Identification and management of greenhouse insect and mite pests (October 18, 2013. Seminar For Kansas High School Horticulture Teachers; Manhattan, KS).
- Entomology and Hollywood: A history of the 1950's “big-bug” science fiction movies (October 7, 2013. Department of Entomology Seminar, Kansas State University; Manhattan, KS).
- Tree insects (October 7, 2013. 40th Kansas Arborists Association Arborists Training Course; Manhattan, KS).
- Systemic pesticides 101 (September 20, 2013. Oklahoma Nursery and Landscape Association Annual Convention and Tradeshow; Shawnee, OK).
- Balance of nature: Beneficial insects in the garden (September 10, 2013. International Master Gardener's Conference—Alaska Cruise on Holland America Line; September 7 through 14, 2013).
- Balance of nature: Beneficial insects in the garden (September 8, 2013. International Master Gardener's Conference—Alaska Cruise on Holland America Line; September 7 through 14, 2013).
- Entomology and hollywood: history of the 1950's science fiction “big bug” movies (September 7, 2013. International Master Gardener's Conference—Alaska Cruise on Holland America Line; September 7 through 14, 2013). Keynote Speaker.

- Get the low-down on pesticide mixtures (August 28, 2013. BFG Grower & Garden Center Expo; Minneapolis, MN).
- Bug games: Insect and mite pest quiz (August 28, 2013. BFG Grower & Garden Center Expo; Minneapolis, MN).
- Scale insects (August 20, 2013. Horticultural Inspection Society-Central Chapter: Multi-State Inspector Training; Ottawa, KS).
- Turf and ornamental insect control (August 1, 2013. Turf and Ornamentals Field Day; Haysville, KS).
- Don't get "sucked up" by systemic pesticides: Understanding the benefits and limitations of systemic pesticides (July 25, 2013. BWI Tulsa Summer Seminar; Tulsa, OK).
- Understanding systemic insecticides (July 23, 2013. Association of Education and Research Greenhouse Curators Annual Meeting; Fargo, ND).
- Don't get "bored" by wood-boring insects: insect borers in nursery production (July 18, 2013. NurseryWorks; Manhattan, KS).
- New and effective pesticides for insect and mite control (July 15, 2013. Ohio Florists' Association Short Course; Columbus, OH).
- Rescue programs for greenhouse growers (July 13, 2013. Ohio Florists' Association Short Course; Columbus, OH).
- Troubleshooting poinsettia problems workshop (July 13, 2013. Ohio Florists' Association Short Course; Columbus, OH).
- Organic or not: what is an organic pesticide? (July 8, 2013. Kansas Community Garden Conference; Manhattan, KS).
- Issues associated with insect pests of Kansas (June 28, 2013. Kansas Arborists Association Summer Field Day; Leawood, KS).
- Don't get "sucked-up:" understanding systemic pesticides (May 14, 2013. Wichita Rose Society Meeting; Wichita, KS).
- Biological control: what is it and is it effective? (March 15, 2013. Missouri Botanical Garden Training Session; St. Louis, MO).
- Insect (and mite) management in flower beds (March 11, 2013. Commercial Flower Beds—Planting and Maintenance Program; Wichita, KS).
- "Natural" pesticides: what are these? (February 28, 2013. Gard'N-Wise Clerk Training; Lenexa, KS).
- Biological control: what is it and is it effective? (February 26, 2013. California Polytechnic State University—San Luis Obispo Horticulture Club Meeting; San Luis Obispo, CA).
- "Natural" pesticides: what are these? (February 19, 2013. Gard'N-Wise Clerk Training; Wichita, KS).
- Emerald ash borer: don't get bored by emerald ash borer (February 16, 2013. Kansas Garden Show; Topeka, KS).
- Sustainable pest management (February 15, 2013. Johnson County Community College Horticultural Sciences Day; Overland Park, KS).
- Primary pests of Maryland (February 14, 2013. Chesapeake Green 2013: An Annual Horticulture Symposium; Linthicum, MD).
- Systemic controls (February 13, 2013. Eastern Shore Pest Management Conference; Salisbury, MD).
- Top insect pests of Maryland and the Eastern Shore (February 13, 2013. Eastern Shore Pest Management Conference; Salisbury, MD).
- How to successfully manage mites in greenhouse production systems (January 24, 2013. Penn State Extension Southeast Greenhouse Growers Day; Shady Maple, East Earl, PA).
- "Bugs no more:" how to effectively deal with aphids and thrips (January 24, 2013. Penn State Extension Southeast Greenhouse Growers Day; Shady Maple, East Earl, PA).
- Tree borers of Kansas and their dynamics (January 18, 2013. 58th Annual Kansas Arborist Association Shade Tree Conference; Topeka, KS).
- What a borer! (December 5, 2012. 62nd Annual Kansas Turfgrass Conference; Topeka, KS).

- Emerald ash borer—what to do? (December 5, 2012. 62nd Annual Kansas Turfgrass Conference; Topeka, KS).
- Insect training—understanding Scales (December 4, 2012. Kansas Department of Agriculture Plant Protection and Weed Control Staff Meeting Agenda; Topeka, KS).
- How do turfgrass pesticides work (November 30, 2012. Missouri Pest Management Association and Kansas Pest Control Association Annual Winter Conference; Kansas City, MO).
- Systemic insecticides: how do they kill bugs? (November 8, 2012. Northeast Greenhouse Conference and Expo; Worcester, MA).
- Insect growth regulators: how to effectively use these pest control materials (November 8, 2012. Northeast Greenhouse Conference and Expo; Worcester, MA).
- “Getting sucked-up:” understanding systemic pesticides (October 25, 2012. Kansas Greenhouse Growers Association Educational Conference; Manhattan, KS).
- Diagnosing infestations of emerald ash borer and what can be done (October 16, 2012. K-State Research and Extension Conference; Manhattan, KS).
- Rose rosette disease up-date (October 9, 2012. Wichita Rose Society Meeting; Wichita, KS).
- Tree insects (October 8, 2012. 39th Kansas Arborists Association Arborists Training Course; Manhattan, KS).
- What effects’ the efficacy of insecticides? (October 3, 2012. Indiana Flower Growers Association 30th Annual Meeting; West Lafayette, IN).
- Dealing with western flower thrips in the future (October 3, 2012. Indiana Flower Growers Association 30th Annual Meeting; West Lafayette, IN).
- Pesticide mixtures: what you need to know (September 27, 2012. Syngenta Lectures in Bloom; Las Vegas, NV).
- Reading plant leaves: basics of crop diagnostics (September 13, 2012. Carlin Horticultural Supplies BuyerFest Trade Show; West Bend, WI).
- A dynamic duo: interactions between insects and diseases (September 13, 2012. Carlin Horticultural Supplies BuyerFest Trade Show; West Bend, WI).
- The challenge of mites & thrips (September 12, 2012. Ohio Florists’ Association Perennial Production & Retail Conference; Grand Rapids, MI).
- New options in traditional insect & disease management (September 11, 2012. Ohio Florists’ Association Perennial Production & Retail Conference; Grand Rapids, MI).
- Perennial production workshop (September 10, 2012. Ohio Florists’ Association Perennial Production & Retail Conference; Grand Rapids, MI).
- Dealing with insect and mite pests in nursery production systems (August 27, 2012. Bailey Nursery Visit; Newport, MN).
- Thrips-B-Gone: management of western flower thrips (August 24, 2012. Farwest Show; Portland, OR).
- Pesticides & biological control: are these two strategies compatible? (August 23, 2012. Farwest Show; Portland, OR).
- A dynamic duo: Interactions between insects and diseases (August 16, 2012. Carlin Horticultural Supplies BuyerFest Trade Show; St. Paul, MN).
- Reading plant leaves: basics of crop diagnostics (August 16, 2012. Carlin Horticultural Supplies BuyerFest Trade Show; St. Paul, MN).
- Winning the war against thrips (August 3, 2012. PlantPeddlar Variety Day; Cresco, IA). Keynote Speaker.
- Turf & ornamental insect control update (August 2, 2012. Kansas Turfgrass Field Day; Manhattan, KS).
- Pesticide mixtures—how not to get mixed up (July 24, 2012. Association of Education and Research Greenhouse Curators Annual Meeting; Toronto, Canada).
- Diagnosis—how to identify and scout for insect and mite pests in the greenhouse & nursery (July 19, 2012. BWI Tulsa Summer Seminar; Broken Arrow, OK).

- Reading geranium leaves: crop diagnostics workshop (July 17, 2012. Ohio Florists' Association Short Course; Columbus, OH).
- A review of greenhouse sanitation protocols (July 16, 2012. Ohio Florists' Association Short Course; Columbus, OH).
- Mealybug & scale management: dealing with these critters (July 14, 2012. Ohio Florists' Association Short Course; Columbus, OH).
- Systemic insecticides: "whole lotta sucking going on." (June 28, 2012. Chattanooga Rose Society Meeting; Chattanooga, TN).
- "Climate change" and arthropod pests (June 14, 2012. Kansas State University, Horticulture June Program Focus Team Training; Wichita, KS).
- Rose pest management (June 12, 2012. Topeka Rose Society Meeting; Topeka, KS).
- De-bugging problems on roses (May 10, 2012. Johnson County Rose Society; Prairie Village, KS).
- Pests of orchids (April 27, 2012. American Orchid Society and Southwest Regional Orchid Growers Association Spring Meeting; Wichita, KS).
- Insects in the vegetable garden (April 3, 2012. Master Gardeners of Greater Kansas City Gardeners' Gatherings; Kansas City, MO).
- Integration strategies for insect management (March 28, 2012. 7th International IPM Symposium— Integrating Biological and Conventional Pest and Disease Management Strategies in Greenhouse and Outdoor Horticulture; Memphis, TN).
- Systemic pesticides: whole lotta "sucking" going on (March 1, 2012. Gard'N-Wise Clerk Training; Dodge City, KS).
- Systemic pesticides: whole lotta "sucking" going on (February 28, 2012. Gard'N-Wise Clerk Training; Wichita, KS).
- Systemic pesticides: whole lotta "sucking" going on (February 23, 2012. Gard'N-Wise Clerk Training; Lenexa, KS).
- How to effectively deal with garden pests (February 19, 2012. Kansas Garden Show; Topeka, KS).
- New biopesticides & insect control (February 18, 2012. Central Kansas Market Vegetable Growers & Tomato Grafting Workshop; Wichita, KS).
- Bug-B-Gone: pesticides and how they kill insect and mite pests (February 17, 2012. RetailWorks Spring Training for Garden Centers; Topeka, KS).
- How insecticides work (February 16, 2012. Johnson County Community College Horticultural Sciences Field Day; Overland Park, KS).
- Western flower thrips: have we reached an impasse? (February 8, 2012. ProGreen Expo; Denver, CO).
- Plant galls: the relationship between plants and insects (February 2, 2012. 66th Annual Midwestern Chapter International Society of Arboriculture Conference & Trade Show; Overland Park, KS).
- Western flower thrips management: is the game over? (February 1, 2012. Mid-Atlantic Fruit & Vegetable Convention; Hershey, PA).
- Fundamentals of tank mixing (January 31, 2012. Mid-Atlantic Fruit & Vegetable Convention; Hershey, PA).
- Don't get weighed down by scales (January 11, 2012. 57th Annual Shade Tree Conference; Topeka, KS).
- Systemic insecticides: how do they kill pests? (January 9, 2012. National Green Centre Show; Kansas City, MO).
- Organic pesticides and biopesticides (January 7, 2012. Great Plains Growers Conference; St. Joseph, MO).
- Managing western flower thrips: have we reached an impasse? (December 7, 2011. Michigan Greenhouse Growers EXPO; Grand Rapids, MI).
- Systemic insecticides (December 6, 2011. 61st Annual Kansas Turfgrass Conference; Topeka, KS).
- Dealing with spider mites (December 6, 2011. 61st Annual Kansas Turfgrass Conference; Topeka, KS).
- How do turf products work? (December 1, 2011. 2011 Kansas Pest Control Association Winter Conference; Kansas City, KS).

- Do western flower thrips have a sweet tooth? (October 27, 2011. 2011 Kansas Greenhouse Growers Association Educational Conference; Manhattan, KS).
- Understanding pesticide modes of action (October 27, 2011. 2011 Kansas Greenhouse Growers Association Educational Conference; Manhattan, KS).
- Scale insects for the Central Region (October 18, 2011. Horticultural Inspection Society—Central Chapter 41st Annual Meeting; Rapid City, SD).
- Management considerations for insect and mite pests in the landscape (October 5, 2011. Pesticide Applicator Recertification Training for Category 3A—Ornamentals and Trees; Shawnee, KS).
- Cleanliness is next to...reduced loss (September 14, 2011. OFA Plug and Cutting Conference; San Jose, CA).
- Tank mix “cookbook” (September 13, 2011. OFA Plug and Cutting Conference; San Jose, CA).
- Recognizing the signs and symptoms of disorders, diseases, and bugs (September 13, 2011. OFA Plug and Cutting Conference; San Jose, CA).
- Tree insects (October 3, 2011. 38th Kansas Arborists Association Arborists Training Course; Manhattan, KS).
- Dealing with insect and mite pests “organically” (September 10, 2011. 2011 Market Gardening Workshop; Kearney, MO).
- Conquering western flower thrips (August 30, 2011. 2011 BFG Hort Expo; Minneapolis, MN).
- Mixing pesticides for top performance (August 30, 2011. 2011 BFG Hort Expo; Minneapolis, MN).
- Reduced-risk insecticides and biopesticides for field and high tunnel vegetable production (August 23, 2011. In-Service Education Vegetable IPM: Fostering Adoption of IPM by Vegetable Farmers in Missouri; Jefferson City, MO).
- Everything you ever wanted to know about fungus gnats but were afraid to ask (August 11, 2011. “Ask The Advisor”; San Marcos, CA).
- Resistance mitigation (July 26, 2011. Association of Education and Research Greenhouse Curators Annual Meeting; Portland, OR).
- New pest control materials and pest management (July 22, 2011. BWI Springfield Summer Grower Seminar; Springfield, MO).
- New pest control materials and pest management (July 21, 2011. BWI Tulsa Summer Seminar; Broken Arrow, OK).
- New pest control materials and pest management (July 20, 2011. BWI 3rd Annual Kansas City Summer Grower Seminar; Olathe, KS).
- New pest control materials and pest management (July 19, 2011. BWI 3rd Annual Summer Grower Seminar; Council Grove, KS).
- Destructive insect and mite pests of vegetables, annuals, and perennials (July 14, 2011. Ward Meade Garden Club; Topeka, KS).
- Recognizing the signs and symptoms of insect and disease activity (July 12, 2011. Ohio Florists’ Association Short Course; Columbus, OH).
- Diagnostics workshop: a systematic approach using petunias as a model (July 10, 2011. Ohio Florists’ Association Short Course; Columbus, OH).
- “The days of bugs and roses:” common rose pest problems (May 14, 2011. Kansas City Rose Society Meeting; Loose Park Garden Center, Kansas City, MO).
- Dealing with greenhouse insect and mite pests (March 29, 2011. Nurserymen’s Exchange Seminar; Half Moon Bay, CA).
- Dealing with insects and mites using softer pesticides (March 6, 2011. Wichita Garden Show; Wichita, KS).
- Growing orchids (February 26, 2011. 2011 Manhattan Area Garden Show; Manhattan, KS).
- Management of common insect and mite pests (February 22, 2011. 2011 Gard’N-Wise Clerk Training; Lenexa, KS).
- Management of common insect and mite pests (February 17, 2011. 2011 Gard’N-Wise Clerk Training; Wichita, KS).

- Up-date on new pest control materials and biological controls (February 16, 2011. 2011 Indiana Flower Growers Association Bedding Plant Conference; Westfield, IN).
- Management of common insect and mite pests (February 15, 2011. 2011 Gard'N-Wise Clerk Training; Dodge City, KS).
- Identification and management of greenhouse insect and mite pests (January 29, 2011. Agriculture Symposium; Manhattan, KS).
- Pest control materials: what are the best application methods (January 27, 2011. ReForest Urban America: The Green Symposium; Overland Park, KS).
- Tree insects: management of Christmas tree pests (January 22, 2011. 2011 Winter Meeting Kansas Christmas Tree Growers Association; Manhattan, KS).
- Entomology Update (January 14, 2011. Kansas Annual Shade Tree Conference; Topeka, KS).
- Chewers: dealing with caterpillar pests in landscapes (December 7, 2010. 60th Annual Kansas Turfgrass Conference; Topeka, KS).
- Get them buggers: implementing pest management strategies to deal with insect and mite pests (November 9, 2010. Association of Specialty Cut Flower Growers National Conference & Trade Show; Tulsa, OK).
- Bug-zilla: problem pests and why they are so difficult to control (November 4, 2010. Northeast Greenhouse Conference and Expo; Worcester, MA).
- Shaking but not stirred—understanding pesticide cocktails (November 4, 2010. Northeast Greenhouse Conference and Expo; Worcester, MA).
- “Bugs-No-More:” up-date on dealing with insect and mite pests of greenhouse-grown crops (October 28, 2010. Kansas Greenhouse Growers Association Educational Conference; Manhattan, KS).
- Research conducted with dinotefuran [Safari] (October 19, 2010. PBI Gordon National Sales Dinotefuran Meeting; Kansas City, MO).
- Get the most out of pesticide mixtures (October 13, 2010. Commercial Flower Growers of Wisconsin Fall Greenhouse Conference; Denmark, WI).
- Biological control of insects and mites (October 13, 2010. Commercial Flower Growers of Wisconsin Fall Greenhouse Conference; Denmark, WI).
- Insect and mite pests of trees (October 11, 2010. 37th Kansas Arborists Association Arborists Training Course; Manhattan, KS).
- Effective insect & mite management (September 29, 2010. OFA Disease, Insect & Plant Growth Management Conference; St. Louis, MO).
- Implementing & expanding an effective disease & insect bio-control program (September 29, 2010. OFA Disease, Insect & Plant Growth Management Conference; St. Louis, MO).
- Insects, mites & signs of feeding injury (September 28, 2010. OFA Disease, Insect & Plant Growth Management Conference; St. Louis, MO).
- Pesticide overuse and resistance (September 21, 2010. 17th Ornamental Workshop on Diseases and Pests Entomology Program: Kanuga Conference Center; Hendersonville, NC).
- Biological control in a greenhouse environment (September 1, 2010. Phipps Conservatory and Botanical Gardens Pesticide Update Training; Pittsburgh, PA).
- Understanding how systemic pest control materials kill insect pests (August 27, 2010. FarWest Show; Portland, OR).
- Tank-mixing pest control materials (August 26, 2010. FarWest Show; Portland, OR).
- Turf insect control update (August 5, 2010. Kansas Turfgrass Field Day; Manhattan, KS).
- Bug-O-Mania: update on how to deal with insect and mite pests (July 28, 2010. Association of Education and Research Greenhouse Curators Annual Meeting; Urbana-Champaign, IL).
- Using beneficial nematodes to control western flower thrips (July 11, 2010. Ohio Florists' Association Short Course; Columbus, OH).
- Cost effective disease & insect control workshop (July 10, 2010. Ohio Florists' Association Short Course; Columbus, OH).

- “Bug-Me-No-More”—dealing with rose pests in a ‘sustainable’ world (June 24, 2010. Chattanooga Rose Society Meeting; Chattanooga, TN).
- Understanding “bugs” in our environments (June 19, 2010. Powell Gardens Educational Program; Kingsville, MO).
- Don’t get caught with your “plants down:” dealing with insect and mite pests in the garden (June 19, 2010. Garden Center Association of Greater Kansas City Program; Kansas City, MO).
- Enhancing and preserving the abundance of natural enemies in landscapes (June 2, 2010. American Public Gardens Association Conference—Innovations in pest management: Bringing the pest that public gardens, extension, and industry have...home. Atlanta, GA).
- Insect and mite pest identification workshop (May 18, 2010. Jolly Farmer Products, Inc., Northhamptom; New Brunswick, Canada).
- Dealing with insect and mite pests “organically” (April 27, 2010. Wichita Organic Garden Club; Wichita, KS).
- Bug-No-More: managing landscape insect and mite pests (April 10, 2010. Harvey County Home & Garden Show; Newton, KS).
- Get them critters: identification & management of household pests (April 10, 2010. Harvey County Home & Garden Show; Newton, KS).
- What’s going on in the bug world (March 25, 2010. Tree City USA Recognition Event; El Dorado, KS).
- Identification and “control” of insect and mite pests of orchids (March 21, 2010. Kansas Orchid Society Meeting; Wichita, KS).
- Basics of biological controls and beneficials (March 4, 2010. Cantigny Professional Grower Conference; Wheaton, IL).
- Alternative pest control (February 26, 2010. 26th Annual Pest & Production Management Conference; Orlando, FL).
- Understanding systemic insecticides & how they kill insect pests (February 24, 2010. Spring 2010 NETWORKSHOP; Lenexa, KS).
- Pest management: common insect and mite pests (February 23, 2010. Gard’N-Wise Clerk Training; Lenexa, KS).
- Management of greenhouse insect and mite pests (February 22, 2010. Arnold’s Greenhouse Continuing Education Class; LeRoy, KS).
- Pest management: common insect and mite pests (February 16, 2010. Gard’N-Wise Clerk Training, Dodge City; KS).
- Pest-B-Gone: why it is important to understand biology & life cycle when dealing with arthropod pests (February 9, 2010. Nursery Grower Day; Quebec, Canada).
- Why pesticides fail to regulate insect and mite pest populations (February 9, 2010. Nursery Grower Day; Quebec, Canada).
- Old (gone) & new insecticides (February 6, 2010. Central Kansas Vegetable Growers Workshop; Wichita, KS).
- Integrated pest management materials for organic production (February 5, 2010. Missouri Organic Association Annual Conference; Columbia, MO).
- Resistance management and pesticide rotations (February 4, 2010. Mid-Atlantic Fruit & Vegetable Convention; Hershey, PA).
- Chew away: dealing with caterpillars and grasshoppers (February 4, 2010. Mid-Atlantic Fruit & Vegetable Convention; Hershey, PA).
- Get them suckers: aphid and whitefly management (February 3, 2010. Mid-Atlantic Fruit & Vegetable Convention; Hershey, PA).
- Practices you need to know to effectively deal with mites (February 3, 2010. Mid-Atlantic Fruit & Vegetable Convention; Hershey, PA).

- Whitefly control and sustainability (January 21, 2010. Romeo Packing Comp., Production Horticulture Seminar; Carpinteria, CA).
- Whitefly control and sustainability (January 19, 2010. Romeo Packing Comp., Production Horticulture Seminar; Watsonville, CA).
- Understanding how systemic insecticides work (January 15, 2010. Shade Tree Conference; Topeka, KS).
- Organic insect pest control (January 8, 2010. Great Plains Vegetable Growers Conference; St. Joseph, MO).
- Up-date on new conventional insecticides for vegetables (January 8, 2010. Great Plains Vegetable Growers Conference; St. Joseph, MO).
- Understanding systemic insecticides and how they kill insect pests (January 4, 2010. 120th WESTERN Annual Meeting and Trade Show; Overland Park KS).
- Using pesticides and natural enemies in the greenhouse (December 9, 2009. Michigan Greenhouse Growers Expo Education Program; Grand Rapids, MI).
- Turf and ornamental insects (December 8, 2009. 59th Annual Kansas Turfgrass Conference; Topeka, KS).
- Focus on plant pests (October 21, 2009. Annual Conference—Horticulture Program Focus Team County Agent Horticulture Training; Manhattan, KS).
- “Buggy wars”—an update on extension and research happenings. What does an ornamental entomologist do at a land-grant institution? (October 2, 2009. Department of Entomology Promotion Seminar: Kansas State University; Manhattan, KS).
- Tree insects (October 5, 2009. 36th Kansas Arborists Association Arborists Training Course; Manhattan, KS).
- Pesticides and natural enemies: are they compatible? (September 30, 2009. Lectures in Bloom—Syngenta Professional Products; Las Vegas, NV).
- Biological control for perennials: what does it take to succeed? (September 21, 2009. OFA Perennial Production Conference; Buffalo, NY).
- Perennial insects: identification & management (September 21, 2009. OFA Perennial Production Conference; Buffalo, NY).
- Perennial production workshop (September 20, 2009. OFA Perennial Production Conference; Buffalo, NY).
- Western flower thrips: have we reached an impasse? (September 11, 2009. 2009 Flowers Canada Pest Management Conference; Niagara Falls, Ontario, Canada).
- Bug wars—managing mealybugs & whitefly in greenhouses (September 11, 2009. 2009 Flowers Canada Pest Management Conference; Niagara Falls, Ontario, Canada).
- Turf & ornamental insects (August 6, 2009. Turf & Ornamentals Field Day; Wichita, KS).
- Bug-eat-bug world: what does it take to succeed with biological control? (July 29, 2009. Kansas Greenhouse Growers Association; Olathe, KS).
- Biological control of insect and mite pests (July 23, 2009. Perennial Plant Symposium; St. Louis, MO).
- Bug-me-know-more: insect and mite pest management strategies for perennials (July 21, 2009. Perennial Plant Symposium; St. Louis, MO).
- Insect and mite management (July 14, 2009. Ohio Florists Association Short Course; Columbus, OH).
- Pest solutions (July 13, 2009. Ohio Florists Association Short Course; Columbus, OH).
- Western flower thrips: have we reached an impasse? (July 13, 2009. Ohio Florists Association Short Course; Columbus, OH).
- Effective integration of biological control agents into your pest management program (July 11, 2009. Ohio Florists Association Short Course; Columbus, OH).
- Scouting: why should you do it? (July 11, 2009. Ohio Florists Association Short Course; Columbus, OH).
- Dealing with insect and mite pests “organically” (April 11, 2009. 2009 Market Gardening Workshop: Growing Growers of Kansas City; Independence, MO).
- What’s going on in the bug world? (March 25, 2009. Tree City USA Recognition Event; Manhattan, KS).
- Bugs: the good, the bad, & the ugly (March 14, 2009. A Gathering of Gardeners: Hutchinson Horticulture Club; Hutchinson, KS).

- Pesticide resistance (February 25, 2009. 2009 27th Annual Gateway Green Industry Conference; Collinsville, IL).
- Dealing with arthropod pests organically (February 25, 2009. 2009 27th Annual Gateway Green Industry Conference; Collinsville, IL).
- Disease identification and management (February 20, 2009. Cantigny Grower Conference: Training for High Performance and Quality Crops; Wheaton, IL).
- Everything you wanted to know about systemic insecticides—but were afraid to ask (February 12, 2009. Wisconsin Nursery Association’s 2009 Winter Workshop; Waukesha, WI).
- Fundamentals of tank-mixing and pesticide resistance (February 12, 2009. Wisconsin Nursery Association’s 2009 Winter Workshop; Waukesha, WI).
- Modes of action of insecticides (January 27, 2009. Ohio State University Nursery Short Course; Columbus, OH).
- Scouting a crop quickly & accurately (January 27, 2009. Ohio State University Nursery Short Course; Columbus, OH).
- Fungus gnats and shore flies (January 26, 2009. Ohio State University Nursery Short Course; Columbus, OH).
- Thrips control (January 22, 2009. 2009 Capital Region Greenhouse Grower Meeting; Shady Maple, PA).
- Managing pesticide resistance (January 22, 2009. 2009 Capital Region Greenhouse Grower Meeting; Shady Maple, PA).
- New pesticide developments and understanding how pesticides kill arthropod pests (January 20, 2009. Spring Training; Topeka, KS).
- How to avoid getting “bored” to death: an update on the Emerald ash borer and other wood-boring insects (January 16, 2009. Kansas Arborists Association Shade Tree Conference; Topeka, KS).
- What you need to know about tank-mixing insecticides (January 13, 2009. Indiana Green Expo; Indianapolis, IN).
- Biological controls (January 12, 2009. Indiana Green Expo; Indianapolis, IN).
- Colony collapse disorder update (January 9, 2009. Great Plains Vegetable Growers Conference; St. Joseph, MO).
- Integrated pest management for bedding plants (January 9, 2009. Great Plains Vegetable Growers Conference; St. Joseph, MO).
- Suppliers of biological control organisms (January 7, 2009. Illinois Specialty Crops and Agritourism Conference and Trade Show; Springfield, IL).
- “Most likely to succeed” biological control organisms for insect management in greenhouses and high tunnels (January 7, 2009. Illinois Specialty Crops and Agritourism Conference and Trade Show; Springfield, IL).
- Emerald ash borer & wood-boring insects (January 6, 2009. Western 119th Annual Meeting and Trade Show; Overland Park, KS).
- Pest/insect control (December 12, 2008. Costa Farms Growers Summit; Miami, FL).
- Management of vegetable garden insect pests (December 9, 2008. Farmers Market & Large Scale Vegetable Production Meeting; Clay Center, KS).
- Panel discussion (December 9, 2008. Tree Injection Seminar; El Dorado, KS).
- Insect management for market farmers (December 1, 2008. Market Farmers Class; Wichita, KS).
- Management strategies for dealing with fungus gnats and shore flies (November 7, 2008. New England Greenhouse Conference & Expo; Worcester, MA).
- Pest management using organic products (November 5, 2008. New England Greenhouse Conference & Expo; Worcester, MA).
- Using biological control agents (November 5, 2008. New England Greenhouse Conference & Expo; Worcester, MA).

- The role of insect monitoring and insect biological control programs (October 28, 2008. Annual Meeting of the Association of Natural Bio-Control Producers; Stoneville, MS).
- Tree insects (October 6, 2008. 35th Kansas Arborists Association Arborists Training Course; Manhattan, KS).
- Modes of action of insecticides (October 5, 2008. Tenarky District Convention—Associated with the Nashville Rose Society; Nashville, TN).
- Greenhouse sanitation (September 30, 2008. Plug & Cutting Conference; Orlando, FL).
- Insect identification and control Parts 1 and 2 (September 30, 2008. Plug & Cutting Conference; Orlando, FL).
- Vectors (September 23, 2008. 16th Ornamental Workshop on Diseases and Pests; Hendersonville, NC).
- Tank mixing pesticides—what are the benefits & concerns? (September 10, 2008. Carlin BuyerFest; West Bend, WI).
- Public enemy #1: western flower thrips (September 9, 2008. Carlin BuyerFest; West Bend, WI).
- Don't get mixed-up about tank-mixing (August 19, 2008. BFG Hort Expo; Hoffman Estates, IL).
- Managing arthropod pests “organically” (August 17, 2008. Market Garden Workshop; St. Joseph, MO).
- Turf insect control update (August 7, 2008. Kansas Turfgrass Field Day; Manhattan, KS).
- Emerald ash borer and prospects of the pest in KS, MO, IA, and NE (August 6, 2008. Healthy Lawns, Healthy Business Summit; Overland Park, KS).
- Dealing with mealybugs and scales in interior plantscapes (July 29, 2008. Association of Education and Research Greenhouse Curators Annual Meeting; Lubbock, TX).
- Thrips—invincible? Understanding your enemy (July 24, 2008. Kansas Greenhouse Growers Association and K-State Bedding Plant Field Trials; Olathe, KS).
- Know and control Part I: whiteflies, thrips, and mealybugs (July 15, 2008. Ohio Florists' Association Short Course; Columbus, OH).
- And the survey says Part I: summary of insecticide trials against major pests (July 12, 2008. Ohio Florists' Association Short Course; Columbus, OH).
- Pesticide resistance and your bottom line (July 12, 2008. Ohio Florists' Association Short Course; Columbus, OH).
- Insect update (June 20, 2008. Kansas Arborists Association Summer Field Day; Haysville/Belle Plaine, KS).
- Forest pests (June 5, 2008. Walnut Council Field Day; Emporia, KS).
- Rose pests—identification and treatment (June 3, 2008. Nashville Rose Society; Nashville, TN).
- BUGOLOGY: research in ornamental entomology (April 25, 2008. Department of Entomology Seminar; Kansas State University, Manhattan, KS).
- Pest-B-Gone: dealing with bugs (April 19, 2008. Harvey County Home and Garden Show; Newton, KS).
- Greenhouse arthropod management: what does it take? (April 10, 2008. Department of Plant Pathology Seminar; Kansas State University, Manhattan, KS).
- Ash-B-Gone (March 26, 2008. Tree City USA Recognition Event; Manhattan, KS).
- Common turf and landscape insects and advances in their management and control (March 20, 2008. Spring Grounds Maintenance Workshop; Lawrence, KS).
- Common turf and landscape insects and advances in their management and control (March 19, 2008. Spring Grounds Maintenance Workshop; Salina, KS).
- Biological control of insect and mite pests (March 11, 2008. Praire Roots Garden Club; Manhattan, KS).
- Fundamentals of tank mixtures (March 1, 2008. 24th Society of American Florists Annual Conference on Pest and Disease Management in Ornamentals; Atlanta, GA).
- Plant-essential oils: are they viable pest control materials? (February 28, 2008. 24th Society of American Florists Annual Conference on Pest and Disease Management in Ornamentals; Atlanta, GA).
- Ash-B-Gone: an update on emerald ash borer (February 21, 2008. Spring Networkshop; Lenexa, KS).
- How insecticides and miticides work (February 21, 2008. Gard'N'Wise Clerk Training; Wichita, KS).
- How insecticides and miticides work (February 19, 2008. Gard'N'Wise Clerk Training; Dodge City, KS).

- Arthropod identification and management (February 15, 2008. Cantigny Grower Conference: Training for High Performance and Quality Crops; Wheaton, IL).
- Organic and natural pest control (January 31, 2008. Farmer's Market Vendor Workshop; Newton, KS).
- All you ever wanted to know about killing bugs (January 23, 2008. Spring Training; Topeka, KS).
- Western flower thrips: have we reached an impasse? (January 17, 2008. Green & Growin' Show; Greensboro, NC).
- Getting tank mixes right (January 17, 2008. Green & Growin' Show; Greensboro, NC).
- High and low impact and organic pest control materials for vegetables and cut flowers (January 12, 2008. Great Plains Vegetable Growers Conference; St. Joseph, MO).
- Insect pest update (January 11, 2008. Kansas Arborists Association 53rd Annual Shade Tree Conference; Topeka, KS).
- Integrated pest management (December 18, 2007. Heartland Green Industry Expo; Overland Park, KS).
- Pest management for the green industry: how viable are plant-derived essential oils as pest control materials? (November 27, 2007. Annual Research/Extension Update; Manhattan, KS).
- Sustainable pest management: what does it mean? (November 13, 2007. Managing Landscapes Organically; Ronkonkoma, NY).
- What's up with colony collapse disorder? (November 8, 2007. Kansas Fruit Growers Association Fall Field Day; Grantville, KS).
- Insects of turf and ornamentals (November 7, 2007. Pesticide Recertification Workshop; Wichita, KS).
- Fungus gnat research and pest management (November 6, 2007. Young Plant Research Center Open House; Gainesville, FL).
- The do's and don't of tank mixing (October 25, 2007. Kansas Greenhouse Grower Association Educational Meeting; Topeka, KS).
- Management of insect and mite pests in the landscape (October 24, 2007. Pesticide Applicator Recertification Training for Category 3A; Olathe, KS).
- Using chemicals compatible with beneficials in conservatories and small production greenhouses (October 13, 2007. Association of Zoological Horticulture, Zoo Horticulture Certification Program—Integrated Pest Management Course; Tulsa, OK) [Invited Presentation].
- Dealing with ornamental insect and mite pests (October 8, 2007. 34th Kansas Arborists Association Arborists Training Course; Manhattan, KS).
- Getting the low-down on bugs: tank-mixing and what's new (September 19, 2007. BWI Expo; Shreveport, LA).
- Scouting the crop quickly and accurately (September 11, 2007. GrowerTalks Greenhouse Experience Conference; Cleveland, OH).
- Sanitation: your most important fundamental pest management strategy (September 10, 2007. GrowerTalks Greenhouse Experience Conference; Cleveland, OH).
- Thrips: the ultimate pest (September 10, 2007. GrowerTalks Greenhouse Experience Conference; Cleveland, OH).
- Fungus gnats and shoreflies (September 10, 2007. GrowerTalks Greenhouse Experience Conference; Cleveland, OH).
- Don't get "stirred" by tank mixing (August 22, 2007. MDM/BFG Midwestern Hort Expo; Minneapolis, MN).
- Crop culture and sanitation—reduce problems without chemicals (August 22, 2007. MDM/BFG Midwestern Hort Expo; Minneapolis, MN).
- Turfgrass insect management (August 2, 2007. Kansas Turfgrass Field Day; Olathe, KS).
- Compatibility conflict: the use of pesticides with biological control agents (July 31, 2007. Association of Education and Research Greenhouse Curators Annual Meeting; Storrs, CT).
- Trade show interactive; with J. Williams and P. Konjoian (July 17, 2007. Ohio Florists' Association Short Course; Columbus, OH).

- Crop culture and sanitation (July 17, 2007. Ohio Florists' Association Short Course; Columbus, OH).
- Pesticide resistance—a grower's response (July 16, 2007. Ohio Florists' Association Short Course; Columbus, OH).
- Don't get "stirred" by tank mixing (July 14, 2007. Ohio Florists' Association Short Course; Columbus, OH).
- Greenhouse insect management (July 17, 2007. College of Knowledge: Ohio Florists' Association Short Course; Columbus, OH).
- Insect and mite management on roses (June 28, 2007. Chattanooga Rose Society Meeting; Chattanooga, TN).
- Insect update (June 15, 2007. Kansas Arborists Association Summer Field Day; Clinton Lake, KS).
- Emerging insect pests (April 4, 2007. Greenhouse Pest and Disease Diagnostics Workshop; Denver, CO).
- Arthropod pests of landscapes (March 29, 2007. Grounds Maintenance Workshop; Hays, KS).
- Arthropod pests of landscapes (March 22, 2007. Grounds Maintenance Workshop; Garden City, KS).
- Beneficial insects in the vineyard (March 10, 2007. Kansas Grape Growers and Winemakers Association Meeting; Emporia, KS).
- Insects of the landscape (February 24, 2007. 2007 Manhattan Area Garden Show; Manhattan, KS).
- How insecticides and miticides work (February 22, 2007. 2007 Gard'N'Wise Clerk Training; Wichita, KS).
- How insecticides and miticides work (February 20, 2007. 2007 Gard'N'Wise Clerk Training; Dodge City, KS).
- Pest management in greenhouses (February 6, 2007. 11th Annual Greenhouse Growers' School; Columbia, MO).
- Insect control II: control of chewers and suckers with organic, soft, and hot products (February 1, 2007. Mid-Atlantic Fruit and Vegetable Convention; Hershey, PA).
- Insect control I: Japanese beetles, corn rootworm, and some other difficult to control vegetable and flower pests (February 1, 2007. Mid-Atlantic Fruit and Vegetable Convention; Hershey, PA).
- Integrated thrips control strategies targeting each stage of the insect life cycle; Q-Biotype whitefly update (January 18, 2007. Romeo Packing & UAP Production Horticulture Seminar; Carpinteria, CA).
- Integrated thrips control strategies targeting each stage of the insect life cycle; Q-Biotype whitefly update (January 16, 2007. Romeo Packing & UAP Production Horticulture Seminar; Watsonville, CA).
- Unwelcome guests: concerns and issues with invasive species (January 12, 2007. 52nd Kansas Arborists Association Annual Shade Tree Conference; Topeka, KS).
- De-bugging your greenhouse: effectively managing insect and mite pests in greenhouses (January 10, 2007. Oregon Association of Nurserymen Greenhouse Chapter Seminar; Wilsonville, OR).
- Turfgrass insects (November 28, 2006. 56th Annual Kansas Turfgrass Conference; Topeka, KS).
- Cultural management of pests on greenhouse ornamentals (November 16, 2006. Northwest Indiana Floriculture Association Meeting; Crete, IL).
- Insect identification and control on ornamentals and turf (November 15, 2006. Pesticide Recertification Workshop 3A, 3B, 3C and Registered Technicians; Wichita, KS).
- Dealing with poinsettia pests...effectively (November 9, 2006. 10th Annual Penn State Poinsettia Growers Trial; Zionsville, PA).
- Pest-B-Gone (November 7, 2006. 2006 Michigan Greenhouse Growers Expo; Lansing, MI).
- Combining pesticides with natural enemies (November 3, 2006. New England Greenhouse Conference and Expo; Worcester, MA).
- Pesticide resistance management (November 2, 2006. New England Greenhouse Conference and Expo; Worcester, MA).
- Insect and mite identification and management (November 1, 2006. New England Greenhouse Conference and Expo; Worcester, MA).
- New issues in pest management (October 11, 2006. Kansas Greenhouse Grower Association Meeting; Manhattan, KS).
- Update—greenhouse insect control (October 5, 2006. 2006 Indiana Flower Growers Conference; West Lafayette, IN).

- Tree insects (October 2, 2006. 33rd Kansas Arborists Association Arborists Training Course; Manhattan, KS).
- Mite-B-Gone: everything you wanted to know about managing spider mites—but were afraid to ask (September 28, 2006. Lectures in Bloom Series; New Orleans, LA).
- Insect identification and control (September 25, 2006. 2006 Perennial Production Conference; Indianapolis, IN).
- Understanding chemicals so they work for you (September 25, 2006. 2006 Perennial Production Conference; Indianapolis, IN).
- Mite-B-Gone: everything you wanted to know about managing spider mites—but were afraid to ask (September 20, 2006. Lectures in Bloom Series; Las Vegas, NV).
- Impact of cultural management of pests (September 13, 2006. Buyerfest; West Bend, WI).
- New options for insect and mite control (September 6, 2006. Hort Expo South Trade Show Program; Kansas City, MO).
- Mite-B-Gone: everything you wanted to know about managing spider mites—but were afraid to ask (August 15, 2006. Lectures in Bloom Series; Chicago, IL).
- Bugs galore: how to debug your garden (July 15, 2006. Woldhuis Farms Sunrise Greenhouse Seminars; Grant Park, IL).
- Bug-Geta: how to successfully use pest control materials to control insect and mite pests (July 11, 2006. Ohio Florists' Association Short Course; Columbus, OH).
- Insects: A to M—aphids, fungus gnats, leafminers, and mealybugs (July 9, 2006. Ohio Florists' Association Short Course; Columbus, OH).
- Role of nutrition in disease and insect problem development (July 9, 2006. Ohio Florists' Association Short Course; Columbus, OH).
- Best management practices: making pest management cost effective (July 8, 2006. Ohio Florists' Association Short Course; Columbus, OH).
- BUG-OL-OGY: how well do you know your pest control materials? (June 23, 2006. Southeast Greenhouse Conference; Greenville, SC).
- Western flower thrips (June 22, 2006. Southeast Greenhouse Conference; Greenville, SC).
- Insect update (June 16, 2006. Kansas Arborists Association Summer Field Day; Lawrence, KS).
- Insecticide and biocontrol compatibility (June 9, 2006. 10th Annual Environmental Horticulture Integrated Pest Management Conference; San Luis Obispo, CA).
- Insecticide and biocontrol compatibility—mealybugs too! (June 7, 2006. San Diego CAPCA's Nursery Greenhouse Seminar 2006; Carlsbad, CA).
- Feeding behavior of the rove beetle, *Atheta coriaria* Kraatz (Coleoptera: Staphylinidae) under laboratory conditions (May 18, 2006. IOBC/WPRS Working Group Meeting Integrated Pest Control in Protected Crops, Mediterranean Climate; Murcia, Spain).
- Integrated pest management in greenhouses and nurseries: The USA perspective (April 4, 2006. 5th National Integrated Pest Management Symposium; St. Louis, MO).
- New strategies to control insect pests in landscape ornamentals (March 21-22, 2006. Fisher & Son Company, Inc. Tree Technology Conference; Stevens, PA and Lawrenceville, NJ).
- How does suburbanization influence pest problems? (March 14, 2006. 50th Annual Iowa State University Shade Tree Short Course; Ames, IA).
- Integrated pest management (March 2, 2006. Peoria Garden Club; Peoria, IL).
- Pest control: don't get buggy on us (March 1, 2006. 2006 Pro-Hort; Morton, IL).
- Bug wars: update on new pest control materials (February 23, 2006. Toledo Area Bedding Plants Clinic; Sylvania, OH).
- How to de-bug your turfgrass (February 22, 2006. 24th Annual Southern Illinois Grounds Maintenance School and Trade Show; Collinsville, IL).

- Identification and control of the major insect pests of the landscape and nursery (February 21, 2006. Purdue University Cooperative Extension Service Initial Certification Training, Commercial Pesticide Applicators: Category 3a—Ornamental Pest Control; West Lafayette, IN).
- Greenhouse vegetable transplant production including insect pest management (February 9, 2006. 2006 Kankakee County Vegetable Growers School; Kankakee, IL).
- Bugs galore: a pot-pourri of insect and mite issues (February 7, 2006. The Autumn Tree Care Experts Seminar; Chicago, IL).
- Biorational pest control materials: what are they and are they effective? (February 2, 2006. Mid-Atlantic Fruit and Vegetable Convention; Hershey, PA).
- Bug-B-Gone: why it is important to understand modes of action (February 2, 2006. Mid-Atlantic Fruit and Vegetable Convention; Hershey, PA).
- Ornamental entomology/integrated pest management (January 26, 2006. BWI Grower Educational Seminar; Springfield, MO).
- Mites on ornamentals, rotational practice, mite biology, and new mite control products (January 19, 2006. Wilbur-Ellis University Technical Seminar; Wilsonville, OR).
- Current mite control strategies (January 10 and 12, 2006. UAP West & Romeo Packing 2006 Production Horticulture Seminar; Watsonville and Carpinteria, CA).
- Bug battles: how to effectively deal with pests in greenhouses and garden centers (January 5, 2006. 32nd Southern Illinois Bedding Plant School and Trade Show; Belleville, IL).
- Pest-B-Gone workshop (November 11, 2005. Ohio Florists' Association Outreach Program; Lemont, IL).
- Mites, thrips & other insect pests (November 1, 2005. Verdicon Fall Meeting-Nursery & Greenhouse Program; Dundee, MI).
- Mites and other pests of trees, and grub control for turf (November 1, 2005. Verdicon Fall Meeting-Lawn & Tree Care Program; Dundee, MI).
- Pest-B-Gone (October 13, 2005. Commercial Flower Growers of Wisconsin Meeting; Germantown, WI).
- Pest-B-Gone: how to get the "most" from your pest control materials (October 5, 2005. Indiana Flower Growers Conference; West Lafayette, IN).
- Pest management in horticulture: dealing with "bugs" in ornamental cropping systems (October 4, 2005. Kansas State University Department of Horticulture, Forestry, and Recreation Resources Fall Seminar Series; Manhattan, KS).
- Compatibility conflict: is the use of biological control agents with pesticides a viable management strategy? (September 12-16, 2005. Second International Symposium on Biological Control of Arthropods; Davos, Switzerland).
- Proper rotation among insecticides and miticides (August 31, 2005. Syngenta Kalamazoo Growers Meeting; Kalamazoo, MI).
- Combining pesticides with natural enemies (July 12, 2005. Ohio Florists' Association Short Course; Columbus, OH).
- Update on new insecticides and fungicides (July 11, 2005. Ohio Florists' Association Short Course; Columbus, OH).
- Fungus gnat management with diatomaceous earth (July 11, 2005. Ohio Florists' Association Short Course; Columbus, OH).
- Effect of tank mixes in controlling insect pests (July 10, 2005. Ohio Florists' Association Short Course; Columbus, OH).
- Insect and pest management: The whole nine yards (July 9, 2005. Ohio Florists' Association Short Course; Columbus, OH).
- Bugs galore: Dealing with those pestiferous rose pests (June 23, 2005. Chattanooga Rose Society; Chattanooga, TN).
- Don't get caught with your plants down (June 18, 2005. Woldhuis Farms Sunrise Greenhouse; Grant Park, IL).

- Feeding behaviors of pestiferous insects and mites: why this is important to know for control (June 9, 2005. Illinois Arborist Association Summer Conference; Monticello, IL).
- Pesticides and natural enemies: defining the issue of compatibility (May 11, 2005. IOBC-NRS/Biocontrol Network-Joint Meeting; Magog-Orford, Quebec, Canada).
- Entomology (March 30, 2005. Champaign Lions Club; Champaign, IL).
- Greenhouse insect pest management (March 5, 2005. Special Produce Growers Meeting; Arthur, IL).
- Greenhouse insect pest management (February 24, 2005. 2005 Kankakee County Vegetable Growers' School; Kankakee, IL).
- Killing the critters, not the earth (February 22, 2005. 3rd Annual Midwest Ecological Landscaping Association-MELA; River Grove, IL).
- Strategies for biological control of greenhouse insects and mites (February 10, 2005. 2005 Tri-State Green Industry Expo; Covington, KY).
- Insecticide classifications, modes of action, efficacies and rotations and why modes of actions and rotations are important (February 3, 2005. Mid-Atlantic Fruit and Vegetable Convention; Hershey, PA).
- Bugs I: why and how insects and mites feed on your plants and flowers and how to identify them (February 3, 2005. Mid-Atlantic Fruit and Vegetable Convention; Hershey, PA).
- Pest control: the latest on the Emerald ash borer (February 2, 2005. 14th Annual Pro Hort Symposium; Peoria, IL).
- Constructing an effective pest management program (January 28, 2005. 2005 Iowa Fruit & Vegetable Growers Association Annual Convention and Trade Show; Marshalltown, IA).
- Beneficial insects (January 28, 2005. 2005 Iowa Fruit & Vegetable Growers Association Annual Convention and Trade Show; Marshalltown, IA).
- Aspects of growing using non-toxic controls of pests (January 20, 2005. Mid-Am Trade Show; Chicago, IL).
- New pest control materials and mode of action (January 6, 2005. 31st Southern Illinois Bedding Plant School and Trade Show; Belleville, IL).
- Safari: a new neonicotinoid insecticide (December 14, 2004. Neonicotinoid Technical Conference; Phoenix, AZ).
- Mealybugs and their life cycles (December 1, 2004. Western Farm Service Inc. IPM Update Conference; Salinas, CA).
- “Getting the bug down:” update on insect management (November 11, 2004. Northwest Indiana Floriculture Association Meeting; Crete, IL).
- Pest management in the retail greenhouse (October 18, 2004. New England Greenhouse Conference and Expo; Worcester, MA).
- Pest management basics (October 18, 2004. New England Greenhouse Conference and Expo; Worcester, MA).
- What's new in insect control: particularly leafminers among others (October 7, 2004. Indiana Flower Growers Conference; West Lafayette, IN).
- Biological control of insects and diseases workshop (September 22, 2004. 2004 International Bedding Plant Production Conference; Rosemont, IL).
- Insect and mite identification and control workshop (September 21, 2004. 2004 International Bedding Plant Production Conference; Rosemont, IL).
- Pesticide rotations: why is it important to know modes of action (August 31, 2004. 9th Annual BFG Supply Co., Buyer's Trade Show; Wheaton, IL).
- Weapons of mass destruction (WMD): what are the new pest control materials and are they effective (August 25, 2004. 2004 Midwestern Hort Expo; Minneapolis, MN).
- Fighting fungus gnats: how to deal with these critters from the deep (August 24, 2004. Midwestern Hort Expo; Minneapolis, MN).
- They're called soft, but they carry a big stick (July 13, 2004. Ohio Florists' Association Ohio Short Course; Columbus, OH).

- Asks the insects: an interview with your favorite pests (July 12, 2004. Ohio Florists' Association Ohio Short Course; Columbus, OH).
- Pests and diseases: diagnosing and managing crop problems (July 10, 2004. Ohio Florists' Association Ohio Short Course; Columbus, OH).
- Diagnostics: insects and diseases (July 10, 2004. Ohio Florists' Association Ohio Short Course; Columbus, OH).
- Pesticide rotations (June 25, 2004. Southeast Greenhouse Conference; Greenville, SC).
- Cultural practices in pest management (June 25, 2004. Southeast Greenhouse Conference; Greenville, SC).
- Biological control of insects in propagation (June 24, 2004. Southeast Greenhouse Conference; Greenville, SC).
- Insect identification in propagation (June 24, 2004. Southeast Greenhouse Conference; Greenville, SC).
- Insecticides in floriculture (June 11, 2004. 8th Annual Environmental Horticulture Integrated Pest Management Conference; San Luis Obispo, CA).
- The devils from the deep: why fungus gnats are problematic (June 10, 2004. 8th Annual Environmental Horticulture Integrated Pest Management Conference; San Luis Obispo, CA).
- What's bugging you? (June 5, 2004. Kleiss Nursery Garden School; Tolono, IL).
- Integrated pest management in floriculture production systems: are action thresholds realistic? (March 29, 2004. North Central Branch Entomological Society of America Annual Meeting; Kansas City, MO).
- Natural indeed: are natural pesticides safer and better than conventional pesticides (March 20, 2004. 2004 Chicago Flower and Garden Show; Chicago, IL).
- Pestgalore: how are you going to deal with insect pests in the future? (March 11, 2004. Stateline Conference For Landscape Professionals; Janesville, WI).
- Scale insects on trees and shrubs (February 24, 2004. 22nd Annual Southern Illinois Grounds Maintenance School Conference; Collinsville, IL).
- Greenhouse troubleshooting: insect pests and diseases (February 16, 2004. Kankakee County Vegetable Growers School; Bourbonnais, IL).
- Invasive species: how do we deal with these unwelcome visitors? (February 11, 2004. Midwest Ecological Landscaping Association-MELA Mini-Conference; River Grove, IL).
- Insects: boring? NO! Wood-boring? OH-NO! (February 11, 2004. The Autumn Tree Care Experts: Silver Anniversary Seminar, Chicago Botanic Garden; Glencoe, IL).
- Are pests eating away your profits? (February 4, 2004. 12th Annual Pro Hort Symposium; Peoria, IL).
- The "lowdown" on new pesticides and new pests (January 21, 2004. Metropolitan Detroit Flower Growers' Association Annual Meeting; Wixom, MI).
- Hard to kill: why should you worry about insecticide resistance? (January 20, 2004. Winter Flower Growers' Meeting; Boston, MA).
- Insect and mite management in greenhouses: Issues related to tank mixes and new pest control materials (January 15, 2004. Mid-America Horticultural Trade Show; Chicago, IL).
- Insect control in annuals and perennials (January 8, 2004. 2004 Indiana Nursery and Landscape Association Professional Landscape and Nursery Trade Show; Indianapolis, IN).
- Identification and control of boring insects in the landscape (January 8, 2004. 2004 Indiana Nursery and Landscape Association Professional Landscape and Nursery Trade Show; Indianapolis, IN).
- Tank mixing (January 6, 2004. 30th Southern Illinois Bedding Plant School and Trade Show; Belleville, IL).
- Scale insects: how to identify and deal with these little suckers (December 4, 2003. North Central Turfgrass Exposition; St. Charles, IL).
- Insects in vegetable transplants (November 13, 2003. Iowa-Illinois Fruit and Vegetable Growers Conference; Bettendorf, IA).
- What's new in insect control (October 9, 2003. Indiana Flower Growers Conference; West Lafayette, IN).
- Insect and mite control in greenhouse situations (October 7, 2003. Fall Greenhouse Growers Program; Cedar Rapids, IA).

- Insect and mite identification and control (September 30, 2003. 2003 Perennial Production Conference; St. Charles, IL).
- Conservation biological control (September 19, 2003. 2003 Illinois Master Gardener State Conference; Lisle/Naperville, IL).
- Invasive species (September 19, 2003. 2003 Illinois Master Gardener State Conference; Lisle/Naperville, IL).
- Identification lab on insects and plant diseases (September 16, 2003. J. G. Smith/BFG Supply 8th Annual Buyer's Trade Show; Naperville, IL).
- Greenhouse insect and mite management and new pesticide controls (September 10, 2003. Kentuckiana Greenhouse Association Educational Session; Louisville, KY).
- Integrated pest management of floriculture pests: where are fungus gnats coming from? (September 4, 2003. Department of Entomology Seminar Series: Purdue University; West Lafayette, IN).
- Systemic pest control materials and tank mixing: what's it all about? (August 28, 2003. Chattanooga Rose Society; Chattanooga, TN).
- Insect management for upcoming crops (August 12, 2003. Carlin Horticultural Supplies Westfield Open House; Westfield, IN).
- Effective use of insecticides to manage this year's most voracious insects (July 16, 2003. Ohio Florists' Association Short Course; Columbus, OH).
- Where are fungus gnats, *Bradysia* spp., coming from? (July 14, 2003. Ohio Florists' Association Short Course; Columbus, OH).
- Modifying your tank mixes for maximum pesticide performance (July 13, 2003. Ohio Florists' Association Short Course; Columbus, OH).
- Diagnostics (July 12, 2003. Ohio Florists' Association Short Course; Columbus, OH).
- Japanese beetles and other garden pests (June 7, 2003. Kleiss Nursery Garden School; Tolono, IL).
- Insects and their control (May 28, 2003. Styer's Horticultural Consulting Grower Conference; Indianapolis, IN).
- Integrated pest management in greenhouses: are pest control materials and natural enemies compatible? (April 8, 2003. Fourth National Integrated Pest Management Symposium; Indianapolis, IN).
- Biological control in interior plantscapes: does plant size affect natural enemy success? (March 25, 2003. North Central Branch Entomological Society of America; Madison, WI).
- Borer problems in trees and shrubs (February 26, 2003. 21st Annual Southern Illinois Grounds Maintenance School and Trade Show; Collinsville, IL).
- Tank-mixing the right way (February 23, 2003. 19th Society of American Florists' Annual Conference on Pest Management on Ornamentals; Orlando, FL).
- Calibration and calculation with pesticide application equipment (February 23, 2003. 19th Society of American Florists' Annual Conference on Pest Management on Ornamentals; Orlando, FL).
- Dealing with garden pests using environmentally-sound management strategies (February 15, 2003, Gardeners Day; Springfield, IL).
- Controlling greenhouse insect pests (February 6, 2003. 2003 Tri-State Green Industry Expo; Covington, KY).
- Future of pest management in Illinois (February 5, 2003. 11th Annual Pro Hort Symposium; Peoria, IL).
- Unwelcome visitors: Gypsy moth, Japanese beetle, and mosquitoes (February 1, 2003. Joys of Gardening; Freeport, IL).
- Integrated pest management (January 31, 2003. Pest Control for Interior Plantscapes Seminar: Ohio Florists' Association; Columbus, OH).
- Diagnostics (January 31, 2003. Pest Control for Interior Plantscapes Seminar: Ohio Florists' Association; Columbus, OH).
- Bug-sumption: dealing with insects and mites on greenhouse-grown herbs (January 22, 2003. Illinois Specialty Growers Conference; Springfield, IL).
- Managing insects on ornamental crops in the greenhouse (January 9, 2003. Illiana Vegetable Growers' School; Schererville, IN).

- Managing insect and mite pests of greenhouse-grown herbs and vegetables (January 7, 2003. 29th Southern Illinois Bedding Plant School and Trade Show; Belleville, IL).
- Dealing with wood-boring insects in landscapes (December 4, 2002. 2002 North Central Turfgrass Exposition; St. Charles, IL).
- Invasive pests-should you be worried? (November 13, 2002. University of Illinois/Central Illinois Golf Course Superintendents Association Annual Education Seminar; Bloomington, IL).
- Top 10 insects in Illinois (October 18 and 19, 2002. Chalet Nursery's Lecture Series; Wilmette, IL).
- Fundamentals of tank mixing and rotating pesticides (October 16, 2002. 22nd Annual Midwest Fall Growers' Conference; Des Moines, IA).
- Orchid workshop (September 28, 2002. Luthy Botanical Garden; Peoria, IL).
- Insect and plant disease identification laboratory (September 17, 2002. J & G Smith 7th Annual Buyer's Trade Show; Naperville, IL).
- Management of insect and mite pests using new chemistry (September 11, 2002. Carlin Horticultural Supplies Buyerfest; West Bend, WI).
- Controlling harmful insects (July 27, 2002. Environmental Commission of Hoffman Estates Speaker Series; Hoffman Estates, IL).
- Managing insect and mite pests in interior plantscapes: Challenges and opportunities (July 25, 2002. Association of Education and Research Greenhouse Curators Annual Meeting; West Lafayette, IN).
- Horticultural practices and pest management: conflicting interests (July 17, 2002. Ohio Florists' Association Short Course; Columbus, OH).
- Perennial pest management (July 14, 2002. Ohio Florists' Association Short Course; Columbus, OH).
- Pest management in perennial production systems (July 11, 2002. Perennial Plant Association Symposium and Trade Show; Rosemont, IL).
- Tank mixes (June 22, 2002. Southeast Greenhouse Conference; Greenville, SC).
- Pest/natural enemy interaction (June 21, 2002. Southeast Greenhouse Conference; Greenville, SC).
- Insect and related pest identification and diagnosis (June 20, 2002. Southeast Greenhouse Conference; Greenville, SC).
- Growing orchids: it's easier than you think (April 13, 2002. 4th Annual Tri-County Gardening Day; Peoria, IL).
- Wanted dead or alive (mostly dead) ornamental insect pests of Illinois and how to deal with them (April 13, 2002. 4th Annual Tri-County Gardening Day; Peoria, IL).
- Challenges related to using biological control in greenhouses (March 27, 2002. North Central Branch Entomological Society of America; East Lansing, MI).
- Gypsy moth-a pest here to stay (March 1, 2002. Chicago Flower and Garden Show; Navy Pier, Chicago, IL).
- How to make pesticides work better (February 20, 2002. 2002 Indiana Spring Plants School; Indianapolis, IN).
- Plant galls: are they a concern? (February 19, 2002. 20th Annual Southern Illinois Grounds Maintenance School and Trade Show; Collinsville, IL).
- Orchid pest management (February 9, 2002. Greenview Nursery; Champaign, IL).
- Bugs galore: major insect pests of Illinois (February 5, 2002. 10th Annual Pro Hort Symposium; Peoria, IL).
- Fighting the foe from the deep-fungus gnats (January 4, 2002. 28th Southern Illinois Bedding Plant School and Trade Show; Belleville, IL).
- The impact of suburbanization on pest control (November 28, 2001. North Central Turfgrass Exposition; St. Charles, IL).
- Managing the top ten landscape insect problems (November 29, 2001. North Central Turfgrass Exposition; St. Charles, IL).
- Biological control of insect pests in the greenhouse and update on new insecticides (November 8, 2001. Northwest Indiana Floriculture Association Meeting and Pesticide Applicator Training; LaPorte, IN).
- Pesticides (November 6, 2001. Big Muddy River Correctional Center; Ina, IL).

- Ways to maximize the effectiveness of pesticide applications (October 25, 2001. Kansas Greenhouse Growers Conference; Manhattan, KS).
- Understanding the behavior of fungus gnats in greenhouse production systems (October 24, 2001. Kansas Greenhouse Growers Conference; Manhattan, KS).
- Plant nutrition (October 12, 2001. Lincoln and Garfield Park Conservatory Development Workshop; Chicago, IL).
- Update on greenhouse insect control (October 11, 2001. Indiana Flower Growers Conference; West Lafayette, IN).
- Resistance management: should you be concerned? (September 25, 2001. J & G Smith 6th Annual Buyer's Trade Show; Naperville, IL).
- Integrated pest management (July 25, 2001. Big Muddy River Correctional Center; Ina, IL).
- Insect management in perennial production (July 18, 2001. Ohio Florists' Association Short Course; Columbus, OH).
- Understanding the behavior of fungus gnats and their natural enemies (July 17, 2001. Ohio Florists' Association Short Course; Columbus, OH).
- Ways to maximize pesticide effectiveness (July 15, 2001. Ohio Florists' Association Short Course; Columbus, OH).
- Insect and mite management on bedding plants (June 23, 2001. Southeast Greenhouse Conference; Greenville, SC).
- Resistance management: theory and practice (June 23, 2001. Southeast Greenhouse Conference; Greenville, SC).
- Insecticide efficacy trials (June 22, 2001. Southeast Greenhouse Conference; Greenville, SC).
- What's happening on the "bug" front (June 11, 2001. 3rd Annual Greenhouse Management Workshop; Springfield, IL).
- Managing insect and mite pests with new chemistry/insect management and control (May 17, 2001. Floriculture Spring Seminar; Tampa, FL).
- Pest management: past, present, and future (March 31, 2001. 3rd Annual Tri-County Gardening Day; Peoria, IL).
- Does plant size influence natural enemy foraging success? (March 26, 2001. Department of Entomology Seminar; University of Illinois, Urbana, IL).
- Bad bugs come to Illinois: Asian long-horned beetle and Gypsy moth (March 15, 2001. Green Seminar; Oakbrook, IL).
- The nuts and bolts of growing orchids (March 10, 2001. Chicago Flower and Garden Show; Navy Pier, Chicago, IL).
- Starting right in the greenhouse (March 2, 2001. East Central Illinois and Western Indiana Commercial Vegetable Production School; Kankakee, IL).
- Major insect problems of deciduous trees (February 21, 2001. 19th Annual Southern Illinois Grounds Maintenance School; Collinsville, IL).
- Insect identification and current management options (January 30, 2001. Central Illinois Greenhouse Management Workshop; Peoria, IL).
- How to improve performance of pest control materials (January 30, 2001. Central Illinois Greenhouse Management Workshop; Peoria, IL).
- Everything you wanted to know about spider mites—but were afraid to ask (January 21, 2001. Olympic Horticultural Products Annual Meeting; Key West, FL).
- Up-date on greenhouse and landscape pest control materials (January 5, 2001. 27th Southern Illinois Bedding Plant School and Trade Show; Belleville, IL).
- New trends in insect control in the greenhouse and landscape (January 4, 2001. 2001 North Carolina Green N' Growin Show and Floral Exposition; Winston-Salem, NC).

- Insect management and biocontrols (January 3, 2001. North Carolina Green N' Growin Show and Floral Exposition; Winston-Salem, NC).
- The role of extension in implementing biological control in greenhouses and other interior plantscapes (December 5, 2000. Entomological Society of America Annual Meeting; Montreal, Canada).
- The impact of parasitoids on Japanese beetle populations (November 29, 2000. 2000 North Central Turfgrass Exposition; St. Charles, IL).
- All about grubs-identification, biology, and control (November 30, 2000. 2000 North Central Turfgrass Exposition; St. Charles, IL).
- Thrips control (October 17, 2000. 12th Ornamental Workshop on Disease and Insects; Crossnore, NC).
- Greenhouse insect control (October 11, 2000. Indiana Flower Growers Conference; West Lafayette, IN).
- Strategies to deal with insect and mite pests in greenhouses (September 12, 2000. J & G Smith 5th Annual Buyer's Trade Show; Naperville, IL).
- Orchids galore workshop (September 2, 2000. Luthy Botanical Garden; Peoria, IL).
- Insects and how they affect your life (August 25, 2000. Singles Celebrating Life; Champaign, IL).
- Total thrips management (July 11, 2000. Ohio Florists' Association Short Course; Columbus, OH).
- Pest control solutions: mealybug and scale (July 8, 2000. Ohio Florists' Association Short Course; Columbus, OH).
- Poinsettias: disease and insect management (July 8, 2000. Ohio Florists' Association Short Course; Columbus, OH).
- Up-date on pest control materials (June 20, 2000. 2nd Annual Greenhouse Management Workshop; Naperville, IL).
- Guidelines to implement a biological control program in the greenhouse (June 20, 2000. 2nd Annual Greenhouse Management Workshop; Naperville, IL).
- Understanding insects: good and bad (March 25, 2000. Tri-County Gardening Day; Illinois Central College, Peoria, IL).
- Orchid pest management (March 21, 2000. Central Illinois Orchid Society; Urbana, IL).
- Effects of plant architecture on biological control in ornamental systems (March 27, 2000. North Central Branch Entomological Society of America; Minneapolis, MN).
- Don't let "bugs" bug you: managing insects in the yard and garden (March 15, 2000. Chicago Flower and Garden Show; Navy Pier, Chicago, IL).
- Insect and plant interactions in the landscape (March 1, 2000. Southern Illinois Grounds Maintenance School; Collinsville, IL).
- Fungus gnats and shorefly management strategies (February 19, 2000. Society of American Florists Insect and Disease Management on Ornamentals; San Jose, CA).
- Holistic pest management (February 12, 2000. 12th Annual Midwestern Herb Show; Mount Vernon, IL).
- Safety considerations for the interiorscape (February 10, 2000. Interior Plantscape Workshop; Chicago, IL).
- Integrated pest management for the interiorscape: controlling scale, mealybug, and fungus gnats (February 10, 2000. Interior Plantscape Workshop; Chicago, IL).
- Integrated pest management for the interiorscape: controlling scale, mealybug, and fungus gnats (February 4, 2000. Interior Plantscape Workshop; Perrysburg, OH).
- Resistance management for greenhouse growers: theory and practice (February 2, 2000. Western Region—Spring Primer for Bedding Plant Growers; Monroeville, PA).
- Tried, true, and new pest control products for greenhouses (February 2, 2000. Western Region—Spring Primer for Bedding Plant Growers; Monroeville, PA).
- Integrated pest management for the interiorscape: controlling scale, mealybug, and fungus gnats (February 1, 2000. Interior Plantscape Workshop; Columbus, OH).
- Developments in pest management in greenhouses (January 14, 2000. Mid-American Growers; Granville, IL).
- Biological controls in the greenhouse (January 5, 2000. 26th Southern Illinois Bedding Plant School and Trade Show; Belleville, IL).

- Getting the most from landscape insect control products (December 1, 1999. North Central Turfgrass Exposition; Pheasant Run Resort and ExpoCenter, St. Charles, IL).
- New developments for insect management in greenhouses (November 11, 1999. Northwest Indiana Floriculture Association; Crete, IL).
- Using pesticides for insect control (October 5, 1999. Indiana Flower Growers Conference; West Lafayette, IN).
- Holistic pest management strategies for dealing with bugs (August 19, 1999. Master Gardener Conference; Champaign, IL).
- Whiteflies (July 14, 1999. Ohio Florists' Association Short Course; Columbus, OH).
- Giving fungus gnats the deep six (July 10, 1999. Ohio Florists' Association Short Course; Columbus, OH).
- Insecticides and biocontrols for managing insect pests of perennials (June 18, 1999. Southwest Greenhouse Conference and Trade Show; Greenville, SC).
- Biological pest control methods for the interiorscape (March 12, 1999. Pest Control for Interior Landscapes; Louisville, KY).
- New insect control issues (October 6, 1998. Indiana Flower Growers Annual Conference; West Lafayette, IN).
- What's bugging you? Pest management in the home garden (July 25, 1998. Purdue Horticulture Garden Day; West Lafayette, IN).
- Integrated pest management: a success story (July 11, 1998. Interior Landscape Workshop. Ohio Florists' Association Short Course; Columbus, OH).
- Do not let bugs "bug" you (June 12, 1998. Nurserymen's Exchange Grower's Day XVII; Half Moon Bay, CA).
- Pest control in bedding plants (March 19, 1998. Northwest Indiana Floriculture Association; Lake Village, IN).
- Thrips control in the greenhouse (January 6, 1998. Southern Illinois Bedding Plant School; Belleville, IL).
- Expanding your business-Landscape IPM (January 5, 1998. Purdue Pest Control Conference; West Lafayette, IN).
- Bio-control: use of beneficial insects (November 6, 1997. Michigan Greenhouse Growers Expo; Lansing, MI).
- IPM-how we do we do it? (October 8, 1997. Indiana Flower Growers Annual Conference; Indianapolis, IN).
- Pesticides for greenhouses (June 14, 1997. Southeast Greenhouse Conference and Trade Show; Greenville, SC).
- Insect pests of greenhouse pansies (June 14, 1997. Southeast Greenhouse Conference and Trade Show; Greenville, SC).
- New insecticides (October 2, 1996. Indiana Flower Growers Annual Conference; West Lafayette, IN 1996).
- Insect control in the greenhouse (November 29, 1995. West Central Indiana Flower Growers Association; Crete, IN).
- Greenhouse biological control (November 3, 1995. Biological Control of Insects Extension Conference; West Lafayette, IN).
- Biological control in corn with *Trichogramma* (November 2, 1995. Biological Control of Insects Extension Conference; West Lafayette, IN).
- Controlling thrips (October 10, 1995. Indiana Flower Growers Annual Conference; Indianapolis, IN).
- Integrated pest management in greenhouses (April 10, 1995. Tippecanoe Master Gardeners Association; West Lafayette, IN).
- Greenhouse biological control (January 17, 1995. Biological Control of Insects Extension Conference; West Lafayette, IN).
- Biological control in corn with *Trichogramma* (January 16, 1995. Biological Control of Insects Extension Conference; West Lafayette, IN).

Greenhouse biological control (October 20, 1993. Biological Control of Insects Conference; Madison, WI).
 An entomologist in the greenhouse (October, 4, 1994. Indiana Flower Growers Annual Conference;
 Indianapolis, IN).

Starting an IPM program—the California experience (April 15, 1993. Northwest Indiana Floriculture
 Association; LaPorte, IN).

12. Presentations: Master Gardener Training Sessions—Kansas State University (Manhattan, KS)

Entomology: what's bugging you? (November 16, 2017. Newton, KS).

Pesticide use and safety (November 16, 2017. Newton, KS).

Entomology: what's bugging you? (October 19, 2017. Wichita, KS).

Pesticide use and safety (October 19, 2017. Wichita, KS).

Entomology: what's bugging you? (October 12, 2017. Topeka, KS).

Entomology: what's bugging you? (October 5, 2017. Manhattan, KS).

Pesticide use and safety (October 5, 2017. Manhattan, KS).

Entomology: what's bugging you? (October 3, 2017. Parsons, KS).

Entomology: what's bugging you? (September 26, 2017. Lawrence, KS).

Entomology: what's bugging you? (March 9, 2017. Salina, KS).

Entomology: what's bugging you? (March 8, 2017. Sublette, KS).

Entomology: what's bugging you? (November 15, 2016. Olathe, KS).

Entomology: what's bugging you? (November 15, 2016. Kansas City, KS).

Pesticide use and safety (October 27, 2016. Wichita, KS).

Entomology: what's bugging you? (October 27, 2016. Wichita, KS).

Entomology: what's bugging you? (October 20, 2016. Hutchinson, KS).

Pesticide use and safety (October 13, 2016. Manhattan, KS).

Entomology: what's bugging you? (October 13, 2016. Manhattan, KS).

Entomology: what's bugging you? (September 22, 2016. Topeka, KS).

Entomology: what's bugging you? (September 20, 2016. Lawrence, KS).

Entomology: what's bugging you? (March 10, 2016. Salina, KS).

Entomology: what's bugging you? (March 8, 2016. Atwood, KS).

Entomology: what's bugging you? (November 12, 2015. Newton, KS).

Entomology: what's bugging you? (November 5, 2015. Wichita, KS).

Pesticide use and safety (October 2, 2015. Manhattan, KS).

Entomology: what's bugging you? (October 2, 2015. Manhattan, KS).

Entomology: what's bugging you? (September 29, 2015. Olathe, KS).

Entomology: what's bugging you? (September 24, 2015. Topeka, KS).

Entomology: what's bugging you? (September 24, 2015. Lawrence, KS).

Entomology: what's bugging you? (November 20, 2014. Wichita, KS).

Pesticide use and safety (November 13, 2014. Newton, KS).

Entomology: what's bugging you? (November 13, 2014. Newton, KS).

Entomology: what's bugging you? (November 11, 2014. Kansas City, KS).

Entomology: what's bugging you? (November 11, 2014. Olathe, KS).

Pesticide use and safety (November 7, 2014. Manhattan, KS).

Entomology: what's bugging you? (November 7, 2014. Manhattan, KS).

Pesticide use and safety (November 1, 2013. Manhattan, KS).

Entomology: what's bugging you? (November 1, 2013. Manhattan, KS).

Pesticide use and safety (October 31, 2013. Newton, KS).

Entomology: what's bugging you? (October 31, 2013. Newton, KS).

Entomology: what's bugging you? (October 29, 2013. Olathe, KS).

Entomology: what's bugging you? (October 29, 2013. Kansas City, KS).

Entomology: what's bugging you? (October 17, 2013. Wichita, KS).

Entomology: what's bugging you? (October 10, 2013. Topeka, KS).
Entomology: what's bugging you? (September 17, 2013. Lawrence, KS).
Entomology: what's bugging you? (November 6, 2012. Olathe, KS).
Entomology: what's bugging you? (November 6, 2012. Leavenworth, KS).
Pesticide use and safety (November 1, 2012. Newton, KS).
Entomology: what's bugging you? (November 1, 2012. Newton, KS).
Pesticide use and safety (October 26, 2012. Manhattan, KS).
Entomology: what's bugging you? (October 26, 2012. Manhattan, KS).
Entomology: what's bugging you? (October 18, 2012. Wichita, KS).
Entomology: what's bugging you? (October 4, 2012. Topeka, KS).
Entomology: what's bugging you? (September 18, 2012. Lawrence, KS).
Pesticide use and safety (November 17, 2011. Wichita, KS).
Entomology: what's bugging you? (November 17, 2011. Wichita, KS).
Pesticide use and safety (November 3, 2011. Newton, KS).
Entomology: what's bugging you? (November 3, 2011. Newton, KS).
Pesticide use and safety (October 28, 2011. Manhattan, KS).
Entomology: what's bugging you? (October 25, 2011. Kansas City, KS).
Entomology: what's bugging you? (October 25, 2011. Olathe, KS).
Entomology: what's bugging you? (October 7, 2011. Manhattan, KS).
Entomology: what's bugging you? (September 22, 2011. Topeka, KS).
Entomology: what's bugging you? (September 6, 2011. Lawrence, KS).
Entomology: what's bugging you? (November 18, 2010. Wichita, KS).
Entomology: what's bugging you? (November 18, 2010. Newton, KS).
Entomology: what's bugging you? (October 26, 2010. Olathe, KS).
Entomology: what's bugging you? (October 26, 2010. Kansas City, KS).
Entomology: what's bugging you? (October 5, 2010. Topeka, KS).
Entomology: what's bugging you? (September 14, 2010. Lawrence, KS).
Entomology: what's bugging you? (September 10, 2010. Manhattan, KS).
Entomology: what's bugging you? (March 18, 2010. Salina, KS).
Entomology: what's bugging you? (March 17, 2010. Garden City, KS).
Entomology: what's bugging you? (March 16, 2010. Colby, KS).
Entomology: what's bugging you? (November 6, 2009. Manhattan, KS).
Entomology: what's bugging you? (November 5, 2009. Wichita, KS).
Entomology: what's bugging you? (November 3, 2009. Olathe, KS).
Entomology: what's bugging you? (November 3, 2009. Leavenworth, KS).
Entomology: what's bugging you? (October 15, 2009. Hutchinson, KS).
Entomology: what's bugging you? (October 1, 2009. Topeka, KS).
Entomology: what's bugging you? (September 8, 2009. Lawrence, KS).
Entomology: what's bugging you? (November 20, 2008. Wichita, KS).
Entomology: what's bugging you? (November 11, 2008. Leavenworth, KS).
Entomology: what's bugging you? (November 11, 2008. Olathe, KS).
Entomology: what's bugging you? (October 30, 2008. Hutchinson, KS).
Entomology: what's bugging you? (September 25, 2008. Topeka, KS).
Entomology: what's bugging you? (September 12, 2008. Manhattan, KS).
Entomology: what's bugging you? (April 1, 2008. Lawrence, KS).
Entomology: what's bugging you? (November 15, 2007. Newton, KS).
Entomology: what's bugging you? (October 23, 2007. Topeka, KS).
Entomology: what's bugging you? (October 11, 2007. Wichita, KS).
Entomology: what's bugging you? (October 9, 2007. Kansas City, KS).

Entomology: what's bugging you? (October 9, 2007. Olathe, KS).

13. Presentations: Master Gardener Training Sessions—University of Illinois (Champaign-Urbana, IL)

Insecticides and miticides (October 24 and 26, 2006). Delivered via Latitude Bridge (or telnet). University of Illinois; Champaign-Urbana, IL.

Entomology: what's bugging you? (March 23, 2006. Macon County Extension Office; Decatur, IL).

Entomology: what's bugging you? (March 16, 2004. Knox County Extension Office; Galesburg, IL).

Entomology: what's bugging you? (March 15, 2004. Adams/Brown County Extension Office; Quincy, IL).

Entomology: what's bugging you? (March 8, 2005. Madison Extension Unit; Edwardsville, IL).

Entomology: what's bugging you? (March 9, 2004. Champaign County Extension Office; Champaign, IL).

Entomology: what's bugging you? (March 5, 2003. McClean County Extension Office; Bloomington, IL).

Entomology: what's bugging you? (March 12, 2002. Champaign County Extension Office; Champaign, IL).

Entomology: what's bugging you? (February 1, 2002. Rock Island County Extension Office; Rock Island, IL).

Entomology: what's bugging you? (March 7, 2001. Champaign County Extension Office; Champaign, IL).

Entomology: what's bugging you? (January 29, 2001. Peoria County Extension Office; Peoria, IL).

Entomology: what's bugging you? (October 24, 2000. Edgar County Extension Unit; Paris, IL).

Entomology: what's bugging you? (March 30, 2000. Jefferson County Extension Unit; Mount Vernon, IL).

Entomology: what's bugging you? (March 8, 2000. Effingham Extension Center; Effingham, IL).

Insect pests and their control (February 29, 2000. Champaign County Extension Unit; Champaign, IL).

Entomology (January 25, 2000. Hancock County Extension Unit; Carthage, IL).

14. Presentations: Advanced Master Gardener Training Sessions—Kansas State University (Manhattan, KS)

Is there such a thing as an "organic" pesticide? (October 7, 2017. Manhattan, KS).

Integrated pest management: what does it mean? (August 6, 2014. Advanced Master Gardener Training Program; Paola, KS).

Issues associated with invasive species and the impact of systemic insecticides on bees (June 19, 2014. Advanced Training for Master Gardeners; Olathe, KS).

Cultural and alternative methods of pest management (October 19, 2013. Advanced Master Gardener Training Program; Lawrence, KS).

"Getting rid of the welcome mat:" issues relating to invasive insects (October 4, 2013. Advanced Master Gardener Training; Manhattan, KS).

Dealing with arthropod pests "organically" (September 21, 2012. Advanced Master Gardener Training; Manhattan, KS).

"The hot zone:" climate change and insects (September 21, 2012. Advanced Master Gardener Training; Manhattan, KS).

Understanding pest-natural enemy interactions in landscapes and gardens (August 30, 2012. Advanced Master Gardener Training Session; Paola, KS).

Thursday evening presentation at the movies (September 30, 2010. Manhattan, KS).

Systemic insecticides and how they kill insect pests, and dealing with household insect and mite pests (July 1, 2010. Paola, KS).

Understanding how natural enemies impact insect and mite pests in landscapes and gardens (July 15, 2010. Olathe, KS).

The good, the bad and the ugly (October 10, 2009. Advanced Master Gardener Training Conference; Manhattan, KS).

Beneficial insects: their role in regulating pest populations (October 10, 2009. Advanced Master Gardener Training Conference; Manhattan, KS).

Biological control of insect pests (November 4, 2008. Topeka, KS).

Biological control of arthropod pests (July 17, 2008. Olathe, KS).

- Bugs galore: insect pests of ornamental plants and how to deal with them (October 18, 2007. Advanced Master Gardener Training; Olathe, KS).
- Biological control of insects (September 29, 2007. Advanced Master Gardener Training Conference; Manhattan, KS).
- How insecticides and miticides work (September 29, 2007. Advanced Master Gardener Training Conference; Manhattan, KS).
- Arachnophobia—all about spiders (September 30, 2006. Advanced Master Gardener Training Conference; Manhattan, KS).
- Bugs galore—insect pests of ornamental plants (September 30, 2006. Advanced Master Gardener Training Conference; Manhattan, KS).
- 15. Presentations: Commercial Pesticide Applicator Training Programs—Kansas State University (Manhattan, KS) and University of Illinois (Champaign-Urbana, IL)**
- Pesticides and pollinators (November 15, 2017. Commercial Pesticide Applicators Training Program Categories: 2, 3A, 3B, and 3C [ornamentals and turfgrass]; Salina, KS).
- Update & review of ornamental & turfgrass pests (November 2, 2016. Commercial Pesticide Applicator Recertification Workshop—3A, 3B, and Registered Technician Credits; Wichita, KS).
- Pollinators and pesticides (November 3, 2016. Commercial Pesticide Applicators Training—2, 3A, 3B, and 3C; Salina, KS).
- Common insects of ornamentals & turf (November 4, 2015. Commercial Pesticide Applicator Recertification Workshop—3A, 3B, and Registered Technician Credits; Wichita, KS).
- Management of ornamental and turfgrass pests (November 3, 2015. Commercial Pesticide Applicators Training—3A, 3B, and 3C; Salina, KS).
- Systemic pesticides (November 3, 2015. Commercial Pesticide Applicators Training—3A, 3B, and 3C; Salina, KS).
- Management options for insect and mite pests of turfgrass (October 28, 2015. Pesticide Applicator Recertification Training For 3B—Turfgrass; Shawnee, KS).
- Understanding systemic pesticides (October 19, 2015. Pesticide Applicator Recertification Training For Category 3A—Ornamentals and Trees; Shawnee, KS).
- Common insects of ornamentals & turf—3A, 3B, and 3C and registered technicians (November 5, 2014. Commercial Pesticide Applicator Recertification Workshop; Wichita, KS).
- Common insects of ornamentals & turf—3A, 3B, and 3C (November 6, 2013. Commercial Pesticide Applicator Recertification Workshop; Wichita, KS).
- Management of insects and mites on ornamentals—2, 3A, and 3C (October 30, 2013. Commercial Pesticide Applicator Training Program; Manhattan, KS).
- Understanding systemic pesticides (September 19, 2013. Pesticide Applicator Recertification Training for Category 3A: Ornamentals and Trees; Shawnee, KS).
- Common insects of ornamentals & turf—3A, 3B, and 3C (November 7, 2012. Commercial Pesticide Applicator Recertification Workshop; Wichita, KS).
- Ornamental insect and mite pest management—2, 3A, and 3C (October 30, 2012. Commercial Pesticide Applicator Training Program; Hutchinson, KS).
- Pesticide mixtures for turf and ornamentals—2, 3A, 3B, and 3C (October 30, 2012. Commercial Pesticide Applicator Training Program; Hutchinson, KS).
- Common insects of ornamentals and turf—2, 3A, 3B, and 3C (November 9, 2011. Wichita, KS).
- Insect and mite pest management of ornamentals and turf—2, 3A, 3B, and 3C (November 2, 2011. McPherson, KS).
- Management considerations for insect and mite pests of turfgrass (October 12, 2011. Pesticide Applicator Recertification Training for Category 3B—Turfgrass; Shawnee, KS).
- Ornamental insect and mite pest management (November 10, 2010. Great Bend, KS).
- Management of insects & mites on ornamentals (November 12, 2009. Manhattan, KS).

- Management of insects & mites on ornamentals (November 10, 2009. Hays, KS).
- Calibration & calculation methods for profitability (November 4, 2009. Pesticide Recertification Workshop for 3A, 3B, 3C and Registered Technicians; Wichita, KS).
- Scale insects of trees and interior ornamentals (November 4, 2009. Pesticide Recertification Workshop 3A, 3B, 3C and Registered Technicians; Wichita, KS).
- Management of insect & mite pests in the landscape (October 14, 2009. Pesticide Applicator Recertification Training for Category 3A—Ornamentals and Tree; Olathe, KS).
- Insects of turf and ornamentals (November 12, 2008. Pesticide Recertification Workshop—3A, 3B, 3C & Registered Technicians; Wichita, KS).
- Dealing with arthropod pests on ornamentals (October 7, 2008. Topeka, KS).
- Dealing with arthropod pests on ornamentals (October 9, 2008. Garden City, KS).
- Ornamental arthropod pests (October 25, 2007. Emporia, KS).
- Turfgrass insects (February 17, 2006. Urbana, IL).
- Integrated pest management, ornamental and turfgrass insects, and interiorscape insects (April 14-15, 2004. Chicago, IL).
- Integrated pest management, ornamental and turfgrass insects, and interiorscape insects (April 16-17, 2003. Chicago, IL).
- Integrated pest management, ornamental and turfgrass insects, and interiorscape insects (April 16-17, 2002. Chicago, IL).
- Integrated pest management, and ornamental and turfgrass insects (March 5-6, 2002. Mundelein, IL).
- Integrated pest management, and ornamental and turfgrass insects (January 28-29, 2002. Springfield, IL).
- Integrated pest management, and ornamental and turfgrass insects (March 22-23, 2001. Crystal Lake, IL).
- Integrated pest management, and ornamental and turfgrass insects (February 15-16, 2001. Matteson, IL).
- General standards, personal protection, integrated pest management, and ornamental and turfgrass insects (January 25-26, 2001. Mount Vernon, IL).

16. Presentations: Entomology and Plant Pathology Agent Training—Kansas State University (Manhattan, KS)

- Up-date on extension and research (February 22, 2017. Salina, KS).
- Up-date on extension and research (March 14, 2017. Emporia, KS).
- Up-date on extension and research (March 1, 2016. Scott City, KS).
- Up-date on extension and research (February 24, 2016. Emporia, KS).
- Systemic insecticides and pollinators (March 5, 2015. Garden City, KS).
- Systemic insecticides and pollinators (February 10, 2015. Manhattan, KS).
- Up-date on extension and research entomology (March 4, 2014. Chanute, KS).
- Up-date on extension and research entomology (February 19, 2014. Hill City, KS).
- Up-date on extension and research entomology (April 8, 2013. Manhattan, KS).
- Up-date on extension and research entomology (March 5, 2013. Chanute, KS).
- Up-date on extension and research entomology (February 15, 2012. Garden City, KS).
- Up-date on extension and research entomology (February 14, 2012. Hill City, KS).
- Up-date on extension and research entomology (March 3, 2010. Garden City, KS).
- Up-date on extension and research entomology (March 2, 2010. Hill City, KS).
- Up-date on extension and research entomology (March 9, 2010. Garden City, KS).
- Up-date on extension and research entomology (March 8, 2010. Hill City, KS).
- Up-date on extension and research entomology (March 13, 2009. Manhattan, KS).
- Up-date on extension and research entomology (February 17, 2009. Chanute, KS).
- Plant-essential oils: Are they viable pest control materials? (March 12, 2008. Hill City, KS).
- Plant-essential oils: Are they viable pest control materials? (March 13, 2008. Garden City, KS).

17. Presentations: Retail Garden Store Personnel Training—University of Illinois (Champaign-Urbana, IL)

Insect identification (February 27, 2003. Hillsboro, IL).
 Insect identification (February 13, 2003. Rock Island, IL).
 Insect identification (February 25, 2002. Rockford, IL).
 Insect identification (February 8, 2002. Decatur, IL).
 Insect identification (February 7, 2002. Quincy, IL).
 Insect identification (April 4, 2001. Champaign, IL).
 Insect identification (March 14, 2001. Springfield, IL).
 Insect identification (March 12, 2001. Bloomington, IL).

18. e-GRO University Presentations (Electronic Grower Resources Online)

Insect and mite pest identification and damage symptoms; October 2012.
 How to scout for insects and mite pests; October 2012.
 How to use biological controls effectively; October 2012.
 How to use pesticides effectively; October 2012.
 Sanitation; October 2012.

19. Webinar Presentations

Insect control strategies for Greenhouse Growers. Greenhouse Product News Plant Health Management Webinars; Sponsored by BASF. October 4, 2016 [<http://cc.readytalk.com/play?id=69gl2s>].
 Insect and mite pests. Soil Health BootCamp and Applications to Vegetable Production Webinar Series. March 26, 2016 [www.soilhealthbootcamp.com/webinars/insect-pests].
 Pollinators and beneficials. Soil Health BootCamp and Applications to Vegetable Production Webinar Series. March 25, 2016 [www.soilhealthbootcamp.com/webinars/pollinators-and-beneficials].
 Rotation, rotation, rotation—tips for resistance management. Sponsored by Dow AgroSciences. September 23, 2015.
 Neonics & alternatives (encore presentation). Ball Publishing Webinar. March 10, 2015.
 Neonics: should you keep them or drop them? Ball Publishing Webinar. March 3, 2015.
 Don't get tripped by thrips: effective thrips management. 2nd International e-GRO Webinar Conference. Ready, Set, Let's Grow: Spring Annual Production Strategies. January 16, 2015. Presented by Proven Winners.
 Troubleshooting poinsettia problems. September 18, 2013. e-GRO University; collaboration between North Carolina State University, University of New Hampshire, and Kansas State University.
 How to efficiently and effectively review a journal manuscript. April 25, 2013. Entomological Society of America; Annapolis, MD.
 Everything you wanted to know about mites...but were afraid to ask! April 18, 2011. Integrated Horticultural Alliance Education Initiative Monthly Webinar: Scotts Professional Products; Marysville, OH.
 Whiteflies and spider mites. May 20, 2010. Integrated Horticultural Alliance Education Initiative Monthly Webinar: Scotts Professional Products; Marysville, OH.

20. Podcast Presentations

Resistance elimination. May 16, 2016. Greenhouse Management (Host: Cassie Neiden).
 Fungus gnats. March 29, 2016. Nursery Management (Host: Matt McClellan).
 Mealybugs. December 2, 2015. Greenhouse Management (Host: Matt McClellan).
 Whiteflies. October 13, 2015. Greenhouse Management (Host: Chris Mosby).
 Thrips. September 23, 2015. Greenhouse Management (Host: Chris Mosby).
 Mites. August 12, 2015. Greenhouse Management (Host: Chris Mosby).
 Aphids. June 6, 2015. Greenhouse Management (Host: Chris Mosby).
 Case study: migration of pests into greenhouse. November 5, 2013. FloriCAST Episode 5 (Greenhouse Grower; Willoughby, OH).

- Case study: leaching out systemic insecticide. August 6, 2013. FloriCAST Episode 5 (Greenhouse Grower; Willoughby, OH).
- Case study: herbicide injury. May 7, 2013. FloriCAST Episode 5 (Greenhouse Grower; Willoughby, OH).
- Pesticide shelf-life. January 30, 2013. FloriCAST Episode 5 (Greenhouse Grower; Willoughby, OH).
- Tank-mixing problem. August 15, 2012. FloriCAST Episode 4 (Greenhouse Grower; Willoughby, OH).
- Using the wrong biological control agent for aphids. August 22, 2012. FloriCAST Episode 4 (Greenhouse Grower; Willoughby, OH).
- Improper pH of spray solution. June 3, 2012. FloriCAST Episode 4 (Greenhouse Grower; Willoughby, OH).
- Improper rotation of pesticides. February 14, 2012. FloriCAST Episode 4 (Greenhouse Grower; Willoughby, OH).
- Surfactants. February 8, 2012. FloriCAST Episode 4 (Greenhouse Grower; Willoughby, OH).
- Biological control of aphids. November 16, 2011. FloriCAST Episode 3 (Greenhouse Grower; Willoughby, OH).
- Case of the late-season whitefly problem (co-author K. A. Williams). September 16, 2011. FloriCAST Episode 3 (Greenhouse Grower; Willoughby, OH).
- Biological control of whiteflies. September 14, 2011. FloriCAST Episode 3 (Greenhouse Grower; Willoughby, OH).
- Biological control of fungus gnats. August 24, 2011. FloriCAST Episode 3 (Greenhouse Grower; Willoughby, OH).
- Biological control of western flower thrips. July 6, 2011. FloriCAST Episode 3 (Greenhouse Grower; Willoughby, OH).
- Weed management in greenhouses. May 18, 2011. FloriCAST Episode 3 (Greenhouse Grower; Willoughby, OH).
- Pesticide mixtures. March 23, 2011. FloriCAST Episode 3 (Greenhouse Grower; Willoughby, OH).
- Systemic insecticides. February 2, 2011. FloriCAST Episode 3 (Greenhouse Grower; Willoughby, OH).
- How to identify insects on yellow sticky cards. January 5, 2011. FloriCAST Episode 3 (Greenhouse Grower; Willoughby, OH).
- Biological control. November 24, 2010. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Resistance management. October 20, 2010. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Beneficial or insect-killing nematodes and fungi. September 22, 2010. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- What impacts the performance of pest control materials. September 1, 2010. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Caterpillars. August 25, 2010. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Mealybugs. May 26, 2010. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Diagnosing insect and mite pest problems. March 31, 2010. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Eriophyid mites. March 3, 2010. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Leafminers. February 10, 2010. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Bulb mites. January 20, 2010. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Mode of action. November 18, 2009. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Insect growth regulators. October 21, 2009. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Whiteflies. September 23, 2009. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Fungus gnats. August 19, 2009. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Broad mite. April 29, 2009. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Western flower thrips on geraniums. March 25, 2009. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
- Twospotted spider mite on geraniums. March 18, 2009. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).

Shore flies. February 11, 2009. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
 Aphids. January 28, 2009. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
 Sanitation. December 2008. FloriCAST Episode 2 (Greenhouse Grower; Willoughby, OH).
 Whiteflies. October 2008. FloriCAST Episode 1 (Greenhouse Grower; Willoughby, OH).

21. Educational Videos

How to correctly diagnosis insect and mite pest problems (e-GRO Instructional Videos; Taped on April 28, 2016. <http://www.youtube.com/watch?v=gPrOf3wyfyk>).
 Understanding pesticide labels (e-GRO Instructional Videos; Taped on April 28, 2016. <https://www.youtube.com/watch?v=pbGNGmkgeuQ>).
 Western flower thrips: biology and management (e-GRO Instructional Videos; Taped on April 28, 2016. <https://www.youtube.com/watch?v=9FubM8r7YNE>).
 How to effectively scout for pest problems (e-GRO Instructional Videos; Taped on April 28, 2015. <https://youtu.be/hZCt1kTVmiA>).
 How to implement a biological control program (e-GRO Instructional Videos; Taped on April 28, 2015. https://youtu.be/s8lCs0W_M1U).
 Ways to maximize pesticide performance (e-GRO Instructional Videos; Taped on April 28, 2015. <https://youtu.be/wG4ttlldvJM>).

22. On-Line Educational Course

Biological control for greenhouse growers 2016 [Instructors: Heidi Lindberg (Wollaeger) (Michigan State University Extension) and Raymond Cloyd (Kansas State University Extension)] (<http://events.anr.msu.edu/BiologicalControlforGreenhouseGrowers/>).

23. Pest Detector Workshops—Kansas State University (Manhattan, KS) and Kansas Department of Agriculture (Topeka, KS).

Emerald ash borer (March 8, 2012. Topeka, KS).
 Emerald ash borer (November 19, 2010. Hays, KS).
 Emerald ash borer (November 12, 2010. Emporia, KS).
 Emerald ash borer (May 11, 2010. Wichita, KS).

24. Tree Health Bootcamp Workshops—Kansas State University (Manhattan, KS)

Diagnosing common insect and mite pest problems of trees and shrubs (August 23, 2013. Parsons, KS).
 Diagnosing common insect and mite pest problems of trees and shrubs (July 31, 2013. Wichita, KS).
 Diagnosing common insect and mite pest problems of trees and shrubs (June 26, 2013. Manhattan, KS).
 Diagnosing common insect and mite pest problems of trees and shrubs (May 14, 2013. Hays, KS).

25. Soil Health Bootcamp Workshops—Kansas State University (Manhattan, KS)

Introduction of arthropods (September 27, 2017. Fort Scott, KS).
 Insects/diseases—hands-on scouting/sampling (May 25, 2017. Hays, KS).
 Biocontrol project; and insects—scouting/sampling (May 26, 2016. Courtland, KS).
 Insect pests and pollinators; and insects—hands-on scouting/sampling (May 11, 2016. Olathe, KS).

26. Media Releases (Radio, Phone, and Television Interviews)

Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. December 11, 2017.
 Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. November 20, 2017.
 Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. October 30, 2017.
 Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. September 18, 2017.
 Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. September 11, 2017.

- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. August 28, 2017.
- Radio interview (“Bug Guy”): Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. August 12, 2017.
- Radio interview (“Bug Guy”): Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. July 29, 2017.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. July 19, 2017.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. June 26, 2017.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. June 19, 2017.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. May 22, 2017.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. May 12, 2017.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. April 24, 2017.
- Radio interview (“Bug Guy”): Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. April 15, 2017.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. March 27, 2017.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. March 6, 2017.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. December 5, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. November 28, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. November 1, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. September 19, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. August 30, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. June 21, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. June 7, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. May 31, 2016.
- Radio interview (“Bug Guy”): Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. May 21, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. May 17, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. April 26, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. March 29, 2016.

- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. March 15, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. February 3, 2016.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. November 24, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. November 10, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. September 28, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. September 8, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. August 18, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. August 11, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. June 29, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. June 2, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. May 26, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. May 4, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. April 20, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. March 30, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. March 9, 2015.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. March 2, 2015.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. November 7, 2014.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. May 23, 2014.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. July 29, 2014.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. June 17, 2014.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. May 24, 2014.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. May 13, 2014.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. April 26, 2014.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. October 15, 2013.

- Phone interview: Future of pest controls (Carol Miller; Editor, *Today's Garden Center*). September 5, 2013.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. August 7, 2013.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. July 27, 2013.
- Phone interview: Chiggers (Bruce Giles; *Lawrence Journal World*). July 26, 2013.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. July 10, 2013.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. June 15, 2013.
- Phone interview: Arborist: Plant trees to help offset thinning of Wichita's canopy (Annie Calovich; *The Wichita Eagle*). March 19, 2013.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. August 14, 2012.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. July 21, 2012.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KKSU 580 AM, Eric Atkinson (Extension Radio Specialist)]. July 10, 2012.
- Radio interview: Rose Rosette Disease (Ian Cummins; *Kansas City Star*, Kansas City, MO). May 29, 2012.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. May 19, 2012.
- Radio interview: General Insects (Chris Frank; KAKE-TV Channel, Wichita, KS), April 30, 2012.
- Radio interview: General Insects (Gene Countryman; KNSS 1330, Wichita, KS), April 29, 2012.
- Radio interview: Update on Insects [Agriculture Today (K-State Network—Horticulture Segment) KFRM 550 AM/KLOE 790 AM, Eric Atkinson (Extension Radio Specialist)]. November 22, 2011.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. September 17, 2011.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. April 2, 2011.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. August 21, 2010.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. April 17, 2010.
- Radio interview: Thousand Cankers (KSN News 27, Topeka, KS). August 2, 2010.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. June 13, 2009.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. October 31, 2008.
- Radio interview: Update on Insects [KMAN 1350 AM, Nancy Moore (Blueville Nursery; Manhattan, KS)]. January 19, 2008.
- Radio interview: Plant Protection (AM Newstalk 1360: Jane Nugent, Pittsburgh, PA; September 1, 2007).
- Radio interview: Update on Insects (KFRM and KGGF: Jeff Wickman, Manhattan, KS; August 27, 2007).
- Radio interview: Integrated Pest Management (WFPL 89.3 FM: Louisville's NPR Station, Home Grown; June 11, 2005).
- Radio interview: Integrated Pest Management (KSEV 700: Livable Garden, Houston, TX; May 21, 2005).
- Radio interview: Update on Insect Pests and Integrated Pest Management (WGN: Chicago, IL; April 23, 2005).
- Radio interview: Integrated Pest Management (KSCO: Santa Cruz, CA; March 18, 2005).

Television interview: Update on Insect Pests (WCIA Morning Show: Champaign, IL; July 7, 2005).

27. Emails and Phone Calls

January 1 through December 31, 2017=513 (these are the ones that were recorded).

January 1 through December 31, 2016=447 (these are the ones that were recorded).

January 1 through December 31, 2015=421 (these are the ones that were recorded).

January 1 through December 31, 2014=317 (these are the ones that were recorded).

January 1 through December 31, 2013=423 (these are the ones that were recorded).

January 1 through December 31, 2012=478 (these are the ones that were recorded).

January 1 through December 31, 2011=420 (these are the ones that were recorded).

January 1 through December 31, 2010=364 (these are the ones that were recorded).

RESEARCH

1. Publications: Scientific Refereed and Extension-Related Peer-Reviewed Articles

Herrick, N. J., and R. A. Cloyd. 2017. Effects of growing medium type and moisture level on predation by adult rove beetle, *Dalotia coriaria* (Coleoptera: Staphylinidae), on fungus gnat, *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae), larvae under laboratory and greenhouse conditions. *HortScience* 52: 736-741.

Herrick, N. J., and R. A. Cloyd. 2017. Effect of systemic insecticides on the citrus mealybug (Hemiptera: Pseudococcidae) feeding on coleus. *J. Entomol. Sci.* 52: 104-118.

Cloyd, R. A., and N. J. Herrick. 2017. Ecology and role of the rove beetle, *Dalotia coriaria*, and insidious flower bug, *Orius insidiosus*, in greenhouse biological control programs. *Adv. Entomol.* 5: 115-126.

Herrick, N. J., and R. A. Cloyd. 2017. Direct and indirect effects of pesticides on the insidious flower bug (Hemiptera: Anthocoridae) under laboratory conditions. *J. Econ. Entomol.* 110: 931-940.

Cloyd, R. A. 2016. Western flower thrips (Thysanoptera: Thripidae) and insecticide resistance: an overview and strategies to mitigate insecticide resistance development. *J. Entomol. Sci.* 51: 257-273.

Kivett, J. M., R. A. Cloyd, and N. M. Bello. 2016. Evaluation of entomopathogenic fungi against the western flower thrips (Thysanoptera: Thripidae) under laboratory conditions. *J. Entomol. Sci.* 51: 274-291.

Herrick, N. J., and R. A. Cloyd. 2016. Western flower thrips, *Frankliniella occidentalis* (Thysanoptera: Thripidae): evaluation of potential attraction to vanilla extract under laboratory and greenhouse conditions. *HortScience* 51: 525-529.

Cloyd, R. A. 2015. Western flower thrips management in greenhouse production systems in the 21st century: alternative strategies need be considered. *Acta Hort.* 1104: 381-394.

Everman, E. R., R. A. Cloyd, C. Copland, and T. J. Morgan. 2015. First report of spotted wing drosophila, *Drosophila suzukii* Matsumura (Diptera: Drosophilidae) in Kansas. *J. Kansas Entomol. Soc.* 88: 128-133.

Echegaray, E. A., R. A. Cloyd, and J. R. Nechols. 2015. Rove beetle (Coleoptera: Staphylinidae) predation on *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae). *J. Entomol. Sci.* 50: 225-237.

Kivett, J. M., R. A. Cloyd, and N. M. Bello. 2015. Insecticide rotation programs with entomopathogenic organisms for suppression of western flower thrips (Thysanoptera: Thripidae) adult populations under greenhouse conditions. *J. Econ. Entomol.* 108: 1936-1946.

Cloyd, R. A. 2015. Ecology of fungus gnats (*Bradysia* spp.) in greenhouse production systems associated with disease-interactions and alternative management strategies. *Insects* 6: 325-332.

Cloyd, R. A., and A. L. Raudenbush. 2014. Efficacy of binary pesticide mixtures against western flower thrips. *HortTechnology* 24(4): 449-456.

Raudenbush, A. L., R. A. Cloyd, and E. R. Echegaray. 2014. Effect of a physical barrier on adult emergence and egg survival associated with the fungus gnat, *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae), under laboratory conditions. *HortScience* 49(7): 905-910.

- Cloyd, R. A. Winter 2013. Secrets of the “big bugs” special effects in 1950s science fiction movies. *Amer. Entomol.* 59(4): 203-207.
- Hogendorp, B. K., and R. A. Cloyd. 2013. Effect of potassium bicarbonate (MilStop[®]) and insecticides on the citrus mealybug, *Planococcus citri* (Risso), and the natural enemies *Leptomastix dactylopii* (Howard) and *Cryptolaemus montrouzieri* (Mulsant). *HortScience* 48(12): 1513-1517.
- Echegaray, E. R., and R. A. Cloyd. 2013. Life history characteristics of the rove beetle, *Dalotia coriaria* (Coleoptera: Staphylinidae) under laboratory conditions. *J. Kansas Entomol. Soc.* 86(2): 145-154.
- Willmott, A. L., R. A. Cloyd, and K. Y. Zhu. 2013. Efficacy of pesticide mixtures against the western flower thrips (Thysanoptera: Thripidae) under laboratory and greenhouse conditions. *J. Econ. Entomol.* 106(1): 247-256.
- Echegaray, E. R., and R. A. Cloyd. 2012. Effects of reduced-risk pesticides and plant growth regulators on rove beetle (Coleoptera: Staphylinidae) adults. *J. Econ. Entomol.* 105(6): 2097-2106.
- Hogendorp, B. K., R. A. Cloyd, and J. M. Swiader. 2012. Determination of silicon concentration in some horticultural plants. *HortScience* 47(11): 1593-1595.
- Johnson, W. A., R. A. Cloyd, J. R. Nechols, K. A. Williams, N. O. Nelson, D. Rotenberg, and M. M. Kennelly. 2012. Effect of nitrogen source on pac choi (*Brassica rapa* L.) chemistry and interactions with the diamondback moth (*Plutella xylostella* L.). *HortScience* 47(10): 1457-1465.
- Johnson, W. A., J. R. Nechols, R. A. Cloyd, D. Rotenberg, and M. M. Kennelly. 2012. Effect of light intensity on *Brassica rapa* chemistry and *Plutella xylostella* (Lepidoptera: Plutellidae) life history traits. *J. Entomol. Sci.* 47(4): 327-349.
- Cloyd, R. A., and J. D. Gillespie. 2012. Effect of sugar-based compounds in enhancing the efficacy of insecticides against the western flower thrips. *HortTechnology* 22(2): 177-184.
- Cloyd, R. A., K. A. Williams, F. J. Byrne, and K. E. Kemp. 2012. Interactions of light intensity, insecticide concentration, and time on the efficacy of systemic insecticides in suppressing populations of the sweetpotato whitefly (Hemiptera: Aleyrodidae) and the citrus mealybug (Hemiptera: Pseudococcidae). *J. Econ. Entomol.* 105(2): 505-517.
- Gontijo, L. M., J. R. Nechols, D. C. Margolies, and R. A. Cloyd. 2012. Plant architecture and prey distribution influence foraging behavior of the predatory mite *Phytoseiulus persimilis* (Acari: Phytoseiidae). *Exp. Appl. Acarol.* 56: 23-32.
- Cloyd, R. A., J. A. Bethke, and R. S. Cowles. 2011. Systemic insecticides and their use in ornamental plant systems. *Floriculture Ornamental Biotech.* 5(1): 1-9.
- Cloyd, R. A., K. A. Marley, R. A. Larson, A. Dickinson, and B. Arieli. 2011. Repellency of naturally occurring volatile alcohols to fungus gnat *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae) adults under laboratory conditions. *J. Econ. Entomol.* 104(5): 1633-1639.
- Fry, J. D., and R. A. Cloyd. 2011. Zoysiagrass genotypes differ in susceptibility to the bluegrass billbug, *Sphenophorus parvulus*. *HortScience* 46(9): 1314-1316.
- Cloyd, R. A., and J. A. Bethke. 2011. Impact of neonicotinoid insecticides on natural enemies in greenhouse and interiorscape environments. *Pest Manag. Sci.* 67: 3-9.
- Hogendorp, B. K., J. M. Swiader, and R. A. Cloyd. 2011. Plant alkaline fusion technique followed by colorimetric procedure for the detection and quantification of total silicon in ornamental plants. *Comm. Soil Sci. Plant Analysis* 42: 75-92.
- Cloyd, R. A., K. A. Marley, R. A. Larson, and B. Arieli. 2010. Bounce[®] fabric softener dryer sheets repel fungus gnat, *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae), adults. *HortScience* 45(12): 1830-1833.
- Cloyd, R. A. 2010. Pesticide mixtures and rotations: Are these viable resistance mitigating strategies? *Pest Technol.* 4(1): 14-18.
- Gontijo, L. M., D. C. Margolies, J. R. Nechols, and R. A. Cloyd. 2010. Plant architecture, prey distribution and predator release strategy interact to affect foraging efficiency of the predatory mite *Phytoseiulus persimilis* (Acari: Phytoseiidae) on cucumber. *Biol. Control* 53: 136-141.

- Cloyd, R. A., C. L. Galle, S. R. Keith, and K. E. Kemp. 2010. Effect of fungicides and miticides with mitochondria electron transport inhibiting activity on the twospotted spider mite, *Tetranychus urticae* (Acari: Tetranychidae). *HortScience* 45(4): 687-689.
- Hogendorp, B. K., R. A. Cloyd, C. Xu, and J. M. Swiader. 2010. Effect of silicon-based fertilizer applications on nymphal development and adult emergence of the greenhouse whitefly (Hemiptera: Aleyrodidae) feeding on poinsettia. *J. Entomol. Sci.* 45(2): 150-169.
- Hogendorp, B. K., R. A. Cloyd, and J. M. Swiader. 2009. Effect of silicon-based fertilizer applications on the reproduction and development of the citrus mealybug (Hemiptera: Pseudococcidae) feeding on green coleus. *J. Econ. Entomol.* 102(6): 2198-2208.
- Cloyd, R. A. 2009. Western flower thrips (*Frankliniella occidentalis*) management on ornamental crops grown in greenhouses: Have we reached an impasse? *Pest Technol.* 3(1): 1-9.
- Hogendorp, B. K., R. A. Cloyd, and J. M. Swiader. 2009. Silicon-based fertilizer applications have no effect on the reproduction and development of the citrus mealybug, *Planococcus citri* Risso (Hemiptera: Pseudococcidae), feeding on fiddleleaf fig, *Ficus lyrata* (Warb.). *HortScience* 44(6): 1616-1621.
- Cloyd, R. A., N. R. Timmons, J. M. Goebel, and K. E. Kemp. 2009. Effect of pesticides on adult rove beetle *Atheta coriaria* (Coleoptera: Staphylinidae) survival in growing medium. *J. Econ. Entomol.* 102(5): 1750-1758.
- Cloyd, R. A., K. A. Marley, R. A. Larson, and B. Arieli. 2009. Attractiveness of parboiled rice hulls to the fungus gnat, *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae), adult relative to standard growing medium components. *HortScience* 44(5): 1366-1369.
- Cloyd, R. A., C. L. Galle, S. R. Keith, N. A. Kalscheur, and K. E. Kemp. 2009. Effect of commercially available plant-derived essential oil products on arthropod pests. *J. Econ. Entomol.* 102(4): 1567-1579.
- Cloyd, R. A. 2009. Getting mixed-up: are greenhouse producers adopting appropriate pesticide mixtures to manage arthropod pests? *HortTechnology* 19(3): 638-646.
- Cloyd, R. A., C. L. Galle, S. R. Keith, and K. E. Kemp. 2009. Evaluation of persistence of selected miticides against the twospotted spider mite, *Tetranychus urticae*. *HortScience* 44(2): 476-480.
- Bethke, J. A., and R. A. Cloyd. 2009. Pesticide use in ornamental production: what are the benefits? *Pest Manag. Sci.* 65: 345-350.
- Cloyd, R. A. 2008. Management of fungus gnats (*Bradysia* spp.) in greenhouses and nurseries. *Floricult. Ornamental Biotech.* 2(2): 84-89.
- Cloyd, R. A., and A. Dickinson. 2008. Procedure to enhance the recovery rate of fungus gnat, *Bradysia* sp. nr. *coprophila* Lintner (Diptera: Sciaridae) adults from growing medium. *HortScience* 43(5): 1528-1530.
- Caamano, E. X., R. A. Cloyd, L. F. Solter, and D. J. Fallon. 2008. Quality assessment of two commercially available species of entomopathogenic nematodes: *Steinernema feltiae* and *Heterorhabditis indica*. *HortTechnology* 18(1): 84-89.
- Cloyd, R. A., A. Dickinson, R. A. Larson, and K. A. Marley. 2007. Effect of growing media and their constituents on fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner) adults. *Insect Sci.* 14(6): 467-475.
- Cloyd, R. A., A. Dickinson, and K. E. Kemp. 2007. Effect of diatomaceous earth and *Trichoderma harzianum* T-22 (Rifai Strain KRL-AG2) on the fungus gnat *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae). *J. Econ. Entomol.* 100(4): 1353-1359.
- Cloyd, R. A., C. L. Galle, and S. R. Keith. 2007. Greenhouse pesticide mixtures for control of silverleaf whitefly (Homoptera: Aleyrodidae) and twospotted spider mite (Acari: Tetranychidae). *J. Entomol. Sci.* 42(3): 375-382.
- Lash, H. E., D. F. Warnock, and R. A. Cloyd. 2007. Effect of pesticide mixtures on the survival of the predatory mite *Neoseiulus cucumeris* (Acarina: Phytoseiidae). *J. Entomol. Sci.* 42(3): 311-319.
- Cloyd, R. A., A. Dickinson, R. A. Larson, and K. A. Marley. 2007. Phototaxis of fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner) (Diptera: Sciaridae), adults to different light intensities. *HortScience* 42(5): 1217-1220.
- Cloyd, R. A. 2007. Management of plant-feeding mites in interior plantscapes. *Pest Technol.* 1(1): 27-32.

- Cloyd, R. A., and H. Chiasson. 2007. Activity of an essential oil derived from *Chenopodium ambrosioides* on greenhouse insect pests. *J. Econ. Entomol.* 100(2): 459-466.
- Czapar, G. F., M. P. Curry, and R. A. Cloyd. 2007. Educational needs and customer service practices of retail stores that sell pesticides in Illinois. *HortTechnology* 17(1): 115-119.
- Birken, E. M., and R. A. Cloyd. 2007. Food preference of the rove beetle, *Atheta coriaria* Kraatz (Coleoptera: Staphylinidae) under laboratory conditions. *Insect Sci.* 14: 53-56.
- Cloyd, R. A., and A. Dickinson. 2006. Effect of insecticides on mealybug destroyer (Coleoptera: Coccinellidae) and parasitoid *Leptomastix dactylopii* (Hymenoptera: Encyrtidae), natural enemies of citrus mealybug (Homoptera: Pseudococcidae). *J. Econ. Entomol.* 99(5): 1596-1604.
- Hogendorp, B. K., and R. A. Cloyd. 2006. Insect management in floriculture: How important is sanitation in avoiding insect problems? *HortTechnology* 16(4): 633-636.
- Cloyd, R. A. 2006. Compatibility of insecticides with natural enemies to control pests of greenhouses and conservatories. *J. Entomol. Sci.* 41(3): 189-197.
- Cloyd, R. A., C. L. Galle, and S. R. Keith. 2006. Compatibility of three miticides with the predatory mites *Neoseiulus californicus* McGregor and *Phytoseiulus persimilis* Athias-Henriot (Acari: Phytoseiidae). *HortScience* 41(3): 707-710.
- Tiddens, P. T., and R. A. Cloyd. 2006. Susceptibility of three rose genotypes to Japanese beetle (Coleoptera: Scarabaeidae) adult feeding. *J. Arboriculture & Urban Forestry* 32(3): 108-113.
- Hogendorp, B. K., R. A. Cloyd, and J. M. Swiader. 2006. Effect of nitrogen fertility on reproduction and development of citrus mealybug, *Planococcus citri* Risso (Homoptera: Pseudococcidae), feeding on two colors of coleus, *Solenostemon scutellarioides* L. Codd. *Environ. Entomol.* 35(2): 201-211.
- Cloyd, R. A., and A. Dickinson. 2006. Effect of *Bacillus thuringiensis* subsp. *israelensis* and neonicotinoid insecticides on the fungus gnat *Bradysia* sp. nr. *coprophila* (Lintner) (Diptera: Sciaridae). *Pest Manag. Sci.* 62: 171-177.
- Meers, T. L., and R. A. Cloyd. 2005. Egg-laying preference of female fungus gnat *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae) on three different soilless substrates. *J. Econ. Entomol.* 98(6): 1937-1942.
- Blumthal, M. R., R. A. Cloyd, L. A. Spomer, and D. F. Warnock. 2005. Flower color preferences of western flower thrips. *HortTechnology* 15(4): 846-853.
- Cloyd, R. A., and A. Dickinson. 2005. Effects of growing media containing diatomaceous earth on the fungus gnat *Bradysia* sp. nr. *coprophila* (Lintner) (Diptera: Sciaridae). *HortScience* 40(6): 1806-1809.
- Meers, T. L., and R. A. Cloyd. 2005. Quantitative sampling method for fungus gnat (Diptera: Sciaridae) eggs in soilless growing media. *J. Econ. Entomol.* 98(4): 1399-1403.
- Cabrera, A. R., R. A. Cloyd, and E. R. Zaborski. 2005. Development and reproduction of *Stratiolaelaps scimitus* (Acari: Laelapidae) with fungus gnat larvae (Diptera: Sciaridae), potworms (Oligochaeta: Enchytraeidae) or *Sancassania* aff. *sphaerogaster* (Acari: Acaridae) as the sole food source. *Exp. Appl. Acarol.* 36: 71-81.
- Cabrera, A. R., R. A. Cloyd, and E. R. Zaborski. 2005. Lethal and sub-lethal effects of novaluron (Pedestal[®]) on the soil-dwelling predatory mite, *Stratiolaelaps scimitus* (Womersley) (Acari: Mesostigmata: Laelapidae), under laboratory conditions. *J. Entomol. Sci.* 40(1): 47-53.
- Warnock, D. R., and R. A. Cloyd. 2005. Effect of pesticide mixtures in controlling western flower thrips (Thysanoptera: Thripidae). *J. Entomol. Sci.* 40(1): 54-66.
- Loughner, R. L., D. F. Warnock, and R. A. Cloyd. 2005. Resistance of greenhouse, laboratory, and native populations of western flower thrips to spinosad. *HortScience* 40(1): 146-149.
- Cloyd, R. A. 2005. Challenges to extension programming. *HortTechnology* 15(1): 177-180.
- Cloyd, R. A., S. R. Keith, and C. L. Galle. 2004. Effect of the insect growth regulator novaluron (Pedestal) on silverleaf whitefly reproduction. *HortTechnology* 14(4): 551-554.
- Rothwangl, K. B., R. A. Cloyd, and R. N. Wiedenmann. 2004. Effects of insect growth regulators on citrus mealybug parasitoid *Leptomastix dactylopii* (Hymenoptera: Encyrtidae). *J. Econ. Entomol.* 97(4): 1239-1244.

- Kushad, M. M., R. Cloyd, and M. Babadoost. 2004. Distribution of glucosinolates in ornamental cabbage and kale cultivars. *Scientia. Hort.* 101: 215-221.
- Czapar, G. F., R. A. Cloyd, P. A. Kalnay, and M. P. Curry. 2004. Development of educational programs for retail stores that sell pesticides. *J. Extension* 42(4): (<http://www.joe.org/joe/2004august/iw6.shtml>).
- Cabrera, A. R., R. A. Cloyd, and E. R. Zaborski. 2004. Effects of greenhouse pesticides on the soil-dwelling predatory mite *Stratiolaelaps scimitus* (Acari: Mesostigmata: Laelapidae) under laboratory conditions. *J. Econ. Entomol.* 97(3): 793-799.
- Zaborski, E. R., and R. A. Cloyd. 2004. Method for quantitative sampling of fungus gnat larvae in soilless growing media. *J. Econ. Entomol.* 97(2): 678-686.
- Cloyd, R. A., and E. R. Zaborski. 2004. Fungus gnats, *Bradysia* spp. (Diptera: Sciaridae), and other arthropods in commercial bagged soilless growing media and rooted plant plugs. *J. Econ. Entomol.* 97(2): 503-510.
- Cabrera, A. R., R. A. Cloyd, and E. R. Zaborski. 2003. Effect of monitoring technique in determining the presence of fungus gnat, *Bradysia* spp. (Diptera: Sciaridae), larvae in growing medium. *J. Agri. and Urban Entomol.* 20(1): 41-47.
- Cloyd, R. A. 2003. Effect of insect growth regulators on citrus mealybug, *Planococcus citri* (Homoptera: Pseudococcidae) egg production. *HortScience* 38(7): 1397-1399.
- Cloyd, R. A., and C. S. Sadof. 2003. Seasonal abundance and use of an action threshold for western flower thrips, in a cut carnation greenhouse. *HortTechnology* 13(3): 497-500.
- Sadof, C. S., J. J. Neal, and R. A. Cloyd. 2003. Effect of variegation on stem exudates of coleus and life history characteristics of citrus mealybug (Hemiptera: Pseudococcidae). *Environ. Entomol.* 32(3): 463-469.
- Cloyd, R. A., and N. L. Cycholl. 2002. Phytotoxicity of selected insecticides on greenhouse-grown herbs. *HortScience* 37(4): 671-672.
- Cloyd, R. A., D. F. Warnock, and K. Holmes. 2001. Technique for collecting thrips for use in insecticide efficacy trials. *HortScience* 36(5): 925-926.
- Cloyd, R. A., and C. S. Sadof. 2000. Effects of plant architecture on the attack rate of *Leptomastix dactylopii* (Hymenoptera: Encyrtidae), a parasitoid of the citrus mealybug (Homoptera: Pseudococcidae). *Environ. Entomol.* 29(3): 535-541.
- Cloyd, R. A., and C. S. Sadof. 2000. Effects of spinosad and acephate on western flower thrips inside and outside a greenhouse. *HortTechnology* 10(2): 359-362.
- Cloyd, R. A., C. R. Edwards, and L. W. Bledsoe. 1999. Trichome density differences and bean leaf beetle, *Cerotoma trifurcata* (Forster), feeding behavior on soybean pods. *Proc. Indiana Acad. Sci.* 106: 85-94.
- Cloyd, R. A., M. Brownbridge, and C. S. Sadof. 1998. Biological control of western flower thrips, *Frankliniella occidentalis* (Pergande). *The IPM Practitioner* 20(8): 1-9.
- Cloyd, R. A., and C. S. Sadof. 1998. Flower quality, flower number, and western flower thrips, *Frankliniella occidentalis* (Pergande) density on transvaal daisy, *Gerbera jamesonii* (H. Bolus ex. Hook. f) treated with granular insecticides. *HortTechnology* 8(4): 567-570.
- Evans, M. R., J. N. Smith, and R. A. Cloyd. 1998. Fungus gnat population development in coconut coir and *Sphagnum* peat-based substrates. *HortTechnology* 8(3): 406-409.

2. Publications: Book Reviews

- Cloyd, R. A. June 2013. Handbook of agricultural entomology. van Emden, H. F. [ed]. John Wiley & Sons, Ltd. The Atrium: Southern Gate; Chichester; West Sussex, UK. 336 pgs. *HortScience* 48(6): 816.
- Cloyd, R. A. 2011. Nematodes as biocontrol agents. Grewal, P. S., R. Ehlers, and D. I. Shapiro-Ilan [eds.]. CAB International: Nosworthy Way; Wallingford, Oxfordshire. 505 pgs. *HortScience* 46(2): 333.
- Cloyd, R. A. 2009. Aphids as crop pests. van Emden, H. F., and R. Harrington [eds.]. CABI International, Nosworthy Way, Wallingford, Oxfordshire. 717 pgs. *HortScience* 44(2): 537.

- Cloyd, R. A. 2007. Armored scale insect pests of trees and shrubs. Miller, D. R., and J. A. Davidson [eds.]. Comstock Publishing Associates (A Division Cornell University Press), Ithaca, NY. 442 pags. HortScience 42(7): 1749-1750.
- Cloyd, R. A. 2004. Quality control and production of biological control agents: Theory and testing procedures. van Lenteren, J. C. [ed.]. CABI Publishing: Cambridge, MA. 327 pgs. Entomological News 114(4): 238.

3. Publications: Efficacy Trials

- Cloyd, R. A. 2007. Efficacy of selected insecticides and MilStop™ for control of citrus mealybug. Arthropod Management Test 32: G34.
- Cloyd, R. A. 2007. Determine effect of systemic insecticides for control of citrus mealybug. Arthropod Management Test 32: G35.
- Cloyd, R. A. 2007. Foliar applications of insecticides for control of long-tailed mealybug. Arthropod Management Test 32: G36.
- Cloyd, R. A. 2005. Activity of different formulations of TetraSan in controlling twospotted spider mite. Arthropod Management Test 30: G22.
- Cloyd, R. A. 2005. Foliar applications of insecticides and insecticide-mixtures for control of long-tailed mealybug. Arthropod Management Test 30: G24.
- Cloyd, R. A. 2005. Foliar applications of neonicotinoid insecticides for control of citrus mealybug. Arthropod Management Test 30: G25.
- Cloyd, R. A. 2003. Foliar applications and potting soil drenches of insecticides for control of citrus mealybug. Arthropod Management Test 28: G22.
- Cloyd, R. A. 2003. Control of western flower thrips on transvaal daisy. Arthropod Management Test 28: G23.
- Cloyd, R. A. 2003. Control of twospotted spider mite on marigolds. Arthropod Management Test 28: G26.
- Cloyd, R. A. 2001. Evaluation of foliar and drench applications of Flagship for control of citrus mealybug on coleus. Arthropod Management Test 26: G40.
- Cloyd, R. A. 2001. Efficacy of selected insecticides for control of western flower thrips. Arthropod Management Test 26: G41.
- Cloyd, R. A. 2001. Evaluation of selected insecticides for control of western flower thrips. Arthropod Management Test 26: G42.
- Cloyd, R. A. 2001. Effectiveness of Endeavor in controlling green peach aphid. Arthropod Management Test 26: G63.
- Cloyd, R. A. 2000. Efficacy of selected insecticides against citrus mealybugs on coleus. Arthropod Management Test 25: 380.
- Cloyd, R. A., and C. S. Sadof. 2000. Efficacy of two different formulations of acephate against western flower thrips. Arthropod Management Test 25: 380-381.

4. Oral Presentations

- Effects of pesticides on the survival of rove beetle, *Dalotia coriaria*, and insidious flower bug, *Orius insidiosus* adults. R. A. Cloyd and N. Herrick. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 5, 2017. Denver, CO).
- Plant-derived volatile essential oils and western flower thrips, *Frankliniella occidentalis*. N. Herrick and R. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (XXV International Congress of Entomology; September 30, 2016. Orlando, FL).
- Rove beetle (*Dalotia coriaria*) predation on the fungus gnat, *Bradysia* sp. nr. *coprophila*. R. Cloyd, E. Echegaray, and J. Nechols. Department of Entomology; Kansas State University, Manhattan, KS (XXV International Congress of Entomology; September 30, 2016. Orlando, FL).
- “Suck-it-up”: are systemic insecticides really effective against mealybugs? R. Cloyd and A. Raudenbush. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 15, 2015. Minneapolis, MN).

- Efficacy of rotation programs against western flower thrips, *Frankliniella occidentalis*, that include entomopathogenic fungi. J. Kivett¹, R. Cloyd¹, and N. Bello². ¹Department of Entomology; Kansas State University, Manhattan, KS. ²Department of Statistics; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 17, 2014. Portland, OR).
- Effects of physical barriers in managing fungus gnats (*Bradysia* spp.). A. L. Willmott¹, R. A. Cloyd¹, and E. R. Echegaray². ¹Department of Entomology; Kansas State University, Manhattan, KS. ²Oregon State University; Hermiston, OR (Entomological Society of America Annual Meeting; November 10, 2013. Austin, TX).
- Residual efficacy of systemic insecticides against the citrus mealybug, *Planococcus citri*. A. L. Willmott, R. A. Cloyd, and K. Y. Zhu. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 13, 2012. Knoxville, TN).
- Pesticide mixtures and western flower thrips, *Frankliniella occidentalis*. A. L. Willmott, R. A. Cloyd, and K. Y. Zhu. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 13, 2012. Knoxville, TN).
- Integrating beneficial arthropods and pesticides: An academic perspective. R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 11, 2012. Knoxville, TN).
- Pesticides and biological control: Are these two strategies compatible? R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (96th Annual Meeting of the Pacific Branch-Entomological Society of America; March 26, 2012. Portland, OR).
- Efficacy of systemic insecticides against the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae) in protected environments. A. L. Willmott, R. A. Cloyd, and K. Y. Zhu. Department of Entomology; Kansas State University, Manhattan, KS (17th Annual K-State Research Forum; March 8, 2012. Manhattan, KS). First place finish in student oral presentation.
- Feeding preference of Southern pine sawyer beetle on four species of pine. M. S. Wilson¹, J. J. Griffin¹, and R. A. Cloyd². ¹Department of Horticulture, Forestry, and Recreation Resources; Kansas State University, Manhattan, KS. ²Department of Entomology; Kansas State University, Manhattan, KS (57th Annual Southern Nursery Association Horticultural Research Conference; January 18, 2012. Mobile, AL). First place finish in student competition.
- Effects of sugar and sugar-based compounds against the western flower thrips, *Frankliniella occidentalis*. N. DePaola, R. A. Cloyd, and J. D. Gillespie. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 13, 2011. Reno, NV).
- Influence of light intensity on the movement and efficacy of systemic insecticides against the citrus mealybug, *Planococcus citri*, and sweet potato whitefly B-biotype, *Bemisia tabaci*. R.A. Cloyd¹, K. A. Williams², F. J. Byrne³, and K. E. Kemp⁴. ¹Department of Entomology; Kansas State University, Manhattan, KS. ²Department of Horticulture, Forestry, and Recreation Resources; Kansas State University, Manhattan, KS. ³Department of Entomology, University of California—Riverside, Riverside, CA. ⁴Department of Statistics; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 13, 2011. Reno, NV).
- Impact of pesticides and plant growth regulators on the rove beetle, *Atheta coriaria*. E. R. Echegaray and R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 13, 2011. Reno, NV).
- Efficacy of pesticide mixtures on the western flower thrips (*Frankliniella occidentalis*). A. L. Willmott, R. A. Cloyd, and K. Y. Zhu. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 14, 2011. Reno, NV).
- Direct effects of pesticides and plant growth regulators on the rove beetle, *Atheta coriaria*. E. R. Echegaray and R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 14, 2011. Reno, NV).

- Effect of light intensity on the efficacy of systemic insecticides in suppressing populations of the citrus mealybug, *Planococcus citri*, and sweet potato whitefly B-biotype, *Bemisia tabaci*. R.A. Cloyd¹, K. A. Williams², F. J. Byrne³, and K. E. Kemp⁴. ¹Department of Entomology; Kansas State University, Manhattan, KS. ²Department of Horticulture, Forestry, and Recreation Resources; Kansas State University, Manhattan, KS. ³Department of Entomology, University of California—Riverside, Riverside, CA. ⁴Department of Statistics; Kansas State University, Manhattan, KS (American Society for Horticultural Science Annual Conference; September 27, 2011. Waikoloa, HI).
- Enhancing arthropod biodiversity in landscapes and gardens. R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (North Central Branch Entomological Society of America Annual Meeting; March 14, 2011. Minneapolis, MN).
- Life history parameters of the rove beetle, *Atheta coriaria*, and suitability as a biological control agent against the fungus gnat, *Bradysia* sp. nr. *coprophila*. E. R. Echegaray and R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; December 15, 2010. San Diego, CA).
- Effects of light intensity on pac choi (*Brassica rapa*) plant chemistry and growth responses of diamondback moth (*Plutella xylostella*). W. A. Johnson¹, J. R. Nechols¹, R. A. Cloyd¹, M. M. Kennelly², and D. Rotenberg². ¹Department of Entomology; Kansas State University, Manhattan, KS. ²Department of Plant Pathology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; December 13, 2010. San Diego, CA).
- Dealing with fungus gnats (*Bradysia* spp.) in greenhouse production systems. R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; December 12, 2010. San Diego, CA).
- Effect of greenhouse light intensity and insect herbivory on plant chemistry of pac choi (*Brassica rapa*) and diamondback moth (*Plutella xylostella*) development. W.A. Johnson, J. R. Nechols, and R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (North Central Branch Entomological Society of America Meeting; March 15, 2010. Louisville, KY).
- Effect of pesticides on rove beetle, *Atheta coriaria* Kraatz (Coleoptera: Staphylinidae), adult survival in growing medium. R. A. Cloyd¹, N. Timmons¹, J. Goebel¹, and K. Kemp². ¹Department of Entomology; Kansas State University, Manhattan, KS. ²Department of Statistics; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; December 13, 2009. Indianapolis, IN).
- Silicon-based fertilizer applications: can they prevent outbreaks of insect pests? R. A. Cloyd¹ and B. Hogendorp². ¹Department of Entomology; Kansas State University, Manhattan, KS. ²Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (Entomological Society of America Annual Meeting; December 16, 2009. Indianapolis, IN).
- Are silicon-based fertilizer treatments effective against insect pests? R. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (85th Annual Meeting of the Kansas Entomological Society; April 25, 2009. Manhattan, KS).
- Effect of silicon-based fertilizer applications on insect pests of greenhouses. R. A. Cloyd¹ and B. K. Hogendorp². ¹Department of Entomology; Kansas State University, Manhattan, KS. ²Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (North Central Branch Entomological Society of America Annual Meeting; March 17, 2009. St. Louis, MO).
- Effect of light intensity on the systemic activity of neonicotinoid-based insecticides in two horticultural crops, and control of sweet potato whitefly B-biotype, and citrus mealybug. J. Goebel¹, R. A. Cloyd², K. A. Williams¹, F. J. Byrne³, and K. Kemp⁴. ¹Department of Horticulture, Forestry, and Recreation Resources; Kansas State University, Manhattan, KS. ²Department of Entomology; Kansas State University, Manhattan, KS. ³University of California—Riverside, Department of Entomology; Riverside, CA. ⁴Department of Statistics; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 16, 2008. Reno, NV).

- Effect of silicon applications on citrus mealybug, *Planococcus citri* and greenhouse whitefly, *Trialeurodes vaporariorum*. B. Hogendorp¹ and R. A. Cloyd². ¹Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL. ²Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; December 9, 2007. San Diego, CA).
- Effect of neonicotinoid-based insecticides on beneficial arthropods of ornamentals. R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; December 9, 2007. San Diego, CA).
- Quality assessment of commercially available entomopathogenic nematodes. R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (Maintaining Worldwide Connections for Quality Assurance in Arthropod and Nematode Rearing; October 29, 2007. Montreal, Canada).
- Effect of diatomaceous earth and *Trichoderma harzianum* T-22 on the fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner). R. A. Cloyd¹ and A. Dickinson². ¹Department of Entomology; Kansas State University, Manhattan, KS. ²Illinois Natural History Survey; Champaign, IL (North Central Branch Entomological Society of America Annual Meeting; March 27, 2007. Winnipeg, Canada).
- Use of entomopathogenic nematodes in greenhouses: Impact of quality control. E. X. Caamano and R. Cloyd. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (December 11, 2006. Entomological Society of America Annual Meeting; December 11, 2006. Indianapolis, IN).
- Egg laying preference of female fungus gnat, *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae) on different commercially available bagged growing media. T. Meers and R. Cloyd. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (Entomological Society of America Annual Meeting; November 14, 2004. Salt Lake City, UT).
- Host plant resistance of Rosa ‘Radrazz’ knockout, Rosa ‘Crimson Bouquet,’ and Rosa ‘Love and Peace’ to *Popilla japonica* adult leaf feeding. T. Tiddens¹ and R. Cloyd². ¹Chicago Botanic Garden; Glencoe, IL. ²Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (Entomological Society of America Annual Meeting; October 29, 2003. Cincinnati, OH).
- Egg laying preference of female fungus gnat, *Bradysia coprophila* (Comstock), on three different commercially available bagged growing media. T. Meers¹, R. Cloyd¹, and E. R. Zaborski². ¹Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL. ²Illinois Natural History Survey; Champaign, IL (Entomological Society of America Annual Meeting; October 29, 2003. Cincinnati, OH).
- Effect of tank mixes on the efficacy of biorational pest control materials in controlling western flower thrips, *Frankliniella occidentalis* (Pergande). D. F. Warnock and R. Cloyd. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (Entomological Society of America Annual Meeting; October 27, 2003. Cincinnati, OH).
- Evaluation of lethal and sub-lethal effects of greenhouse pesticides on the soil-dwelling predatory mite, *Hypoaspis miles*. A. R. Cabrera¹, R. Cloyd¹, and E. R. Zaborski². ¹Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL. ²Illinois Natural History Survey; Champaign, IL (Entomological Society of America Annual Meeting; October 27, 2003. Cincinnati, OH).
- Color preference of western flower thrips, *Frankliniella occidentalis*, for selected cut flower species. M. Blumthal, R. Cloyd, and D. F. Warnock. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (Entomological Society of America Annual Meeting; October 27, 2003. Cincinnati, OH).
- Compatibility of natural enemies and pesticides. R. Cloyd¹, K. B. Rothwangl², and R. N. Wiedenmann³. ¹Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL. ²Department of Entomology; University of Illinois, Urbana, IL. ³Center for Economic Entomology; Champaign, IL (Entomological Society of America Annual Meeting; October 26, 2003. Cincinnati, OH).

- Compatability of the citrus mealybug parasitoid, *Leptomastix dactylopii*, with low-risk insecticides. K. B. Rothwangl¹, R. A. Cloyd², and R. N. Wiedenmann³. ¹Department of Entomology; University of Illinois, Urbana, IL. ²Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL. ³Center for Economic Entomology; Champaign, IL (North Central Branch Entomological Society of America Annual Meeting; March 24, 2003. Madison, WI).
- Evaluation of lethal and sub-lethal effects of greenhouse pesticides on the soil-dwelling predatory mite, *Hypoaspis miles*. A. R. Cabrera¹, R. A. Cloyd¹, and E. R. Zaborski². ¹Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL. ²Illinois Natural History Survey; Champaign, IL (North Central Branch Entomological Society of America Annual Meeting; March 24, 2003. Madison, WI).
- Sources of fungus gnat, *Bradysia* spp. (Diptera: Sciaridae) contamination in commercial floriculture greenhouses. R. A. Cloyd¹ and E. R. Zaborski². ¹Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL. ²Illinois Natural History Survey; Champaign, IL (Entomological Society of America Annual Meeting; November 17, 2002. Fort Lauderdale, FL).
- Effect of variegation on phloem composition of *Coleus* and life history characteristics of citrus mealybug. C. S. Sadof¹, Jonathon Neal¹, and R. A. Cloyd². ¹Department of Entomology; Purdue University, West Lafayette, IN. ²Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (Entomological Society of America Annual Meeting; December 10, 2001. San Diego, CA).
- Fenpyroximate: Another METI for mite management? M. Bell¹ and R. A. Cloyd². ¹SePRO Corporation; Carmel, IN. ²Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (Entomological Society of America Annual Meeting; December 10, 2001. San Diego, CA).
- Assessing effects of plant architecture on the behavior of the citrus mealybug parasitoid, *Leptomastix dactylopii*. R. A. Cloyd. Department of Entomology; Purdue University, West Lafayette, IN (Entomological Society of America Annual Meeting; November 10, 1998. Las Vegas, NV).
- Effects of *Coleus blumei* architecture on attack rates of a citrus mealybug predator and parasitoid. C. S. Sadof, J. F. Garcia, R. A. Cloyd, and R. J. O'Neil. Department of Entomology; Purdue University, West Lafayette, IN (Entomological Society of America Annual Meeting; November 9, 1998. Las Vegas, NV).
- Effects of *Coleus blumei* architecture on the behavior of the citrus mealybug parasitoid, *Leptomastix dactylopii*. R. A. Cloyd and C. S. Sadof. Department of Entomology; Purdue University, West Lafayette, IN (Entomological Society of America Annual Meeting; December 19, 1997. Nashville, TN).
- Flower quality, flower number, and western flower thrips, *Frankliniella occidentalis* (Pergande) density on transvaal daisy, *Gerbera jamesonii* treated with Pinpoint 15G and Marathon 1G. R. A. Cloyd and C. S. Sadof. Department of Entomology; Purdue University, West Lafayette, IN (Entomological Society of America Annual Meeting; December 10, 1996. Louisville, KY).
- Trichome density differences and bean leaf beetle, *Cerotoma trifurcata* (Forster), feeding behavior on soybean pods. R. A. Cloyd, C. R. Edwards, and L. W. Bledsoe. Department of Entomology; Purdue University, West Lafayette, IN (Indiana Academy of Science Annual Meeting; November 8, 1996. Greencastle, IN).
- Evaluation of trichome density levels and *Cerotoma trifurcata* (Forster), feeding preference on soybean pods. R. A. Cloyd, C. R. Edwards, and L. W. Bledsoe. Department of Entomology; Purdue University, West Lafayette, IN (Entomological Society of America Annual Meeting; December 20, 1995. Las Vegas, NV).
- Evaluation of trichome density levels on soybean pods. R. A. Cloyd, C. R. Edwards, M. N. Anwar, and N. N. Troxclair. Department of Entomology; Purdue University, West Lafayette, IN (North Central Branch Entomological Society of America Annual Meeting; March 24, 1993. Fargo, ND).

5. Poster Presentations

- Effect of western flower thrips, *Frankliniella occidentalis* pupal stages, predator-prey ratios, and predator-prey numbers on adult rove beetle, *Dalotia coriaria* predation. Y. Li and R. Cloyd. Department of Entomology; College of Agriculture, Kansas State University (Kansas State University Research and Extension; November 9, 2017. Manhattan, KS).
- Rove beetle, *Dalotia coriaria* adult predation on western flower thrips, *Frankliniella occidentalis*. Y. Li and R. A. Cloyd. Department of Entomology; College of Agriculture, Kansas State University (K-State Graduate Research, Arts, and Discovery Forum; March 30, 2017. Manhattan, KS).
- Predation of rove beetle, *Dalotia coriaria* adult on western flower thrips, *Frankliniella occidentalis* pupal stage. Y. Li and R. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 7, 2017. Denver, CO).
- Effects of growing medium type and moisture level on predation by adult rove beetle, *Dalotia coriaria* (Coleoptera: Staphylinidae), on fungus gnat, *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae), larvae under laboratory and greenhouse conditions. R. Cloyd and N. Herrick. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 7, 2017. Denver, CO).
- Educating greenhouse growers on biological control through an international online course. H. M. Lindberg¹ and R. A. Cloyd². ¹Michigan State University Extension; West Olive, MI. ²Department of Entomology; Kansas State University, Manhattan, KS (IOBC-WPRS Working Group: Integrated Control in Protected Crops, Temperate Climate; June 5, 2017. Niagara Falls, Canada).
- Pine sawyer beetle (*Monochamus carolinensis*) feeding preference on eleven pinaceae taxa. M. S. Wilson¹, J. J. Griffin¹, R. A. Cloyd², and T. C. Todd³. ¹Department of Horticulture, Forestry, and Recreation Resources; Kansas State University, Manhattan, KS. ²Department of Entomology; Kansas State University, Manhattan, KS. ³Department of Plant Pathology; Kansas State University, Manhattan, KS (American Society for Horticultural Sciences Annual Conference; August 5, 2015. New Orleans, LA).
- Promoting IPM and enhancing decision-making among Kansas stakeholders through innovative programming. F. Miller¹, B. McCornack¹, S. Zukoff¹, W. Johnson¹, C. Boyer², R. Cloyd¹, M. Kennelly³, and J. Hoyle². ¹Department of Entomology; Kansas State University, Manhattan, KS. ²Department of Horticulture, Forestry, and Recreation Resources; Kansas State University, Manhattan, KS. ³Department of Plant Pathology; Kansas State University, Manhattan, KS (8th International Integrated Pest Management Symposium; March 25, 2015. Salt Lake City, UT).
- Entomology and hollywood: History of the 1950's "big bug" science fiction movies. R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (Entomological Society of America Annual Meeting; November 12, 2013. Austin, TX).
- New workshops and resources for tree health and agroforestry. M. Kennelly¹, N. Ricci², C. Barden³, J. O'Mara¹, and R. Cloyd⁴. ¹Department of Plant Pathology; Kansas State University, Manhattan, KS. ²Kansas Forest Service; Manhattan, KS. ³Department of Horticulture, Forestry, and Recreation Resources; Kansas State University, Manhattan, KS. ⁴Department of Entomology; Kansas State University, Manhattan, KS (K-State Research and Extension Annual Conference; October 16, 2012. Manhattan, KS).
- Choice and no-choice feeding preferences of the Southern pine sawyer beetle on four species of pine. M. S. Wilson¹, J. J. Griffin¹, and R. A. Cloyd². ¹Department of Horticulture, Forestry, and Recreation Resources; Kansas State University, Manhattan, KS. ²Department of Entomology; Kansas State University, Manhattan, KS (American Society for Horticultural Science Annual Conference; August 2, 2012. Miami, FL).
- Efficacy of pesticide mixtures on the western flower thrips, *Frankliniella occidentalis* (Thysanoptera: Thripidae). A. L. Willmott, R. A. Cloyd, and K. Y. Zhu. Department of Entomology; Kansas State University, Manhattan, KS (67th Annual Meeting of the North Central Branch Entomological Society of America; June 4, 2012. Lincoln, NE).

- Life history parameters of the rove beetle *Atheta coriaria* and efficacy against the fungus gnat *Bradysia* sp. nr. *coprophila*. E. Echegaray and R. A. Cloyd. Department of Entomology; Kansas State University, Manhattan, KS (K-State Graduate Research Forum; April 20, 2011. Manhattan, KS).
- Zoysiagrass genotypes differ in susceptibility to bluegrass billbug. J. Fry¹, R. Cloyd², A. Chandra³, A. Genovesi³, and M. Engelke³. ¹Department of Horticulture, Forestry, and Recreation Resources; Kansas State University, Manhattan, KS. ²Department of Entomology; Kansas State University, Manhattan, KS. ³Texas AgriLife Research; Dallas, TX (American Society of Agronomy-Crop Science Society of America-Soil Science Society of America Annual Meeting; October 31 through November 4, 2010. Long Beach, CA).
- Effect of light intensity on the translocation of two systemic insecticides in poinsettia (*Euphorbia pulcherrima*) and their subsequent efficacy for sweet potato whitefly (*Bemisia argentifolii*) control. J. Goebel¹, K. Williams¹, and R. Cloyd². ¹Department of Horticulture, Forestry, and Recreation Resources; Kansas State University, Manhattan, KS. ²Department of Entomology; Kansas State University, Manhattan, KS (July 17, 2007. American Society of Horticultural Science Annual Conference; July 17, 2007. Scottsdale, AZ).
- Lethal effects of pesticide mixtures on the predatory mite, *Neoseiulus cucumeris*. H. E. Lash, D. F. Warnock, and R. A. Cloyd. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (5th National Integrated Pest Management Symposium; April 5, 2006. St. Louis, MO).
- Integrated pest management in floriculture: How important is sanitation in reducing pest problems? B. K. Hogendorp and R. A. Cloyd. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (61st Annual North Central Branch Entomological Society of America Meeting; March 28, 2006. Bloomington, IL).
- Effect of tank mixing pesticides in controlling western flower thrips, *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae). D. Warnock and R. Cloyd. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (Entomological Society of America Annual Meeting; December 16, 2005. Fort Lauderdale, FL).
- Effect of nitrogen fertility on reproduction and development of citrus mealybug, *Planococcus citri* (Risso) (Hemiptera: Pseudococcidae) feeding on two colors of coleus, *Solenostemon scutellarioides* (L.) Codd. B. K. Hogendorp, R. A. Cloyd, and J. M. Swaider. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (North Central Branch Entomological Society of America Annual Meeting; March 22, 2005. West Lafayette, IN).
- Egg laying preference of female fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner) (Diptera: Sciaridae) on three different commercially available bagged growing media. T. L. Meers and R. A. Cloyd. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (14th Ornamental Workshop on Diseases and Pests: Entomology Program; September 30, 2004. Hendersonville, NC).
- Effect of tank mixing pesticides in controlling western flower thrips, *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae). D. Warnock and R. Cloyd. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (American Society of Horticultural Sciences Annual Meeting; July 17, 2004. Austin, TX).
- Egg laying preference of female fungus gnats, *Bradysia* spp. nr. *coprophila* (Linter) (Diptera: Sciaridae) on three different commercially available bagged growing media. T. L. Meers and R. A. Cloyd. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (North Central Branch Entomological Society of America Annual Meeting; March 30, 2004. Kansas City, MO).

- Development and reproduction of *Hypoaspis miles* (Mesostigmata: Laelapidae) with fungus gnats, *Bradysia ocellaris* (Diptera: Sciaridae), potworms (Oligochaeta: Enchytraeidae) and *Sancassinia* sp. (Acari: Astigmata) as prey. A. R. Cabrera¹, E. R. Zaborski², and R. A. Cloyd¹. ¹Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL. ²Illinois Natural History Survey; Champaign, IL (9th Biennial Soil Ecology Society Conference; May 11-14, 2003. Palm Springs, CA).
- Evaluating lethal and sub-lethal effects of greenhouse pesticides on the soil-dwelling predatory mite, *Hypoaspis miles*. A. R. Cabrera¹, R. A. Cloyd¹, and E. R. Zaborski². ¹Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL. ²Illinois Natural History Survey; Champaign, IL (4th National Integrated Pest Management Symposium; April 8, 2003. Indianapolis, IN).
- Managing western flower thrips using a combination of impatiens with resistance and reduced-risk insecticides. D. Warnock, R. Cloyd, R. Loughner, and R. Elshire. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (4th National Integrated Pest Management Symposium; April 8, 2003. Indianapolis, IN).
- Developing educational programs for retail stores that sell pesticides. G. F. Czapar¹, R. A. Cloyd², and P. A. Kalnay¹. ¹University of Illinois Extension; Springfield, IL. ²Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana IL (4th National Integrated Pest Management Symposium; April 8, 2003. Indianapolis, IN).
- Managing western flower thrips using a combination of impatiens with resistance and reduced-risk insecticides. D. Warnock, R. Cloyd, R. Loughner, and R. Elshire. Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (16th International Horticultural Congress; August 11, 2002. Toronto, Canada).
- Fungus gnats and natural enemies: Interactions in floricultural production systems. E. R. Zaborski¹ and R. A. Cloyd². ¹Illinois Natural History Survey; Champaign, IL. ²Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL (Entomological Society of America Annual Meeting; December 11, 2001. San Diego, CA).
- Effect of coir and sphagnum peat-based substrates on fungus gnat populations. M. R. Evans¹, J. N. Smith¹, and R. Cloyd². ¹Department of Horticulture; Iowa State University, Ames, IA. ²Department of Entomology; Purdue University, West Lafayette, IN (American Society of Horticultural Science Annual Meeting; July 26, 1997. Salt Lake City, UT).
- Effects of soybean lines and growth stages on the expression of antibiosis in Mexican bean beetle. M. N. Anwar, L. W. Bledsoe, C. R. Edwards, and R. A. Cloyd. Department of Entomology; Purdue University, West Lafayette, IN (North Central Branch Entomological Society of America Annual Meeting; March 27, 1995. Lexington, KY).
- Effects of soybean lines, growth stages, and feeding intervals on the feeding behavior of Mexican bean beetle larvae. M. N. Anwar, L. W. Bledsoe, C. R. Edwards, and R. A. Cloyd. Department of Entomology; Purdue University, West Lafayette, IN (North Central Branch Entomological Society of America Annual Meeting; March 27, 1995. Lexington, KY).
- Relations of trichome parameters of several insect-resistant soybean lines to insect feeding. N. N. Troxclair, M. N. Anwar, L. W. Bledsoe, C. R. Edwards, and R. A. Cloyd. Department of Entomology; Purdue University, West Lafayette, IN (North Central Branch Entomological Society of America Annual Meeting; March 24, 1993. Fargo, ND).
- Resistance in soybean, *Glycine max* to the Mexican bean beetle, *Epilachna varivestis*. M. N. Anwar, L. W. Bledsoe, N. N. Troxclair, C. R. Edwards, and R. A. Cloyd. Department of Entomology; Purdue University, West Lafayette, IN (North Central Branch Entomological Society of America Annual Meeting; March 24, 1993. Fargo, ND).

6. Small-Scale Research Projects/Pesticide Efficacy Trials

- Efficacy of systemic insecticides against the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae) feeding on wax begonia, *Begonia x semperflorens-cultorum*, plants grown under greenhouse conditions 2017.
- Predation by insidious flower bug, *Orius insidiosus*, adults on western flower thrips, *Frankliniella occidentalis*, adults under laboratory and greenhouse conditions 2017.
- Efficacy of drench applications of Hachi-Hachi[®] and Pylon[®] against fungus gnat, *Bradysia* sp. nr. *coprophila* larvae under laboratory conditions 2017.
- Residual activity of pyriproxyfen (Fulcrum[®]) on western flower thrips, *Frankliniella occidentalis*, pupae under laboratory conditions 2017.
- Residual activity of pyriproxyfen (Fulcrum[®]) on western flower thrips, *Frankliniella occidentalis*, pupae under laboratory conditions 2017.
- Efficacy of Aria[™] insecticide against the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae) on coleus, *Solenostemon scutellarioides*, plants grown under greenhouse conditions 2017.
- Host plant selection by redheaded flea beetle (*Systema frontalis*) adults when exposed to *Itea virginica*, *Hydrangea paniculata*, and *Weigela florida* plants, in a nursery production system 2017.
- Efficacy of Mainspring[®] and CapSil[®] mixtures, on western flower thrips, *Frankliniella occidentalis*, feeding on chrysanthemum, *Tanacetum (=Dendranthema) x grandiflorum*, plants under greenhouse conditions 2017.
- Efficacy of VST-006340 LC, TriStar[®], and SuffOil-X[®] in suppressing citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae), populations under greenhouse conditions 2017.
- Efficacy of Mainspring[®] 200 SC and Mainspring[®] 40 WDG in mixtures with CapSil[®] against citrus mealybug, *Planococcus citri*, feeding on coleus, *Solenostemon scutellarioides*, plants under greenhouse conditions 2017.
- Efficacy of Hachi-Hachi[®] SC with and without CapSil[®], and Mainspring[®] against western flower thrips, *Frankliniella occidentalis*, in transvaal daisy, *Gerbera jamesonii*, flowers under greenhouse conditions 2017.
- Efficacy of VST-006340LC, Captiva[®], Pylon[®], BotaniGard[®], and BotaniGard MAXX[®] against western flower thrips, *Frankliniella occidentalis*, in transvaal daisy, *Gerbera jamesonii*, flowers under greenhouse conditions 2017.
- Efficacy of systemic insecticides against the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae) feeding on coleus, *Solenostemon scutellarioides*, plants grown under greenhouse conditions 2017.
- Effect of insecticides in reducing foliar damage caused by redheaded flea beetle (*Systema frontalis*) adults on sweetspire (*Itea virginica*) in a nursery production system 2017.
- Efficacy of Safari[®] 20 SG and Altus[™] against citrus mealybug, *Planococcus citri*, feeding on coleus, *Solenostemon scutellarioides*, plants under greenhouse conditions 2017.
- Plant safety associated with various herbaceous plant species when exposed to foliar and drench applications of the insecticide flupyradifurone (Altus[™]) under greenhouse conditions 2017.
- Efficacy of GWN-10569, GWN-10589 10SC, and Pylon[®] against western flower thrips, *Frankliniella occidentalis*, in transvaal daisy, *Gerbera jamesonii*, flowers under greenhouse conditions 2017.
- Efficacy of systemic insecticides against the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae) feeding on coleus, *Solenostemon scutellarioides*, plugs grown under greenhouse conditions 2017.
- Effects of Aria[™], KleenGrow[™], and STRIP-IT PRO[™] on the survival of rove beetle, *Dalotia coriaria*, and insidious flower bug, *Orius insidiosus*, adults under laboratory conditions 2017.
- Direct effects of the pesticides Pyganic[®] and Entrust[®] on the insidious flower bug, *Orius insidiosus* (Hemiptera: Anthocoridae), under laboratory conditions 2017.

- Efficacy of drench applications of Ancora™ and Fulcrum® against fungus gnat, *Bradysia* sp. nr. *coprophila*, larvae under laboratory conditions 2017.
- Effects of Ancora™ and Fulcrum® on western flower thrips, *Frankliniella occidentalis*, pupae under laboratory conditions 2017.
- Efficacy of Mainspring® and CapSil® alone and in mixtures, on western flower thrips, *Frankliniella occidentalis*, feeding on chrysanthemum, *Tanacetum (=Dendranthema) x grandiflorum*, plants under greenhouse conditions 2017.
- Effects of Hachi-Hachi® with and without Captiva®, and Mainspring® on adult survival of the rove beetle, *Dalotia coriaria*, and the insidious flower bug, *Orius insidiosus*, under laboratory conditions 2017.
- Efficacy of Ancora™ and Fulcrum® against the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae) on coleus, *Solenostemon scutellarioides*, plants grown under greenhouse conditions 2017.
- Efficacy of VST-006340LC and Captiva® against western flower thrips, *Frankliniella occidentalis*, in transvaal daisy, *Gerbera jamesonii*, flowers under greenhouse conditions 2017.
- Effects of the insecticides Altus™ and Ancora™ on the survival of rove beetle, *Dalotia coriaria*, and insidious flower bug, *Orius insidiosus*, adults under laboratory conditions 2017.
- Efficacy of drench applications of KleenGrow™ and STRIP-IT PRO™ against fungus gnat, *Bradysia* sp. nr. *coprophila* larvae under laboratory conditions 2017.
- Effects of KleenGrow™ and STRIP-IT PRO™ on western flower thrips, *Frankliniella occidentalis*, pupae under laboratory conditions 2017.
- Efficacy of V-10433 EC, Azera® SC, and Entrust® SC against western flower thrips, *Frankliniella occidentalis*, in transvaal daisy, *Gerbera jamesonii*, flowers under greenhouse conditions 2017.
- Efficacy of S-1423 300 G/L SC and V-10435 mixtures compared to Kontos® and Veratran® D mixed with CapSil®, on western flower thrips, *Frankliniella occidentalis*, feeding on green bean, *Phaseolus vulgaris*, plants under greenhouse conditions 2017.
- Efficacy of various insecticide treatments, with and without surfactants, on western flower thrips, *Frankliniella occidentalis*, feeding on green bean, *Phaseolus vulgaris*, plants under greenhouse conditions 2017.
- Efficacy of V-10433, V-10446, and other insecticides on western flower thrips, *Frankliniella occidentalis*, feeding on green bean, *Phaseolus vulgaris*, plants under greenhouse conditions 2017.
- Efficacy of S-1423 300 G/L SC and V-10435 mixtures compared to Kontos®, Venom®, and Sivanto® mixed with CapSil® against citrus mealybug, *Planococcus citri*, feeding on coleus, *Solenostemon scutellarioides*, plants under greenhouse conditions 2017.
- Efficacy of V-10433 and other insecticides on citrus mealybug, *Planococcus citri*, feeding on coleus, *Solenostemon scutellarioides*, plants under greenhouse conditions 2017.
- Determine phytotoxicity of the insecticide tolfenpyrad (Hachi-Hachi®) on various greenhouse-grown horticultural plants 2017 (IR-4 Formal Report).
- Determine phytotoxicity of the pesticides cyflumetofen (Sultan™) and pyrifluquinazon (Rycar®) on various greenhouse-grown herbaceous horticultural plants 2017 (IR-4 Formal Report).
- Effect of five insecticides in reducing foliar damage caused by redheaded flea beetle (*Systema frontalis*) adults on sweetspire (*Itea virginica*) plants in a nursery production system 2017 (IR-4 Formal Report).
- Efficacy of VST-006340LC and TriStar® against the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae) on coleus, *Solenostemon scutellarioides*, plants grown under greenhouse conditions 2016.
- Efficacy of VST-006340LC and Overture® against western flower thrips, *Frankliniella occidentalis*, in transvaal daisy, *Gerbera jamesonii*, flowers under greenhouse conditions 2016.
- Evaluate tolerance of string bean (*Phaseolus vulgaris*) to S-1423 under greenhouse conditions 2016.
- Evaluate tolerance of lettuce (*Lactuca sativa*) to S-1423 under greenhouse conditions 2016.

- Evaluate tolerance of summer squash (*Cucurbita pepo*) to S-1423 under greenhouse conditions 2016.
- Evaluate tolerance of hardy geranium (*Geranium incanum* ‘Sugar Plum’) to S-1423 under greenhouse conditions 2016.
- Effect of the insecticide VST-006340LC on the insidious flower bug, *Orius insidiosus*, and the rove beetle, *Dalotia coriaria*, under laboratory conditions 2016.
- Direct and indirect effects of pesticides on the insidious flower bug, *Orius insidiosus* (Hemiptera: Anthocoridae) under laboratory conditions 2016.
- Direct effects of pesticides and pesticide mixtures on the insidious flower bug, *Orius insidiosus* (Hemiptera: Anthocoridae) under laboratory conditions 2016.
- Efficacy of drench applications of Mainspring™ against the larvae of the fungus gnat, *Bradysia* sp. nr. *coprophila* under greenhouse conditions 2016.
- Residual effects of the insecticide Mainspring™ on rove beetle, *Dalotia coriaria* adults 2016.
- Effect of surfactants on the insidious flower bug, *Orius insidiosus* under laboratory conditions 2016.
- Efficacy of *Metarhizium anisopliae* strain F52 (Met52® EC), and pyriproxyfen (Fulcrum®) against the fungus gnat, *Bradysia* sp. nr. *coprophila*, under laboratory conditions 2016.
- Effect of five insecticides in reducing foliar damage caused by redheaded flea beetle (*Systema frontalis*) adults on sweetspire (*Itea virginica*) in a nursery production system 2016.
- Effectiveness of neonicotinoid systemic insecticides against the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae) on coleus, *Solenostemon scutellarioides* 2016.
- Effectiveness of systemic insecticides against the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae) on coleus, *Solenostemon scutellarioides* 2016.
- Effect of growing media and moisture content on adult rove beetle, *Dalotia coriaria* predation on fungus gnat, *Bradysia* sp. nr. *coprophila* larvae under laboratory and greenhouse conditions 2016.
- Efficacy of A16894D against the sweet potato whitefly B-biotype, *Bemisia tabaci* (Hemiptera: Aleyrodidae), under greenhouse conditions 2016.
- Tolerance of select beneficial insects and mites to XXpire™ insecticide 2015.
- Effect of Growstones® as a physical barrier in decreasing populations of the fungus gnat, *Bradysia* sp. nr. *coprophila* under greenhouse conditions 2015.
- Efficacy of the insecticide XXpire™ in controlling the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae), under greenhouse conditions 2015.
- Direct effects of XXpire® insecticide on beneficial arthropods 2015.
- Efficacy of two formulations of the insect growth regulator, pyriproxyfen (Distance® and Fulcrum®) against the fungus gnat, *Bradysia* sp. nr. *coprophila*, under laboratory conditions 2015.
- Direct effects of the insecticide Mainspring™ on the rove beetle, *Dalotia coriaria* 2015.
- Efficacy of various insecticides in controlling the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae), under greenhouse conditions 2015.
- Evaluation of the susceptibility of different cultivars of *Weigela* spp. to flea beetles 2015.
- Direct effects of the insecticide XXpire™ on the insidious flower bug, *Orius insidiosus* under laboratory conditions 2015.
- Efficacy of gs-omega/kappa-hctx-hvla (VST-06330 EP), *Bacillus thuringiensis* subsp. *israelensis* strain bmp 144 (Aquabac® 3000), and clove and rosemary oil (SNS 203™) against the fungus gnat, *Bradysia* sp. nr. *coprophila*, under laboratory conditions 2015.
- Efficacy of pyrifluquinazon (Rycar®) and dinotefuran (Safari® 20 SG) for control of the citrus mealybug, *Planococcus citri* (Hemiptera: Pseudococcidae), under greenhouse conditions 2015.
- Determine the effect of various miticides and combinations against the twospotted spider mite, *Tetranychus urticae* under greenhouse conditions 2014.
- Determine the translaminar activity of hexythiazox (Hexygon) and GWN-10208 with and without Kinetic® against the twospotted spider mite, *Tetranychus urticae* on two different horticultural crops 2014.

- Efficacy of A20520, thiamethoxam, and *Steinernema feltiae* against the larval stage of the fungus gnat, *Bradysia* sp. nr. *coprophila* under laboratory conditions 2014.
- Effects of AzaGuard and Zerotel on the biological control agents: *Amblyseius swirskii*, *Phytoseiulus persimilis*, *Orius insidiosus*, and *Leptomastix dactylopii* under laboratory conditions 2014.
- Efficacy of AzaGuard and AzaGuard + AX-1373 against the citrus mealybug, *Planococcus citri* under greenhouse conditions 2014.
- Efficacy of entomopathogenic fungi and pyrethrins against the citrus mealybug, *Planococcus citri* under greenhouse conditions 2014.
- Efficacy of insecticides available for homeowner use against the citrus mealybug, *Planococcus citri*, under greenhouse conditions 2013.
- Feeding location of the citrus mealybug (*Planococcus citri*) on untreated green coleus (*Solenostemon scutellarioides*) plants in sun and shade under greenhouse conditions 2013.
- Effect of reduced rates of pesticide mixtures on the western flower thrips, *Frankliniella occidentalis* associated with cut flowers 2013.
- Effect of incorporating KleenGrow™ into pesticide mixtures to enhance efficacy against the western flower thrips, *Frankliniella occidentalis* under greenhouse conditions 2013.
- Determine the effectiveness of GWN-1531 + GWN-1708 against the twospotted spider mite, *Tetranychus urticae* under greenhouse conditions 2013.
- Phytotoxicity of the insecticides tolfenpyrad (Hachi-Hachi®) and spirotetramat (Kontos™) on greenhouse-grown horticultural plants (IR-4 Formal Report) 2013.
- Effect of different treatment application frequencies of Mighty Wash® against the citrus mealybug, *Planococcus citri* under greenhouse conditions 2013.
- The efficacy of Mighty Wash® against the citrus mealybug, *Planococcus citri* under greenhouse conditions 2013.
- Determine effectiveness of the SHARK S3901Q2 electronic steam applicator against the bed bug, *Cimex lectularius* 2013.
- Determine the effectiveness of different application volumes of BAS 92102 against the twospotted spider mite, *Tetranychus urticae* under greenhouse conditions 2013.
- Efficacy of Nuke Em® against the citrus mealybug, *Planococcus citri* under greenhouse conditions 2013.
- Efficacy of Discus® tablets against the citrus mealybug, *Planococcus citri* under greenhouse conditions 2013.
- Effect of Growstones® on the fungus gnat, *Bradysia* sp. nr. *coprophila* adult emergence and egg survival under laboratory conditions 2013.
- Efficacy of dinotefuran and confidential insecticides against the western flower thrips, *Frankliniella occidentalis* under greenhouse conditions 2013.
- Repellent activity of mulches incorporated with an insecticide and herbicides on the bigheaded ant, *Pheidole megacephala* 2013.
- Effect of different treatment application frequencies of Mighty Wash® against the citrus mealybug, *Planococcus citri* under greenhouse conditions 2012.
- Determine the effectiveness of CX-48 (tebufenpyrad 3EC) against the twospotted spider mite, *Tetranychus urticae* under greenhouse conditions 2012.
- Phytotoxicity of the insecticides tolfenpyrad, pyridalyl, and spirotetramat on greenhouse-grown horticultural plants. IR-4 Formal Report 2012.
- Effect of entomopathogenic fungi against western flower thrips, *Frankliniella occidentalis* populations of transvaal daisy, *Gerbera jamesonii* plants under greenhouse conditions 2012.
- Evaluate the effectiveness of azadirachtin (AzaGuard™) in regulating western flower thrips, *Frankliniella occidentalis* populations on transvaal daisy, *Gerbera jamesonii* plants under greenhouse conditions 2012.
- Determine the effectiveness of numbered compounds (GWN-1531, GWN-10143, and GWN-1708) against the twospotted spider mite, *Tetranychus urticae* under greenhouse conditions 2012.

- Effect of diflubenzuron (Adept®) on fungus gnat, *Bradysia* sp. nr. *coprophila* larvae and rove beetle, *Atheta coriaria* adults in the growing medium 2012.
- Effect of Growstones™ on fungus gnat, *Bradysia* sp. nr. *coprophila* adult emergence and female oviposition in growing medium 2012.
- Determine the effects of thiamethoxam (Flagship®) drenches on western flower thrips (*Frankliniella occidentalis*) populations and plant vigor associated with common garden verbena (*Verbena x hybrida*) plants 2012.
- Efficacy of KleenGrow™ applied individually and incorporated into insecticide spray solutions against the western flower thrips, *Frankliniella occidentalis* and citrus mealybug, *Planococcus citri* 2012.
- Effect of A16901B applied as a foliar spray or drench to the growing medium on the sweet potato whitefly B-biotype, *Bemisia tabaci* under greenhouse conditions 2012.
- Determine the effectiveness of hexythiazox (Hexygon 50 DF) against the twospotted spider mite, *Tetranychus urticae* under greenhouse conditions 2011.
- Evaluate the effect of contact and residual timing of insecticides used for control of the western flower thrips, *Frankliniella occidentalis* on transvaal daisy, *Gerbera jamesonii* under greenhouse conditions 2011.
- Effectiveness of the Euro-Pro Shark SC3901W electronic hand-held steam scrubber unit against the bed bug, *Cimex lectularius* 2011.
- Evaluate the performance of fenazaquin (Magus™) against the two-spotted spider mite, *Tetranychus urticae* on butterfly bush, *Buddleia davidii* 2011.
- Determine the performance of fenazaquin (Magus™) against the two-spotted spider mite, *Tetranychus urticae* under greenhouse conditions 2011.
- Evaluate the efficacy of different formulations of SYN545377 applied as either a foliar spray or drench to the growing medium against the sweet potato whitefly B-biotype, *Bemisia tabaci* under greenhouse conditions 2011.
- Effect of petroleum-based oil insecticides and potassium nitrate on sweet potato whitefly B-biotype, *Bemisia tabaci* nymphs 2011.
- Determine the ovicidal properties of *Beauveria bassiana* (BotaniGard®) on sweet potato whitefly B-biotype, *Bemisia tabaci* eggs 2011.
- Evaluate effect of various treatments of the entomopathogenic nematode, *Steinernema feltiae* in reducing populations of the western flower thrips, *Frankliniella occidentalis* in chrysanthemum, *Dendranthema x grandiflorum* flowers under greenhouse conditions 2011.
- Effect of growing medium applications of designated numbered compounds and insecticide treatments for control of the sweetpotato whitefly B-biotype (*Bemisia tabaci*) under greenhouse conditions 2010.
- Effect of drench and spray applications of insecticides and numbered compounds in suppressing populations of the western flower thrips, *Frankliniella occidentalis* on chrysanthemum, *Dendranthema grandiflora* plants under greenhouse conditions 2010.
- Effect of *Bacillus pumilus* GHA 180 on the fungus gnat, *Bradysia* sp. nr. *coprophila* (Sciaridae: Diptera) larvae 2009.
- Activity of numbered compounds and sugar-based insecticides against western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers under greenhouse conditions 2009.
- Activity of numbered compound (S-1783) against the pea aphid, *Acyrtosiphon pisum* feeding on lima bean, *Phaseolus limensis* plants under greenhouse conditions 2009.
- Determine the effect of the entomopathogenic nematode, *Steinernema feltiae* in reducing populations of the western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers under greenhouse conditions 2009.
- Efficacy of designated insecticides against western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers under greenhouse conditions. IR-4 Formal Report 2009.

- Effect of *Beauveria bassiana* (BotaniGard) on the fungus gnat, *Bradysia* sp. nr. *coprophila* (Sciaridae: Diptera) larvae 2008.
- Activity of *Beauveria bassiana* (BotaniGard®) and mixtures with azadirachtin (Ornazin®) against the western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers under greenhouse conditions 2009.
- Activity of *Beauveria bassiana* (BotaniGard®) and mixtures with azadirachtin (Ornazin®) against the western flower thrips, *Frankliniella occidentalis* nymphs in transvaal daisy, *Gerbera jamesonii* flowers under greenhouse conditions 2009.
- Effect of various insecticides for control of the fungus gnat, *Bradysia* sp. nr. *coprophila* (Sciaridae: Diptera) larvae 2008.
- Effect of drench applications of designated pest control materials against the sweet potato whitefly B-biotype, *Bemisia tabaci* Gennadius under greenhouse conditions 2008.
- Effect of foliar applications of designated pest control materials against the sweet potato whitefly B-biotype, *Bemisia tabaci* Gennadius under greenhouse conditions 2008.
- Efficacy of foliar and drench applications of insecticides against the sweet potato whitefly B-biotype, *Bemisia tabaci* Gennadius under greenhouse conditions 2008.
- Control of western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers using a plant-derived essential oil product (Ecotrol®) 2008.
- Efficacy of plant-derived essential oil products in controlling the sweet potato whitefly B-biotype, *Bemisia tabaci* Gennadius under greenhouse conditions 2008.
- Efficacy of plant-derived essential oil products in controlling the brown soft scale, *Coccus hesperidum* L. under greenhouse conditions 2008.
- Efficacy of individual pesticide treatments and pesticide mixtures in controlling the twospotted spider mite, *Tetranychus urticae* Koch 2008.
- Effect of lure (ThripLine AMS) in enhancing detection of western flower thrips, *Frankliniella occidentalis* adults on blue sticky cards 2008.
- Efficacy of insecticides, including numbered compounds and commercially available products, against western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers 2008.
- Effect of SP3010 spray applications for control of the western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers 2008.
- Efficacy of foliar and drench applications of insecticides against the sweet potato whitefly B-biotype, *Bemisia tabaci* Gennadius under greenhouse conditions 2008.
- Effect of potassium bicarbonate (MilStop®) on the natural enemies of the citrus mealybug, *Planococcus citri*: the parasitoid, *Leptomastix dactylopii* and the coccinellid beetle, *Cryptolaemus montrouzieri* 2007.
- Effect of tank mixing insecticides on control of the green peach aphid, *Myzus persicae* Sulzer 2008.
- Effect of selected molluscicides for control of the common garden slug, *Derocerus reticulatum* 2007.
- Attractiveness of parboiled rice hulls to the fungus gnat, *Bradysia* sp. nr. *coprophila* (Diptera: Sciaridae) compared to standard growing medium components 2007.
- Control of western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers with insecticides 2007.
- Activity of SP3010 on the green peach aphid, *Myzus persicae* 2007.
- Effect of *Beauveria bassiana* (BotaniGard) on the sweet potato whitefly B-biotype, *Bemisia argentifolii* under greenhouse conditions 2007.
- Effect of *Beauveria bassiana* (BotaniGard) on the green peach aphid, *Myzus persicae* Sulzer under greenhouse conditions 2007.
- Activity of different insecticides in controlling western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers 2007.
- Efficacy of selected pest control materials against the twospotted spider mite, *Tetranychus urticae* Koch 2007.

- Efficacy of the insecticide, thiamethoxam (Meridian) in controlling Japanese beetle, *Popillia japonica* (Newman) larvae 2007.
- Activity of different insecticides in controlling western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers 2007.
- Effect of selected insecticides for control of the fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner) 2007.
- Effect of insecticide spray applications for control of the western flower thrips, *Frankliniella occidentalis* in transvaal daisy, *Gerbera jamesonii* flowers 2007.
- Effect of numbered compounds in controlling citrus mealybug, *Planococcus citri* (Risso) on coleus, *Solenostemon scutellarioides* (L.) Codd 2006.
- Evaluate efficacy of acequinocyl (Shuttle) and abamectin (Avid) on the twospotted spider mite, *Tetranychus urticae* Koch 2006.
- Effect of insecticides in controlling the green peach aphid, *Myzus persicae* (Sulzer) under greenhouse conditions 2006.
- Compare residual activity of etoxazole (TetraSan) with other miticides for control of the twospotted spider mite, *Tetranychus urticae* Koch 2006.
- Effect of insecticides in controlling the silverleaf whitefly, *Bemisia argentifolii* Bellows & Perring under greenhouse conditions 2006.
- Activity of insecticides in controlling citrus mealybug, *Planococcus citri* (Risso) on coleus, *Solenostemon scutellarioides* (L.) Codd 2005.
- Activity of insecticides for control of western flower thrips, *Frankliniella occidentalis* on transvaal daisy, *Gerbera jamesonii* flowers under greenhouse conditions 2005.
- Activity of BW420 in controlling silverleaf whitefly, *Bemisia argentifolii* on ornamental plants 2005.
- Evaluate the effects of flonicamid (Aria) for control of the fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner) under laboratory conditions 2005.
- Effect of pesticides and pesticide-mixtures for control of twospotted spider mite, *Tetranychus urticae* 2005.
- Effect of selected pesticides and pesticide-mixtures for control of green peach aphid, *Myzus persicae* 2005.
- Effect of the miticide spiromesifen (Judo) on the predatory mites, *Neoseiulus californicus* McGregor and *Phytoseiulus persimilis* Athias-Henriot 2005.
- Effect of soil-applied insecticides and rove beetles, *Atheta* (= *Dalotia*) *coriaria* (Kraatz) in controlling fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner) under laboratory conditions 2005.
- Activity of abamectin (Avid) and A8612 for control of twospotted spider mite, *Tetranychus urticae* on ornamentals 2005.
- Evaluate performance of clothianidin (Celero) and other neonicotinoid-based insecticides against silverleaf whitefly, *Bemisia argentifolii* 2005.
- Evaluate performance of selected pesticides and pesticide-mixtures for control of green peach aphid, *Myzus persicae* 2005.
- Evaluate performance of selected pesticides and pesticide-mixtures for control of twospotted spider mite, *Tetranychus urticae* 2005.
- Effect of insecticides in controlling citrus mealybug, *Planococcus citri* (Risso) 2005.
- Effect of insecticides in controlling longtailed mealybug, *Pseudococcus longispinus* (Targioni-Tozzetti) 2005.
- Effect of insecticides in controlling western flower thrips, *Frankliniella occidentalis* on transvaal daisy, *Gerbera jamesonii* flowers 2005.
- Determine repellency of essential oils on green peach aphid, *Myzus persicae* 2005.
- Effect of compounds derived from essential oils on two-spotted spider mite, *Tetranychus urticae* 2005.
- Effect of insecticides in controlling citrus mealybug, *Planococcus citri* (Risso) 2005.
- Effect of insecticides in controlling western flower thrips, *Frankliniella occidentalis* on transvaal daisy, *Gerbera jamesonii* flowers 2005.
- Effect of insecticides in controlling longtailed mealybug, *Pseudococcus longispinus* (Targioni-Tozzetti) 2005.

- Determine the effect of clothianidin (Arena) and other neonicotinoid-based insecticides on fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner) 2004.
- Determine the effect of clothianidin (Arena) against citrus mealybug, *Planococcus citri* (Risso) 2004.
- Evaluate performance of acequinocyl (Shuttle) against twospotted spider mite, *Tetranychus urticae* 2004.
- Efficacy of different pest control materials for control of green peach aphid, *Myzus persicae* 2004.
- Effect of insecticides and insecticide-mixtures for control of western flower thrips, *Frankliniella occidentalis* 2004.
- Efficacy of different pest control materials for control of silverleaf whitefly, *Bemisia argentifolii* 2004.
- Effectiveness of different azadirachtin (Azatin) formulations for control of silverleaf whitefly, *Bemisia argentifolii* 2004.
- Effect of soil-applied insecticides in controlling the fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner) 2004.
- Evaluate efficacy of pyriproxyfen (Distance) and dinotefuran (Safari) for control of fungus gnats, *Bradysia* sp. nr. *coprophila* (Lintner) 2004.
- Determine efficacy of pyriproxyfen (Distance) and V-10112 for control of citrus mealybug, *Planococcus citri* (Risso) 2004.
- Evaluate efficacy of selected insecticides and Milstop™ for control of citrus mealybug, *Planococcus citri* (Risso) 2004.
- Efficacy of milbemectin (Ultiflora) combined with a surfactant for control of two-spotted spider mite, *Tetranychus urticae* on marigold, *Tagetes patula* 2004
- Effect of insecticides and insecticide-mixtures for control of western flower thrips, *Frankliniella occidentalis* 2004.
- Determine efficacy of insecticides and insecticide mixtures for control of long-tailed mealybug, *Pseudococcus longispinus* (Targioni-Tozzetti) 2004.
- Determine efficacy of insecticides and insecticide mixtures for control of citrus mealybug, *Planococcus citri* (Risso) 2004.
- Evaluate performance of pesticides and pesticide-mixtures for control of twospotted spider mite, *Tetranychus urticae* 2004.
- Assess performance of selected pesticides and pesticide-mixtures for control of green peach aphid, *Myzus persicae* 2004.
- Determine efficacy of spiromesifen (Judo) and chlorfenapyr (Pylon) in controlling twospotted spider mite, *Tetranychus urticae* 2004.
- Baseline sensitivity testing of silverleaf whitefly, *Bemisia argentifolii* to thiamethoxam (Flagship) and imidacloprid (Marathon) compared to field efficacy on ornamentals 2004.
- Determine efficacy of spray and drench applications of selected insecticides for control of green peach aphid, *Myzus persicae* 2004.
- Determine the effects of flonicamid (Aria) on the citrus mealybug parasitoid, *Leptomastix dactylopii* (Howard) (Hymenoptera: Encyrtidae) under laboratory conditions 2004.
- Effect of insecticides in controlling long-tailed mealybug, *Pseudococcus longispinus* 2004.
- Determine the effect of the essential oil from *Chenopodium ambrosioides* L., on fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner) 2003.
- Evaluate the effects of the miticide, chlorfenapyr (Pylon) on the predatory mites, *Neoseiulus californicus* McGregor and *Phytoseiulus persimilis* Athias-Henroit 2003.
- Assess the effect of acetamiprid (TriStar®) in controlling citrus mealybug, *Planococcus citri* (Risso) 2003.
- Efficacy of different miticides for control of two-spotted spider mite, *Tetranychus urticae* on marigold, *Tagetes patula* 2003.
- Effect of the insect growth regulator, novaluron (Pedestal®) in controlling citrus mealybug, *Planococcus citri* (Risso) 2003.
- Lethal and sub-lethal effects of novaluron (Pedestal®) on the soil-dwelling predatory mite, *Hypoaspis miles* (Berlese) 2003.

- Determine the effect of different formulations of etoxazole (TetraSan[®]) in controlling two-spotted spider mite, *Tetranychus urticae* 2003.
- Determine the effect of flonicamid (Aria[®]) and other systemic insecticides in controlling citrus mealybug, *Planococcus citri* (Risso) 2003.
- Effect of different soil-applied insecticides in controlling fungus gnat, *Bradysia* sp. nr. *coprophila* (Lintner) 2003.
- Determine the effect of imidacloprid (Merit[®]) in controlling long-tailed mealybug, *Pseudococcus longispinus* 2003.
- Efficacy of milbemectin (Ultiflora) against two-spotted spider mite, *Tetranychus urticae* on marigold, *Tagetes patula* 2003.
- Determine the effect of insect growth regulators in controlling long-tailed mealybug, *Pseudococcus longispinus* 2003.
- Baseline sensitivity testing of silverleaf whitefly, *Bemisia argentifolii* to thiamethoxam (Flagship) compared to field efficacy on ornamentals 2003.
- The effect of *Steinernema feltiae* (Nemasys F) on the larvae and adult stages of western flower thrips, *Frankliniella occidentalis* (Pergande) 2003.
- Determine the effectiveness of drench and spray applications of selected insecticides for controlling silverleaf whitefly, *Bemisia argentifolii* (Bellow & Perring) on transvaal daisy, *Gerbera jamesonii* H. Bolus ex. Hook f. 2002.
- Effect of spray and drench applications of selected insecticides in controlling the pupae stage of western flower thrips, *Frankliniella occidentalis* (Pergande) 2002.
- Effect of pot size, plant number, application type, and formulation on the activity of thiamethoxam (Flagship) for control of citrus mealybug, *Planococcus citri* (Risso) 2002.
- Effect of Agri-50 on silverleaf whitefly, *Bemisia argentifolii* Bellows & Perring, crawler emergence from eggs and adult emergence from pupae 2002.
- Efficacy of several new miticides for two-spotted spider mite, *Tetranychus urticae* control on marigold, *Tagetes patula* 2002.
- Evaluate the efficacy of Novaluron 10SC alone or in rotation with other pest control materials for management of western flower thrips, *Frankliniella occidentalis* (Pergande) on transvaal daisy, *Gerbera jamesonii* (H. Bolus ex. Hook f) 2001.
- Determine the effect of selected pest control materials for management of citrus mealybug, *Planococcus citri* (Risso) 2001.
- Determine the effectiveness of different pest control materials for management of citrus mealybug, *Planococcus citri* (Risso) 2001.
- Evaluate the effectiveness of DR-A-034, an experimental insecticide/miticide, in controlling citrus mealybug, *Planococcus citri* (Risso) 2001.
- Determine the potential phytotoxicity of Novaluron[®] at different rates on 'Freedom Red' poinsettia, *Euphorbia pulcherrima* (Willd. ex. Klotzsch) 2001.
- Evaluate the effectiveness of different pest control materials for management of citrus mealybug, *Planococcus citri* (Risso) 2001.
- Efficacy of pymetrozine (Endeavor) with and without an adjuvant on silverleaf whitefly, *Bemisia argentifolii* (Bellows & Perring), and potential phytotoxicity on bracts of 'Freedom Red' poinsettia, *Euphorbia pulcherrima* (Willd. ex. Klotzsch) 2001.
- Evaluation of Distance, V-10101, Enstar II, and Orthene for control of citrus mealybug, *Planococcus citri* (Risso) 2001.
- Determine the efficacy of various pest control materials for management of citrus mealybug, *Planococcus citri* (Risso) 2001.
- Determine the efficacy of various pest control materials for control of western flower thrips, *Frankliniella occidentalis* (Pergande) on transvaal daisy, *Gerbera jamesonii* (H. Bolus ex Hook. f) 2001.

- Evaluate the residual activity of foliar applications of thiamethoxam (Flagship 25WG) alone or in rotation with other pest control materials for management of citrus mealybug, *Planococcus citri* (Risso) 2001.
- Efficacy of Phyton 27 and selected miticides for control of twospotted spider mite, *Tetranychus urticae* Koch on marigold, *Tagetes patula* L. 2001.
- Efficacy of Agri-50 and Endeavor for green peach aphid, *Myzus persicae* control on chrysanthemum, *Dendranthema grandiflora* 2000.
- Efficacy of different pest control materials for two-spotted spider mite, *Tetranychus urticae* control on marigold, *Tagetes patula* 2000.
- Effect of different pest control materials in controlling melon aphid, *Aphis gossypii* on chrysanthemum, *Dendranthema grandiflora* 2000.
- Effectiveness of different materials in controlling citrus mealybug, *Planococcus citri* on coleus, *Solenostemon scutellarioides* 2000.
- Efficacy of different formulations of bifenthrin (Floramite) against two-spotted spider mite, *Tetranychus urticae* on marigold, *Tagetes patula* 2000.
- Evaluate efficacy of etoxazole (TetraSan) against two-spotted spider mite, *Tetranychus urticae* Koch, when tank mixed with quick knockdown adulticides 2000.
- Efficacy of Novaluron 10EC against western flower thrips, *Frankliniella occidentalis* (Pergande) on transvaal daisy, *Gerbera jamesonii* (H. Bolus ex. Hook f) 2000.
- Effectiveness of pymetrozine (Endeavor) in controlling green peach aphid, *Myzus persicae* (Sulzer) on chrysanthemum, *Dendranthema grandiflora* Tzvelev and *Ipomoea batatas* (L.) 2000.
- Efficacy of selected insecticides against western flower thrips, *Frankliniella occidentalis* (Pergande) on transvaal daisy, *Gerbera jamesonii* (H. Bolus ex. Hook f) 2000.
- Evaluation of selected miticides for two-spotted spider mite, *Tetranychus urticae* (Koch) control on marigold, *Tagetes patula* L. 2000.
- Efficacy of selected insecticides against western flower thrips, *Frankliniella occidentalis* (Pergande) on transvaal daisy, *Gerbera jamesonii* (H. Bolus ex. Hook f) 2000.
- Evaluation of selected insecticides for western flower thrips, *Frankliniella occidentalis* (Pergande) control on transvaal daisy, *Gerbera jamesonii* (H. Bolus ex. Hook f) 2000.
- Determine the effectiveness of insecticides in controlling citrus mealybug, *Planococcus citri*, under greenhouse conditions 2000.
- Evaluation of two new formulations of V-1283 for two-spotted spider mite control 2000.
- Effect of Conserve[®] SC on the control of two-spotted spider mites by beneficial insects and mites 2000.
- Phytotoxicity and control of western flower thrips, *Frankliniella occidentalis* (Pergande), with XR-693 SC under greenhouse conditions on ornamental plants 1999.
- Determine the efficacy of Cinnamite[®] on two life stages of citrus mealybug, *Planococcus citri*, under greenhouse conditions 1999.
- Compare western flower thrips, *Frankliniella occidentalis* control using Conserve[®] in a greenhouse and outdoor nursery situation 1998.
- Comparison between two formulations of acephate, 15G and 15% tablet, against western flower thrips, *Frankliniella occidentalis* on transvaal daisy, *Gerbera jamesonii* 1998.
- Evaluate effectiveness of 15% acephate tablet for controlling western flower thrips, *Frankliniella occidentalis* 1998.
- Determine efficacy of acetamiprid and fipronil EC formulations for control of western flower thrips and evaluation of phytotoxicity to transvaal daisy, *Gerbera jamesonii* 1997.
- Evaluate effectiveness of insecticide treatments for control of bagworm 1997.
- Control of western flower thrips with Conserve[®] under field plot/commercial conditions 1997.
- Evaluate effectiveness of insecticide treatments for control of western flower thrips in transvaal daisy 1997.
- Determine efficacy of CHIPCO acetamiprid alone and in tank mix combinations with CHIPCO fipronil for control of western flower thrips 1997.

- Control of small and medium-sized bagworms with Conserve[®] under field plot/commercial conditions 1997. Effectiveness of Pinpoint 15G and Marathon 1G against western flower thrips, *Frankliniella occidentalis* (Pergande) on transvaal daisy, *Gerbera jamesonii* 1995-96.
- Control of western flower thrips using spinosad (DE-105) under field plot/commercial conditions 1996. Evaluate effectiveness of insecticide treatments for control of fall webworm 1996. Evaluate effectiveness of insecticide treatments for control of eastern tent caterpillar 1996. Evaluate effectiveness of insecticide treatments for control of western flower thrips in transvaal daisy 1996. Integrated pest management of western flower thrips, *Frankliniella occidentalis* (Pergande) in greenhouse-grown carnations, *Dianthus caryophyllus*. Purdue Horticulture Greenhouses 1993-96. Biological control of European corn borer, *Ostrinia nubilalis* (Hubner) in seed corn using *Trichogramma brassicae*. Purdue University and Pioneer Hi-Bred Seed International, Inc., 1993-95. Corn and Alfalfa Insecticide Evaluations 1992-95.

7. Special Research Reports

- Willmott, A. L., R. A. Cloyd, and K. Y. Zhu. 2013. Effects of pesticide mixtures in controlling arthropod pests of greenhouses. Special Research Report #215: Insect management. American Floral Endowment; Alexandria, VA.
- Hogendorp, B. K., and R. A. Cloyd. 2012. Effect of silicon-based fertilizer applications on reproduction and development of arthropod pests associated with horticultural crops—Part 1. Special Research Report #209: Insect Management; American Floral Endowment, Alexandria, VA.
- Hogendorp, B. K., and R. A. Cloyd. 2012. Effect of silicon-based fertilizer applications on reproduction and development of arthropod pests associated with horticultural crops—Part 2. Special Research Report #209: Insect Management. American Floral Endowment; Alexandria, VA.
- Hogendorp, B. K., and R. A. Cloyd. 2012. Effect of silicon-based fertilizer applications on reproduction and development of arthropod pests associated with horticultural crops—Part 3. Special Research Report #209: Insect Management. American Floral Endowment; Alexandria, VA.

8. Competitive Grants Awarded: National Organizations (Research and Extension-Related)

- Miller, F., C. R. Thompson, D. E. Peterson, R. A. Cloyd, W. A. Johnson, B. P. McCornack, W. Upham, J. A. Hoyle, C. R. Boyer, M. Kennelly, E. D. DeWolf, S. Zukoff, S. R. Duncan, and C. Rivard. 2017. Merging traditional methods of transformative approaches to enhance stakeholder engagement and IPM adoption. United States Department of Agriculture, National Institute of Food and Agriculture (Crop Protection and Pest Management). Proposal Duration: 09/1/2017 to 08/31/2018. Funding Awarded: \$246,146.00
- Cloyd, R. A. 2016. Integrating the entomopathogenic fungus, *Beauveria bassiana*, with the rove beetle, *Dalotia coriaria*, to suppress populations of the western flower thrips, *Frankliniella occidentalis*. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 07/1/2016 through 06/30/2017. Funding Awarded: \$15,000.00
- Miller, F. L., C. R. Thompson, D. E. Peterson, R. A. Cloyd, W. A. Johnson, R. J. Whitworth, B. P. McCornack, W. Upham, J. A. Hoyle, C. R. Boyer, M. Kennelly, E. D. DeWolf, S. N. Zukoff, and S. R. Duncan. 2016. Promoting IPM and enhancing decision making among Kansas stakeholders through innovative programming. National Institute of Food and Agriculture, United States Department of Agriculture (Crop Protection and Pest Management). Proposal Duration: 09/1/2016 to 08/31/2017. Funding Awarded: \$278,000.00
- Many co-investigators and collaborators (Raymond Cloyd). 2015. Identifying opportunities and challenges for the use of bioproducts to increase the sustainability of ornamental and vegetable production in controlled environments. United States Department of Agriculture, National Institute of Food and Agriculture, Specialty Crop Research Initiative (SCRI). Proposal Duration: 01/1/2016 through 12/31/2016. Funding Awarded: \$50,000.00

- Cloyd, R. A. 2015. Determine the effect of foliar applications of entomopathogenic nematodes and water sprays on western flower thrips, *Frankliniella occidentalis*, populations. Association of Specialty Cut Flower Growers Research Foundation. Proposal Duration: 01/1/2016 through 12/31/2016. Funding Awarded: \$5,000.00
- Cloyd, R. A. 2015. Effect of the entomopathogenic fungus, *Beauveria bassiana*, and the rove beetle, *Dalotia coriaria*, in suppressing populations of the western flower thrips, *Frankliniella occidentalis*. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 07/1/2015 through 06/30/2016. Funding Awarded: \$14,000.00
- Lopez, R., R. Cloyd, B. Whipker, C. Currey, and G. Owen. 2015. eGRO Instructional Videos. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 01/01/2016 through 12/31/2016. Funding Awarded: \$9,000.00 (\$1,500.00 designated to Department of Entomology; Kansas State University, Manhattan, KS).
- Kennelly, M., C. Rivard, D. Ricks Presley, R. Cloyd, and K. Oxley. 2015. Soil health bootcamp and applications to sustainable vegetable cropping: professional development for local agriculture educators. North Central Region (NCR) Sustainable Agriculture Research and Education (SARE) Professional Development Grant Program. Proposal Duration: 01/1/2016 through 12/31/2018. Funding Awarded: \$64,307.00
- Miller, F., B. McCornack, R. Cloyd, J. Cox, L. Oppy, W. Upham, and C. Boyer. 2014. Promoting IPM and enhancing decision making among Kansas stakeholders through innovative programming. National Institute of Food and Agriculture, United States Department of Agriculture (Crop Protection and Pest Management). Proposal Duration: 09/1/2014 to 08/31/2015. Funding Awarded: \$278,000.00
- Krug, B. A., B. E. Whipker, R. G. Lopez, R. A. Cloyd, and O. Garrett. 2014. eGRO Instructional Videos. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 01/01/2014 through 12/31/2014. Funding Awarded: \$7,500.00 (\$1,500.00 designated to Department of Entomology; Kansas State University, Manhattan, KS).
- Cloyd, R. A. 2014. Effect of incorporating entomopathogenic fungi into rotation programs against the western flower thrips, *Frankliniella occidentalis*. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 07/1/2014 through 06/30/2015. Funding Awarded: \$15,000.00
- Miller, F., J. Shroyer, C. Thompson, D. Peterson, B. McCornack, R. Whitworth, R. Cloyd, W. Johnson, W. Upham, C. Boyer, M. Kennelly, and E. DeWolf. 2013. Innovative programming resources for Kansas stakeholders to enhance IPM decisions. United States Department of Agriculture (Extension IPM Coord/Support: E-IPM Grant). Proposal Duration: 09/01/2013 to 08/31/2016. Funding Awarded: \$289,200.00
- Cloyd, R. A. 2013. Effect of pesticide mixtures on arthropod pests of cut flowers. Association of Specialty Cut Flower Growers Research Foundation. Proposal Duration: 03/1/2013 through 02/28/2014. Funding Awarded: \$5,000.00
- Krug, B. A., B. E. Whipker, R. G. Lopez, M. Daughtrey, R. A. Cloyd, and K. A. Williams. 2013. eGRO University certificate. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 01/01/2013 through 12/31/2014. Funding Awarded: \$6,000.00 (\$750.00 designated to Department of Entomology; Kansas State University, Manhattan, KS).
- Cloyd, R. A. 2013. Effectiveness of systemic insecticides in regulating populations of the citrus mealybug, *Planococcus citri*. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 07/1/2013 through 06/30/2014. Funding Awarded: \$11,000.00
- Cloyd, R. A. 2012. Residual efficacy of systemic insecticides in regulating populations of the citrus mealybug, *Planococcus citri*. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 07/1/2012 through 06/30/2013. Funding Awarded: \$11,000.00

- Krug, B. A., B. E. Whipker, R. G. Lopez, M. Daughtrey, R. A. Cloyd, and K. A. Williams. 2012. eGRO—Electronic grower resources online. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 01/01/2012 through 12/31/2013. Funding Awarded: \$16,600.00 (\$2,700.00 designated to Department of Entomology; Kansas State University, Manhattan, KS).
- Cloyd, R. A. 2012. Effect of pesticide mixtures on arthropod pests of cut flowers. Association of Specialty Cut Flower Growers Research Foundation. Proposal Duration: 03/1/2012 through 02/28/2013. Funding Awarded: \$5,000.00
- Kennelly, M., N. Ricci, L. Biles, C. Barden, R. Atchison, R. Cloyd, and J. O'Mara. 2012. Professional development training for sustainable agroforestry in Kansas. North Central Region—Sustainable Agriculture Research and Education (SARE) Professional Development Program. Proposal Duration: 01/01/2012 through 12/31/2013. Funding Awarded: \$50,946.00
- Cloyd, R. A. 2011. Effect of sugar-based compounds in enhancing the efficacy of insecticides against the western flower thrips, *Frankliniella occidentalis*. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 01/01/2011 through 12/31/2012. Funding Awarded: \$8,000.00
- Krug, B. A., B. E. Whipker, R. G. Lopez, M. Daughtrey, R. A. Cloyd, and K. A. Williams. 2011. eGRO—Electronic grower resources online. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 01/01/2011 through 12/31/2012. Funding Awarded: \$16,600.00 (\$2,600.00 designated to Kansas State University).
- Cloyd, R. A. 2011. Effect of pesticide mixtures on arthropod pests of cut flowers. Association of Specialty Cut Flower Growers Research Foundation. Proposal Duration: 03/1/2011 through 02/28/2012. Funding Awarded: \$5,000.00
- Cloyd, R. A., and K. Y. Zhu. 2010. Effect of pesticide mixtures in controlling arthropod pests. American Floral Endowment. Proposal Duration: 08/01/2010 through 07/31/2013. Funding Awarded: \$75,000.00
- Cloyd, R. A. 2009. Efficacy and characteristics of commercially available plant-derived essential oil products used for control of greenhouse insect and mite pests. Fred C. Gloeckner Foundation, Inc. Proposal Duration: 07/31/2009 through 06/30/2010. Funding Awarded: \$9,000.00
- Cloyd, R. A. 2008. Efficacy and characteristics of plant derived essential oils used to control greenhouse arthropod pests. Fred C. Gloeckner Foundation, Inc. Proposal Duration: 07/31/2008 through 06/30/2009. Funding Awarded: \$10,000.00
- Cloyd, R. A., and K. Y. Zhu. 2008. Resistance of soft scale and mealybug pests to insecticides commonly used in interior plantscapes. National Foliage Foundation. Proposal Duration: 01/01/2009 through 05/31/2012. Funding Awarded: \$84,000.00
- Carey, E., R. Janke, K. Williams, C. Rajashekar, M. Kennelly, J. Nechols, R. Cloyd, and N. Nelson. 2007. Effects of organic fertility management on crop health and phytochemical content of vegetables under open field and high tunnel production. United States Department of Agriculture Integrated Organic Program. Proposal Duration: 06/01/2007 through 05/30/2010. Funding Awarded: \$964,610.00
- Cloyd, R. A. 2007. Effect of silicon applications on the reproduction and development of arthropod pests feeding on horticultural crops. American Floral Endowment. Proposal Duration: 06/01/2007 through 05/31/2008. Funding Awarded: \$20,000.00
- Cloyd, R. A. 2007. The effect of extracts derived from organic growing medium components in controlling fungus gnats, *Bradysia* spp. (Diptera: Sciaridae) in greenhouses. Fred C. Gloeckner Foundation, Inc. Proposal Duration: 07/31/2007 through 06/30/2008. Funding Awarded: \$12,000.00
- Cloyd, R. A. 2007. Effect of systemic insecticides on the brown soft scale, *Coccus hesperidum*. National Foliage Foundation. Proposal Duration: 05/01/2007 through 04/30/2008. Funding Awarded: \$2,000.00
- Cloyd, R. A., and R. A. Larson. 2006. The effects of extracts derived from organic growing medium components in controlling fungus gnats, *Bradysia* spp. (Diptera: Sciaridae) in greenhouses. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 09/01/2006 through 08/31/2008. Funding Awarded: \$20,000.00

- Brewer, M., D. Brown-Rytlewski, R. Richardson, S. Gower, J. Byrne, D. Smitley, B. Zandstra, J. Neal, and R. Cloyd. 2005. Development of regionally-based educational materials for ornamental IPM. North Central IPM Center Implementation Grant Program. United States Department of Agriculture Cooperative State Research, Education, and Extension Service. Proposal Duration: 04/01/2005 through 03/31/2007. Funding Awarded: \$72,194.00
- Horst, K. R., and R. A. Cloyd. 2004. Revision of the Compendium of Rose Diseases. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 09/01/2004 through 08/31/2005. Funding Awarded: \$3,500.00
- Cloyd, R. A., and R. A. Larson. 2004. Alternative management strategies to control fungus gnats, *Bradysia* spp. (Diptera: Sciaridae) in greenhouses using extracts derived from organic soil components. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 09/01/2004 through 08/31/2006. Funding Awarded: \$20,000.00
- Warnock, D. F., and R. A. Cloyd. 2003. Effect of tank mixes on the efficacy of biorational pest control materials in controlling western flower thrips, *Frankliniella occidentalis* Pergande, on two cut flower crops. Kee Kitayama Research Foundation. Proposal Duration: 02/15/2003 through 02/14/2004. Funding Awarded: \$9,500.00
- Warnock, D. F., and R. A. Cloyd. 2003. Determining the effect of tank mixes on the efficacy of biorational pesticides in controlling western flower thrips, *Frankliniella occidentalis* (Pergande). Floriculture Industry Research and Scholarship Trust (FIRST). Proposal Duration: 01/01/2003 through 12/31/2003. Funding Awarded: \$5,000.00
- Parrella, M., K. Heinz, R. Cloyd, D. Ullman, and K. Robb. 2002. Management strategies for thrips and tospoviruses on cut flowers/specialty crops, potted crops, and bedding plants. American Floral Endowment Research Grant Program/Agricultural Research Service (ARS). Proposal Duration: 09/01/2002 through 08/31/2006. Funding Awarded: \$390,000.00
- Nechols, J. R., D. C. Margolies, K. A. Williams, T. L. Marsh, and R. A. Cloyd. 2002. Alternative pest management for greenhouse bedding plants: Demonstration and economic evaluation at a commercial level. United States Department of Agriculture-Pest Management Alternative Program (PMAP) Cooperative State Research, Education, and Extension Service Grant. Proposal Duration: 09/01/2002 through 08/31/2004. Funding Awarded: \$165,803.00
- Warnock, D. F., and R. A. Cloyd. 2001. Managing western flower thrips using a combination of impatiens with natural resistance and reduced-risk insecticides. The Fred C. Gloeckner Foundation, Inc. Proposal Duration: 09/01/2001 through 08/31/2002. Funding Awarded: \$10,000.00
- Kalnay, P. L., G. Czapar, and R. A. Cloyd. 2001. Developing educational programs for retail stores that sell pesticides. United States Environmental Protection Agency Grant: Educational Pilot Program. Proposal Duration: 01/01/2001 through 12/31/2002. Funding Awarded: \$21,900.00
- Warnock, D. F., and R. A. Cloyd. 1999. Identifying interactions between impatiens with natural resistance to western flower thrips and synthetic insecticides: Evaluation for IPM programs. The Fred C. Gloeckner Foundation Research, Inc. Proposal Duration: 01/01/2000 through 12/31/2000. Funding Awarded: \$10,000.00
- 9. Competitive Grants Awarded: Regional Organizations (Research and Extension-Related)**
- Williams, K. A., T. Carey, R. Janke, R. Cloyd, and M. Kennelly. 2008. Developing web resources for organic production in high tunnels. Organic Farming Research Foundation. Proposal Duration: 01/01/2009 through 12/31/2011. Funding Awarded: \$14,322.00
- Williams, K. A., and R. A. Cloyd. 2007. Impact of light intensity on the ability of systemic insecticides to control whiteflies. K-State IPM Mini-Grant Program. Proposal Duration: 01/01/2007 through 12/31/2007. Funding Awarded: \$5,221.00
- Byrne, J., R. Richardson, D. Brown-Rytlewski, W. Kirk, B. Zandstra, S. Gower, D. Smitley, and R. Cloyd. 2005. Development of three pocket IPM scouting guides for pest identification in Christmas trees, nurseries, and landscapes. Project GREEN Grant Program. Proposal Duration: 04/01/2005 through 12/31/2006. Funding Awarded: \$14,730.00

- Andresen, J. W., R. A. Cloyd, and N. R. Pataky. 2001. Seminar and workshop on solutions to solve tree maladies found on United States Department of Defense urban forests. USDA Forest Service Urban Forestry Center for the Midwestern States Urban and Community Forestry Technology Transfer Grant. Proposal Duration: 08/10/2001 through 09/30/2003. Funding Awarded: \$30,000.00
- 10. Competitive Grants Awarded: State Organizations (Research and Extension-Related)**
- Cloyd, R. A. 2017. Monitoring for larval populations of turfgrass insect pests at Rocky Ford Turfgrass Facility. Kansas Turfgrass Foundation. Proposal Duration: 01/01/2017 through 12/31/2017. Funding Awarded: \$1,500.00
- Cloyd, R. A. 2016. Monitoring for larval populations of turfgrass insect pests at Rocky Ford Turfgrass Facility. Kansas Turfgrass Foundation. Proposal Duration: 01/01/2016 through 12/31/2016. Funding Awarded: \$1,500.00
- Cloyd, R. A. 2015. Monitoring for larval populations of turfgrass insect pests at Rocky Ford Turfgrass Facility. Kansas Turfgrass Foundation. Proposal Duration: 01/01/2015 through 12/31/2015. Funding Awarded: \$1,500.00
- Cloyd, R. A. 2014. Monitoring for larval populations of turfgrass insect pests at Rocky Ford Turfgrass Facility. Kansas Turfgrass Foundation. Proposal Duration: 01/01/2014 through 12/31/2014. Funding Awarded: \$2,000.00
- Cloyd, R. A. 2013. Monitoring for bluegrass billbug, *Sphenophorus parvulus* populations at Rocky Ford Turfgrass Facility. Kansas Turfgrass Foundation. Proposal Duration: 01/01/2013 through 12/31/2013. Funding Awarded: \$3,000.00
- Cloyd, R. A. 2012. Assess susceptibility of zoysiagrass cultivars to the bluegrass billbug, *Sphenophorus parvulus*. Kansas Turfgrass Foundation. Proposal Duration: 01/01/2012 through 12/31/2012. Funding Awarded: \$3,000.00
- Cloyd, R. A. 2011. Determine susceptibility of zoysiagrass cultivars against the bluegrass billbug, *Sphenophorus parvulus*. Kansas Turfgrass Foundation. Proposal Duration: 01/01/2011 through 12/31/2011. Funding Awarded: \$2,000.00
- Cloyd, R. A. 2010. Determine the effectiveness of insecticides against the billbug, *Sphenophorus* spp. Kansas Turfgrass Foundation. Proposal Duration: 01/01/2010 through 12/31/2010. Funding Awarded: \$4,000.00
- Cloyd, R. A. 2009. Efficacy of insecticides against the billbug, *Sphenophorus* spp. Kansas Turfgrass Foundation. Proposal Duration: 01/01/2009 through 12/31/2009. Funding Awarded: \$4,000.00
- Cloyd, R. A. 2008. Comprehensive literature review associated with organic mulches and arthropods. Mulch and Soil Council Research Foundation. Proposal Duration: 01/01/2008 through 12/31/2008. Funding Awarded: \$2,000.00
- Cloyd, R. A. 2006. Effect of silicon applications on arthropod pests feeding on ornamental plants. Research Board Granting Program. Proposal Duration: 01/01/2006 through 12/31/2006. Funding Awarded: \$12,714.00
- Cloyd, R. A., and R. N. Wiedenmann. 2001. Enhanced plant production in interior landscapes by combining reduced-risk insecticides with biological control agents. C-FAR UIUC Internal Competitive Grants Program FY2001. Proposal Duration: 07/01/2001 through 06/30/2003. Funding Awarded: \$60,000.00
- Cloyd, R. A., and D. F. Warnock. 2001. Trap crops and insecticide application methods for use in integrated pest management programs to combat western flower thrips in potted floriculture crops. Research Board Granting Program. Proposal Duration: 05/20/2001 through 05/20/2002. Funding Awarded: \$12,079.00
- Cloyd, R. A., and E. R. Zaborski. 2000. Distribution and interactions of biological control agents and fungus gnats in Illinois greenhouses as influenced by different growing media and watering regimes. Illinois Department of Agriculture Conservation 2000 FY2000 Sustainable Agriculture Grant Program. Proposal Duration: 02/01/2000 through 01/31/2003. Funding Awarded: \$122,435.00

11. Sponsored Research Project Funding

- Cloyd, R. 2017. Interregional Research Project #6 (IR-4): Minor Crop Pest Management Program for the North Central Region. Source: United States Department of Agriculture-NIFA; New Insecticide/Miticide Crop Safety (Michigan State University). Funding Awarded: \$16,750.00. Duration: 08/15/2015 through 06/14/2017.
- Cloyd, R. 2016. Interregional Research Project #6 (IR-4): Minor Crop Pest Management Program for the North Central Region. Source: United States Department of Agriculture-NIFA; New Insecticide/Miticide Crop Safety (Michigan State University). Funding Awarded: \$3,000.00. Duration: 08/15/2015 through 08/14/2016.
- Cloyd, R. 2015. Interregional Research Project #6 (IR-4): Minor Crop Pest Management Program for the North Central Region. Source: United States Department of Agriculture-NIFA; New Insecticide/Miticide Crop Safety (Michigan State University). Funding Awarded: \$3,000.00. Duration: 07/1/2015 through 06/30/2016.
- Cloyd, R. 2014. Interregional Research Project #6 (IR-4): Minor Crop Pest Management Program for the North Central Region. Source: United States Department of Agriculture-NIFA; New Insecticide/Miticide Crop Safety (Michigan State University). Funding Awarded: \$6,000.00. Duration: 7/1/2014 through 6/30/2015.
- Cloyd, R. 2013. Interregional Research Project #4 (IR-4): Minor Crop Pest Management Program for the North Central Region. Source: United States of America Department of Agriculture-NIFA Budget (Michigan State University). Funding Awarded: \$4,000.00. Duration: 7/1/2013 through 6/30/2014.
- Cloyd, R. 2012. Interregional Research Project #4: Minor Crop Pest Management Program for the North Central Region. Source: United States of America Department of Agriculture CSREES (Michigan State University). Funding Awarded: \$5,000.00. Duration: 7/1/2012 through 6/30/2013.
- Cloyd, R. 2008. Interregional Research Project #4: Minor Crop Pest Management Program for the North Central Region. Source: United States of America Department of Agriculture CSREES (Michigan State University). Funding Awarded: \$8,000.00. Duration: 7/1/2008 through 6/30/2009.

12. Pesticide Efficacy Trial Funding

January 1 through December 31, 2017=\$116,646.10
 January 1 through December 31, 2016=\$48,500.00
 January 1 through December 31, 2015=\$39,250.00
 January 1 through December 31, 2014=\$36,900.00
 January 1 through December 31, 2013=\$35,700.00
 January 1 through December 31, 2012=\$27,250.00
 January 1 through December 31, 2011=\$25,300.00
 January 1 through December 31, 2010=\$33,100.00
 January 1 through December 31, 2009=\$28,550.00
 January 1 through December 31, 2008=\$45,000.00
 January 1 through December 31, 2007=\$63,950.00

13. Additional Funding Sources

Pearlstein Family Foundation (Nurserymen's Exchange; Half Moon Bay, CA)=\$10,000.00 (2010).

TEACHING

Although Dr. Cloyd has no official teaching appointment, he is consistently requested to give guest lectures in a number of classes at Kansas State University (Manhattan, KS) in the Department of Entomology; Department of Horticulture and Natural Resources; and the Department of Plant Pathology. Dr. Cloyd also guest lectures for several horticulture classes at Johnson County Community College (Overland Park, KS). Below is a listing of all the guest lectures that Dr. Cloyd has given:

- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: December 8, 2017.
Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Turfgrass Insects and Their Management (ENTM 589)-Fall Semester. Guest lecturer: November 17, 2017.
Topic: Insecticides, biological controls, and factors that impact their performance. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: November 2, 2017.
Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Christophe LaHovary.
- Plant Problems (HORT 225)-Spring Semester. Guest lecturer: March 29, 2017. Topic: Diagnosing plant problems. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Landscape Diseases (PLPTH 590)-Spring Semester. Guest lecturer: February 10, 2017. Topic: Identification and management of greenhouse insect and mite pests. Kansas State University; Manhattan, KS.
Instructor: Judy O'Mara.
- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: December 2, 2016. Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Turfgrass Insects and Their Management (ENTM 589)-Fall Semester. Guest lecturer: November 14, 2016.
Topic: Insecticides, biological controls, and factors that impact their performance. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Interior Plantscaping (HORT 377)-Spring Semester. Guest lecturer: April 12, 2016. Topic: Pests and pest management in interiorscapes. Kansas State University; Manhattan, KS. Instructors: Kimberly Williams and Gregory Davis.
- Vegetable Crop Production (HORT 560)-Spring Semester. Guest lecturer: March 22, 2016. Topic: Plant protection of vegetable crops. Kansas State University; Manhattan, KS. Instructor: May Altamimi.
- Plant Problems (HORT 225)-Spring Semester. Guest lecturer: March 2, 2016. Topic: Diagnosing plant problems. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Landscape Diseases (PLPTH 590)-Spring Semester. Guest lecturer: February 26, 2016. Topic: Identification and management of greenhouse insect and mite pests. Kansas State University; Manhattan, KS.
Instructor: Judy O'Mara.
- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: November 20, 2015.
Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Turfgrass Insects and Their Management (ENTM 589)-Fall Semester. Guest lecturer: November 11, 2015.
Topic: Insecticides, biological controls, and factors that impact their performance. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Foundations of Horticulture Pest Management (HORT 582)-Fall Semester. Guest lecturer: October 1, 2015.
Topic: Ornamental and turfgrass insect and mite pests. Kansas State University; Manhattan, KS.
Instructor: Steve Keeley.
- Plant Problems (HORT 225)-Spring Semester. Guest lecturer: March 25, 2015. Topic: Diagnosing plant problems. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Landscape Diseases (PLPTH 590)-Spring Semester. Guest lecturer: February 17, 2015. Topic: Identification and management of greenhouse insect and mite pests. Kansas State University; Manhattan, KS.
Instructor: Judy O'Mara.
- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: November 21, 2014.
Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.

- Turfgrass Insects and Their Management (ENTM 589)-Fall Semester. Guest lecturer: November 19, 2014. Topic: Insecticides, biological controls, and factors that impact their performance. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Plant Problems (HORT 225)-Spring Semester. Guest lecturer: April 10, 2014. Topic: Diagnosing plant problems. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Landscape Diseases (PLPTH 590)-Spring Semester. Guest lecturer: February 14, 2014. Topic: Identification and management of greenhouse insect and mite pests. Kansas State University; Manhattan, KS. Instructor: Judy O'Mara.
- Nursery Management (HORT 575)-Fall Semester. Guest lecturer: December 10, 2013. Topic: Systemic insecticides. Kansas State University; Manhattan, KS. Instructor: Stu Warren.
- Nursery Management (HORT 575)-Fall Semester. Guest lecturer: December 5, 2013. Topic: Pest management in nurseries. Kansas State University; Manhattan, KS. Instructor: Stu Warren.
- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: November 23, 2013. Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Karen Thum.
- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: November 22, 2013. Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Turfgrass Insects and Their Management (HORT/ENTM 589)-Fall Semester. Guest lecturer: November 20, 2013. Topic: Ecology and management of root-feeding grubs. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Turfgrass Insects and Their Management (HORT/ENTM 589)-Fall Semester. Guest lecturer: November 4, 2013. Topic: Insecticides, biological controls, and factors that impact their performance. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Introduction to Horticultural Sciences (HORT 201)-Spring Semester. Guest lecturer: April 30, 2013. Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Karen Thum.
- Plant Problems (HORT 225)-Spring Semester. Guest lecturer: April 11, 2013. Topic: Diagnosing plant problems. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Plant-Water Relations (AGRON 820)-Spring Semester. Guest lecturer: March 13, 2013. Topic: How would "climate change" impact arthropod pests? Kansas State University; Manhattan, KS. Instructor: Mary Beth Kirkham.
- Landscape Diseases (PLPTH 590)-Spring Semester. Guest lecturer: February 22, 2013. Topic: Identification and management of greenhouse insect and mite pests. Kansas State University; Manhattan, KS. Instructor: Judy O'Mara.
- Introduction to Horticultural Sciences (HORT 201)-Spring Semester. Guest lecturer: December 1, 2012. Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Karen Thum.
- Introduction to Horticultural Sciences (HORT 201)-Spring Semester. Guest lecturer: November 30, 2012. Topic: Identification of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Turfgrass Insects and Their Management (HORT/ENTM 589)-Fall Semester. Guest lecturer: November 5, 2012. Topic: Ecology and management of root-feeding grubs. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Turfgrass Insects and Their Management (HORT/ENTM 589)-Fall Semester. Guest lecturer: November 2, 2012. Topic: Insecticides, biological controls, and factors that impact their performance. Kansas State University; Manhattan, KS. Instructor: James Nechols.

- Greenhouse Operations Management (HORT 570)-Fall Semester. Guest lecturer: October 31, 2012. Topic: Pest management of greenhouse insect and mite pests: How is it integrated? Kansas State University; Manhattan, KS. Instructor: Kimberly Williams.
- H₂O and Elevated CO₂ (AGRON 600/960)-Fall Semester. Guest lecturer: September 25, 2012. Topic: Impact of “climate change” on arthropod pests. Kansas State University; Manhattan, KS. Instructor: Mary Beth Kirkham.
- Special Problems (HORT 390)-Spring Semester. Guest lecturer: May 23, 2012. Topic: Managing insect and mite pests in organic production systems. Kansas State University; Manhattan, KS. Instructor: Rhonda Janke.
- Introduction to Horticultural Sciences (HORT 201)-Spring Semester. Guest lecturer: May 3, 2012. Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Karen Thum.
- Landscape Diseases (PLPTH 590)-Spring Semester. Guest lecturer: February 24, 2012. Topic: Management of greenhouse insect and mite pests. Kansas State University; Manhattan, KS. Instructor: Judy O’Mara.
- Nursery Management (HORT 575)-Fall Semester. Guest lecturer: November 29, 2011. Topic: Pest management in nurseries. Kansas State University; Manhattan, KS. Instructor: Stu Warren.
- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: November 19, 2011. Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Karen Thum.
- Turfgrass Insects and Their Management (HORT 589)-Fall Semester. Guest lecturer: November 18, 2011. Topic: Ecology and management of root-feeding grubs. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: November 11, 2011. Topic: Identification and management of greenhouse insect and mite pests. Johnson County Community College, Overland Park, KS. Instructor: Lekha Sreedhar.
- Turfgrass Insects and Their Management (HORT 589)-Fall Semester. Guest lecturer: November 7, 2011. Topic: Insecticides and biological controls: Factors that affect their use. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: May 9, 2011. Topic: Identification of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Karen Thum.
- Landscape diseases (PLPTH 590)-Spring Semester. Guest lecturer: February 25, 2011. Topic: Management of greenhouse insect and mite pests. Kansas State University, Manhattan, KS. Instructor: Judy O’Mara.
- Co-taught; Turfgrass Insects and Their Management (HORT/ENTM 589)-Fall Semester 2010 (November through December). 19 students enrolled. Kansas State University; Manhattan, KS. Original Instructor: James Nechols.
- Introduction to Horticultural Sciences (HORT 201)-Fall Semester. Guest lecturer: December 1, 2010. Topic: Management of greenhouse insect and mite pests. Johnson County Community College; Overland Park, KS. Instructor: Lekha Sreedhar.
- Horticultural Entomology (HORT/ENTM 320)-Fall Semester. Guest lecturer: November 16, 2010. Topic: Management of greenhouse insect and mite pests. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Organic Farming Systems (HORT 325)-Fall Semester. Guest lecturer: October 29, 2010. Topic: Organic pest management. Kansas State University; Manhattan, KS. Instructor: Rhonda Janke.
- Vegetable Crops (HORT 560)-Spring Semester. Guest lecturer: March 2, 2010. Topic: Old (gone) and alternative insecticides. Kansas State University; Manhattan, KS. Instructor: Rhonda Janke.
- Landscape Diseases (PLPTH 590)-Spring Semester. Guest lecturer: February 19, 2010. Topic: Management of greenhouse insect and mite pests. Kansas State University; Manhattan, KS. Instructor: Judy O’Mara.

- Turfgrass Insects and Their Management (HORT/ENTOM 589)-Fall Semester. Guest lecturer: November 18, 2009. Topic: Ecology of root-feeding grubs. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Turfgrass Insects and Their Management (HORT 589/ENTOM 589)-Fall Semester. Guest lecturer: November 9, 2009. Topic: Insecticides & biological controls: Factors that affect their use. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Nursery Management (HORT 575)-Spring Semester. Guest lecturer: February 3, 2009. Topic: Pest management in nurseries. Kansas State University; Manhattan, KS. Instructor: Stu Warren.
- Turfgrass Insects and Their Management (HORT 589)-Fall Semester. Guest lecturer: November 21, 2008. Topic: Ecology of root-feeding grubs. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Turfgrass Insects and Their Management (HORT 589)-Fall Semester. Guest lecturer: November 14, 2008. Topic: Insecticides, biological controls, and factors that affect performance. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Organic Farming Systems (HORT 325)-Fall Semester. Guest lecturer: October 24, 2008. Topic: Organic materials for pest management. Kansas State University; Manhattan, KS. Instructor: Rhonda Janke.
- Turfgrass Insect Pest Management (HORT 519)-Fall Semester. Guest lecturer: November 9, 2007. Topic: Ecology of root-feeding grubs. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Turfgrass Insect Pest Management (HORT 519)-Fall Semester. Guest lecturer: November 2, 2007. Topic: Insecticides, biological controls, and factors that affect performance. Kansas State University; Manhattan, KS. Instructor: James Nechols.
- Horticultural Pest Management (HORT 582)-Fall Semester. Guest lecturer: November 1, 2007. Topic: Greenhouse pests and management. Kansas State University; Manhattan, KS. Instructor: Steve Keeley.
- Horticultural Pest Management (HORT 582)-Fall Semester. Guest lecturer: September 27, 2007. Topic: What's new in arthropod control? Kansas State University; Manhattan, KS. Instructor: Steve Keeley.
- Entomology: What's Bugging You? Guest lecturer: October 11, 2007. Wellington High School; Wellington, KS. Instructor: Ed LeValley.
- Horticultural Pest Management (HORT 582)-Fall Semester. Guest lecturer: October 26, 2006. Topic: Greenhouse pest management. Kansas State University; Manhattan, KS. Instructor: Steve Keeley.
- Turfgrass Pest Management (HORT 519)-Fall Semester. Guest lecturer: September 8, 2006. Topic: Turfgrass pests. Kansas State University; Manhattan, KS. Instructor: Steve Keeley.
- Plants for Interior Environments (HORT 377)-Spring Semester. Guest lecturer: April 10, 2006. Topic: Insect and mite management in interiorscapes. Kansas State University; Manhattan, KS. Instructor: Kent Kimmins.
- Greenhouse Operations Management (HORT 570)-Fall Semester. Guest lecturer: November 29, 2005. Topic: Integrated pest management in greenhouses. Kansas State University; Manhattan, KS. Instructor: Kimberly Williams.
- Fundamentals of Integrated Pest Management (IB-482)-Fall Semester. Guest laboratory lecturer: October 26 and 28, 2005. Topic: Greenhouse pest management. University of Illinois; Champaign-Urbana, IL. Instructor: Larry Hanks.
- Plants for Interior Environments (HORT 377)-Spring Semester. Guest lecturer: April 18, 2005. Topic: Insect management in interiorscapes. Kansas State University; Manhattan, KS. Instructor: Kent Kimmins.
- Non-Toxic Pest Control (March 3, 2005. Chicago Botanic Garden; Glencoe, IL).
- Greenhouse Management and Production (HORT 241)-Fall Semester. Guest lecturer: December 5, 2003. Topic: Insect identification and management. University of Illinois; Champaign-Urbana, IL. Instructor: Daniel Warnock.

- Fundamentals of Integrated Pest Management (ENTM 319)-Fall Semester. Guest laboratory lecturer: November 12 and 14, 2003. Topic: Greenhouse pest management. University of Illinois; Champaign-Urbana, IL. Instructor: Larry Hanks.
- Insect Pest Management in Ornamentals (NRES 399)-Fall Semester. Oakbrook; Chicago, IL 2003.
- Insect Ecology (March 11, 2003. Chicago Botanic Garden; Glencoe, IL).
- Fundamentals of Greenhouse Plant Nutrition (February 18, 2003. Chicago Botanic Garden; Glencoe, IL).
- Insect Identification Series-Use of Insect Ecology in Managing Urban Pests: Biological Control and Cultural Control (March 8, 2002). Delivered via Latitude Bridge. University of Illinois; Champaign-Urbana, IL.
- Pesticides 101: Understanding Pesticides and Their Use (February 15, 2002. Chicago Botanic Garden; Glencoe, IL).
- Fundamentals of Integrated Pest Management (ENTM 319)-Fall Semester. Guest laboratory lecturer: October 10, 2001. Topic: Greenhouse pest management. University of Illinois; Champaign-Urbana, IL. Instructor: Larry Hanks.
- Greenhouse Management and Production (NRES 241)-Fall Semester. Guest lecturer: November 2, 2001. Topic: Insect identification and management. University of Illinois; Champaign-Urbana, IL. Instructor: Daniel Warnock.
- Greenhouse Pests and Diseases (July 27, 2001. Chicago Botanic Garden; Glencoe, IL).
- Insect Identification Series-Basic Entomology (March 9, 2001) and Urban Entomology (March 16, 2001). Delivered via Latitude Bridge. University of Illinois; Champaign-Urbana, IL.
- Indoor Plant Culture Use and Identification (NRES 245)-Fall Semester. Guest lecturer: November 13, 2000. Topic: Interior plantscape pests. University of Illinois; Champaign-Urbana, IL. Instructors: Denny Schrock and Daniel Warnock.
- Ornamental Plant Insect Management (NRES 300)-Fall Semester. Oakbrook; Chicago, IL 1999.
- Greenhouse Management and Production (NRES 241)-Fall Semester. Guest lecturer: November 5, 1999. Topic: Insect identification and management. University of Illinois; Champaign-Urbana, IL. Instructor: Daniel Warnock.
- Taught 'Identification and Control of the Major Insect Pests of the Landscape and Nursery Industries' for 3A Ornamental Pest Control Training. February 9, 1998. Purdue University; West Lafayette, IN.
- Presented two lectures on 'Western Flower Thrips and Impatiens Necrotic Spot Virus' in Botany 519-Diseases of Greenhouse Ornamentals. 1997. Purdue University; West Lafayette, IN. Instructor: Dr. Paul Pecknold.
- Taught 'Solving Dilution Problems: How Much Chemical Do I Need?' for 3A Ornamental Pest Control Training. January 28, 1997. Purdue University; West Lafayette, IN.
- Teaching Assistant: ENTM 307E-Ornamental Insects. 1995-1998. Purdue University; West Lafayette, IN. Instructor: Dr. Clifford Sadof.
- Presented two lectures on 'Biological Control in Interior Plantscapes' in ENTM 555-Theory and Practice of Biological Control. October 13 and 16, 1995. Purdue University; West Lafayette, IN. Instructor: Dr. Robert O'Neil.

SERVICE

1. Kansas State University Department of Entomology/College Committee Services/Student Participation

- Department of Entomology Greenhouse Committee 2007-2012 [Chairperson 2008-2009].
- Department of Entomology Insect Zoo Committee 2007-2010 [Chairperson 2010].
- Department of Entomology Awards and Scholarships Committee 2010-2012 [Chairperson 2011].
- Department of Entomology Evaluation Protocol Committee 2011-2012.
- Department of Entomology PSEP-IPM Steering Committee 2009-2014.

Department of Entomology Evaluation and Review Committee 2013-2014.

Department of Entomology Research Subcommittee 2013.

Department of Entomology Executive Committee 2014-2017.

Department of Entomology Facilities and Safety Committee 2017-2020.

State Extension Leader, Department of Entomology 2014-2017.

Search Committee Member: Medical and Veterinary Extension Entomologist position 2008.

Department of Entomology PSEP-IPM Steering Committee 2009-2015.

Linnaean Team Coach: Entomological Society of America North Central Branch Annual Meeting; March 15-18, 2009 (St. Louis, MO).

Linnaean Team Coach: Entomological Society of America North Central Branch Annual Meeting; March 14-17, 2010 (Louisville, KY).

Linnaean Team Coach: Entomological Society of America North Central Branch Annual Meeting; March 13-16, 2011 (Minneapolis, MN).

Linnaean Team Coach: Entomological Society of America North Central Branch Annual Meeting; June 3-5, 2012 (Lincoln, NE).

Linnaean Team Coach: Entomological Society of America North Central Branch Annual Meeting; June 16-19, 2013 (Rapid City, SD).

College of Agriculture Awards Committee 2011-2012.

College of Agriculture Scholarships Committee 2011-2012.

2. University of Illinois Department of Natural Resources and Environmental Sciences, and College Committee Services

Natural Resources and Environmental Sciences Outreach Committee 1999-2003.

Natural Resources and Environmental Sciences Network Committee 2000-2001.

Natural Resources and Environmental Sciences Awards Committee 2000-2001.

Natural Resources and Environmental Sciences Retreat Committee 2002-2003.

College of Agricultural, Consumer, and Environmental Sciences Plant Care Advisory Committee 2000-2005.

College of Agricultural, Consumer, and Environmental Sciences Team Award for Excellence Committee 2003.

Natural Resources and Environmental Sciences Departmental External Relations Committee 2003-2006.

Natural Resources and Environmental Sciences Seminar Committee 2004-2006.

College of Agricultural, Consumer, and Environmental Sciences National Soybean Research Center (NSRC) Building Advisory Committee 2003-2006. Committee Chair: 2003-2006.

College of Agricultural, Consumer, and Environmental Sciences Space Policy Committee 2004-2005.

3. Illinois Natural History Survey Committee Services

Center of Economic Entomology Luckmann Award Committee 2002-2003.

4. Professional Committee Services

Entomological Society of America Section E, Subsection Ea: Extension, Arthropod Management Test Representative 2001-2005.

Entomological Society of America Arthropod Management Test, Chairperson for Editorial Board 2004.

Entomological Society of America Section E, Subsection Ea: Extension, Chairperson 2004.

Entomological Society of America Section E, Subsection Ea: Extension, Secretary 2002.

Entomological Society of America Standing Committee on Graduate Student Award for Leadership in Applied Entomology. North Central Branch Entomological Society of America Representative 2001-2003.

Entomological Society of America Section E, Subsection Ea: Extension, Vice-Chairperson 2003.

Entomological Society of America North Central Branch Resolutions Committee 2002-2005.

Entomological Society of America North Central Branch Resolutions Committee, Chairperson 2004-2005.

- Entomological Society of America, Section E (Extension): Editorial Board Representative, Environmental Entomology 2006-2008.
- Entomological Society of America: judging panel member for Distinguished Achievement Award in Horticultural Entomology 2007-2009.
- Entomological Society of America: Plant-Insect Ecosystems (PIE) section representative for Education and Outreach Committee 2010-2013.
- Subject-Editor for the Journal of Economic Entomology (Section: Horticultural Entomology) 2011-2017.
- American Society of Horticultural Sciences Extension Publication Award Committee 2002-2004.
- American Society of Horticultural Sciences Extension Publication Award Committee 2007-2010 [Chairperson: 2009-2010].
- American Phytopathological Society Diseases of Ornamental Plants Committee 2001-2004.
- Ohio Florists' Association Environmental Education Committee 2001-2005.
- Ohio Florists' Association Short Course Grower Program Committee 2006-2011.
- Ohio Florists' Association: Entomological Consultant 2002-2012.
- Educator Community Connector for AmericanHort 2014.
- Member of Editorial Board for the Journal of Environmental Horticulture 2015-2017.
- American Orchid Society: Member of Editorial Advisory Board 2006-2013.
- Society of American Florist's; Coordinator for Pest Management Conference 2003.
- Association of Education and Research Curators Communications Committee 2008-2011.
- North Central Region (NCR) Committee Number 101; Controlled Environment Technology and Use. University of Illinois Representative 2001-2005.
- North Central Region (NCR) Committee Number 193; Management of Insect Pests and Diseases of Landscape Plants. University of Illinois Representative 2000-2005.
- North Central Region (NCR) Committee Number 193; Management of Insect Pests and Diseases of Landscape Plants. Kansas State University, Department of Entomology Representative 2006-2015.
- Co-organizer of Symposium: Greenhouse Pest Management: Past, Present, and Future (Entomological Society of America Annual Meeting; November 13, 2011. Reno, NV).
- Co-organized (with Randy Martin of BioWorks Inc., Victor, NY) Member Symposium [Holistic Pest Management: Realistic Integration of Biological, Chemical, and Cultural Strategies in Horticultural Production Systems] (Entomological Society of America Annual Meeting; November 11, 2012. Knoxville, TN).
- 5. Regional Committee Services**
- Southern Illinois Bedding Plant School Planning Committee 2001-2005.
- Epsilon Sigma Phi (ESP)—Alpha Nu Chapter Membership Committee, Co-Chairperson 2005-2006.
- Epsilon Sigma Phi (ESP)—Alpha Rho Kansas Chapter Awards Committee 2009-2011.
- Epsilon Sigma Phi (ESP)—Alpha Rho Kansas Chapter Budget and Audit Committee 2011-2014.
- Epsilon Sigma Phi (ESP)—Alpha Rho Kansas Chapter Global Relations Committee 2015-2017.
- Western University Faculty Member 2008-2012.
- Kansas Greenhouse Growers Association (KGGA); Advisor 2008-2017.
- Kansas Greenhouse Growers Association (KGGA); Treasurer 2010-2017.
- Science Advisory Panel Member: Kansas Emerald Ash Borer Readiness and Response Plan 2009-2017.
- K-SRE Emerald Ash Borer Response Team; K-State Research and Extension Agriculture and Natural Resources, Manhattan, KS 2010-2017.
- Tree Health Discussion Group: Kansas Forest Service, Kansas Department of Agriculture, and K-State Research and Extension; Manhattan, KS 2012-2013.
- Tree Campus USA Committee: Advisory Member; Entomology (Kansas State University; Manhattan, KS) 2017.

6. Manuscripts/Books/Manuals/Grant Proposals/and Fact Sheets Reviewed

- Competitive interactions between *Bemisia tabaci* (Hemiptera: Aleyrodidae) MED and MEAM1 on multiple ornamental host plants 2017. Grant Application: Agency: Horticultural Research Institute (The AmericanHort Foundation), Columbus, OH.
- Biological and chemical control of the oriental flower beetle, *Protaetia orientalis* 2017. Grant Application: Agency; Horticultural Research Institute (The AmericanHort Foundation), Columbus, OH.
- Use of long-lasting insecticide netting for IPM strategies in vegetable crops 2017. Grant Application: Agency; Horticultural Research Institute (The AmericanHort Foundation), Columbus, OH.
- Density-dependent demography of the peach fruit moth, *Carposina sasakii* Matsumura (Lepidoptera: Carposinidae) 2017. Journal: Journal of Economic Entomology.
- Chemical and botanical insecticides affecting performance of the ectoparasitoid wasp *Habrobracon hebetor* (Hym.: Braconidae) 2017. Journal: Journal of Economic Entomology.
- Effectiveness of Huwa-San TR50 on tomato russet mite *Aculops lycopersici* (Masse) (Acari: Eriophyidae) 2017. Journal: Journal of Economic Entomology.
- Evaluation of biorational and chemical insecticides for curative, prophylactic and rotational use against chilli thrips, *Scirtothrips dorsalis* South Asia 1 2017. Journal: Journal of Economic Entomology.
- Developing a degree-day model to predict billbug (Coleoptera: Curculionidae) seasonal activity in Utah and Idaho turfgrass 2017. Journal: Journal of Economic Entomology.
- Visual behavior of the black fungus gnat *Bradysia difformis* Frey (Diptera: Sciaridae) enlightened with LEDs 2017. Journal: Entomologia Experimentalis et Applicata.
- Residual toxicity of selected organic insecticides to *Diaphorina citri* (Hemiptera: Liviidae) and non-target effects on *Tamarixia radiata* (Hymenoptera: Eulophidae) in California 2017. Journal: Journal of Economic Entomology.
- Evaluating damage to nursery crops by brown marmorated stink bug 2017. Journal: HortScience.
- Oil and soap for armored and soft scales: pathway to success or slippery slope to failure? 2017. Journal: Journal of Economic Entomology.
- Fitness impact of chlorantraniliprole and adjuvants on the pupa parasitoid *Palmistichus elaeisis* (Hymenoptera: Eulophidae) 2017. Journal: Journal of Economic Entomology.
- Conventional standardized sampling plan for the thrips *Frankliniella schultzei* in three lettuce varieties 2017. Journal: Pest Management Science.
- Lethal and side effects of the acaricides spiroidiclofen and spiromesifen on the two-spotted spider mite, *Tetranychus urticae* Koch, and its predatory mite, *Neoseiulus californicus* McGregor (Acari: Phytoseiidae) 2017. Journal: Experimental and Applied Acarology.
- Combining choice and no-choice bioassays to select for *Bemisia tabaci* resistance and identifying trichome types associated with resistance in tomato 2017. Journal: HortScience.
- Virulence of entomopathogenic nematodes and fungi to cowpea curculio larvae, *Chalcodermus aeneus* (Coleoptera: Curculionidae) 2017. Journal: Journal of Economic Entomology.
- Phenology and natural enemies of a new scale pest, *Acanthococcus* (=Eriococcus) *lagerstroemiae* Kuwana (Sternorrhynca: Eriococcidae), of crapemyrtles in Texas 2017. Journal: Journal of Environmental Horticulture.
- Markedly improved capture of *Drosophila suzukii* by a novel trap baited with two independent attractants in the same device 2017. Journal: Journal of Economic Entomology.
- Evaluation of biorational insecticides and DNA barcoding as tools to improve insect pest management in lablab bean (*Lablab purpureus*) in Bangladesh 2017. Journal: Journal of Economic Entomology.
- Bio-efficacy of acephate 95% SG (RIL-059/F195% SG) against insect pests of chilli and effect on crop health and natural enemies 2017. Journal: Crop Protection.
- Variation in susceptibility of the fifth instar nymphs of *Agonoscena pistaciae* (Hemiptera: Aphalaridae), and the coccinellid predator, *Oenopia conglobata* (Coleoptera: Coccinellidae) to some bio-insecticides 2017. Journal: Journal of Economic Entomology.

- Acute, persistent and field toxicity of insecticides to *Frankliniella schultzei* on rose 2017. Journal: Journal of Economic Entomology.
- Sublethal effects of spiroticlofen on demographic parameters on predatory mite *Neoseiulus californicus* (Acari: Phytoseiidae) 2017. Journal: Experimental and Applied Acarology.
- Acute, persistent and field toxicity of insecticides to flower thrips, *Frankliniella schultzei* Trybom on rose 2017. Journal: Crop Protection.
- Optimizing a mass trapping system design for organic control of the Japanese beetle, *Popillia japonica* (Coleoptera: Scarabaeidae) 2017. Journal: Journal of Economic Entomology.
- Control of different generations of *Dendrolimus punctatus* Walker using *Beauveria bassiana* and deltamethrin 2017. Journal: Journal of the Kansas Entomological Society.
- Life history parameters and predation capacities of *Nesidiocoris volucer* (Hemiptera: Miridae): a new biological control agent 2017. Journal: Biological Control.
- Biological aspects of *Helicoverpa armigera* (Lepidoptera: Noctuidae) fed on quinoa (*Chenopodium quinoa*) 2017. Journal: Journal of Economic Entomology.
- Lignin-encapsulated nootkatone as a potential biomiticide 2017. Journal: Journal of Environmental Horticulture.
- Toxicity of imidacloprid to natural enemies of tobacco (*Nicotiana tabacum* L.) feeding caterpillar pests 2017. Journal: Journal of Economic Entomology.
- Halyomorpha halys* (Hemiptera: Pentatomidae) responses to traps baited with pheromonal stimuli in peach and apple orchards 2017. Journal: Journal of Economic Entomology.
- Comparison of trapped western flower thrips, *Frankliniella occidentalis* (Thysanoptera: Thripidae) to yellow and blue sticky traps in three different heights on two greenhouse rose cultivars 2017. Journal: Journal of Economic Entomology.
- Spray penetration and natural enemy survival in dense and sparse plant canopies treated with carbaryl: implications for conventional and biological control 2017. Journal: Journal of Environmental Horticulture.
- Host related differences in the biological and life table parameters of *Panonychus ulmi* (Acari: Tetranychidae) 2017. Journal: Journal of Economic Entomology.
- First detection of spotted wing drosophila, *Drosophila suzukii* (Matsumura) (Diptera: Drosophilidae), in North Dakota with notes on fruit hosts 2017. Journal: Journal of the Kansas Entomological Society.
- Red light controls the behavior of the melon thrips, *Thrips palmi* (Thysanoptera: Thripidae) 2017. Journal: Journal of Economic Entomology.
- Factors influencing insecticide efficacy against armored and soft scales 2017. Journal: Journal of Economic Entomology.
- Acute, persistent and field toxicity of insecticides to flower thrips, *Frankliniella schultzei* (Thysanoptera: Thripidae) on rose 2017. Journal: Journal of Entomological Science.
- Chemical control of *Frankliniella* spp. (Thysanoptera: Thripidae) in mango orchards of Mexico does not increase yields 2017. Journal: Journal of Economic Entomology.
- Chlorantraniliprole increases fecundity of *Tetranychus urticae* (Acari: Tetranychidae) 2017. Journal: Journal of Economic Entomology.
- Screening of hydrangea for two-spotted spider mite resistance 2016. Grant Application: Agency: Horticultural Research Institute (The AmericanHort Foundation); Columbus, OH.
- Consumer and producer solutions to pollinator issues 2016. Grant Application; Agency; Horticultural Research Institute (The AmericanHort Foundation), Columbus, OH.
- An investigation of green industry landscaping plant alternatives to repel mosquitoes 2016. Grant Application: Agency; Horticultural Research Institute (The AmericanHort Foundation), Columbus, OH.
- Structure based design of novel acaricide agents against *Tetranychus urticae* 2016. Grant Application: Agency; Horticultural Research Institute (The AmericanHort Foundation), Columbus, OH.

- Developing native Hawaiian *Sida fallax* as a pollinator-friendly potted flowering plant 2016. Grant Application: Agency; Horticultural Research Institute (The AmericanHort Foundation), Columbus, OH.
- High tunnels: Protection for, rather than from, insect pests? 2016. Journal: Journal of Economic Entomology.
- Impact of various factitious foods and prey on the oviposition of the predatory mites *Gaeolaelaps aculeifer* and *Stratiolaelaps scimitus* (Acari: Laelapidae) 2016. Journal: Experimental and Applied Acarology.
- Artificial diet for laboratory rearing of *Condylorrhiza vestigialis* (Guenée, 1854) (Lep.: Crambidae) 2016. Journal: Journal of Economic Entomology.
- Additive and synergistic interactions amongst *Orius laevigatus* (Heteroptera: Anthocoridae), entomopathogens and azadirachtin for controlling western flower thrips (Thysanoptera: Thripidae) 2016. Journal: Journal of Economic Entomology.
- Development and demographic characteristics of *Aphis gossypii* (Hemiptera: Aphididae) fed on cucumber seedlings on colored plastic films 2016. Journal: Journal of Economic Entomology.
- Season long control of *Thrips tabaci* (Thysanoptera: Thripidae) under field conditions in the Columbia basin 2016. Journal: Journal of Economic Entomology.
- Biology and life history of *Atanycolus cappaerti* (Hymenoptera: Braconidae), a North American larval parasitoid newly associated with the invasive emerald ash borer (Coleoptera: Buprestidae) 2016. Journal: Journal of Economic Entomology.
- Diversity and population of thrips species (with special reference on *Megalurothrips*) on legumes 2016. Journal: Journal of Economic Entomology.
- Insect interactions: implications for pest management 2016. Journal: Journal of Agriculture and Ecology Research International.
- Optimisation of fluorescent pigment marking for *Bactrocera dorsalis* (Diptera: Tephritidae) in African conditions 2016. Journal: Journal of Economic Entomology.
- Lethal and sublethal actions of essential oils from *Artemisia khorassanica* Podl. and *Vitex pseudo-negundo* (Hausskn) against *Plodia interpunctella* (Hübner) (Lepidoptera: Pyralidae) 2016. Journal: Journal of Economic Entomology.
- Native bee diversity and pollen foraging specificity in cultivated highbush blueberry (Ericaceae: *Vaccinium corymbosum* L.) in Rhode Island 2016. Journal: Journal of Economic Entomology.
- Susceptibility of cold hardy grapes to *Drosophila suzukii* (Diptera: Drosophilidae) 2016. Journal: Journal of Economic Entomology.
- The efficacy of pesticides against eggs and nymphs of *Aleyrodes proletella* (Hemiptera: Aleyrodidae) 2016. Journal: Journal of Economic Entomology.
- Assessment of population dynamics of the lesser date moth using a sex pheromone-baited trap 2016. Journal: Journal of Economic Entomology.
- Primary screening of plant essential oils as insecticides, fumigants and repellents for controlling health pest *Paederus fuscipes* (Coleoptera: Staphylinidae) 2016. Journal: Journal of Economic Entomology.
- Influence of previous fruit injury on susceptibility to spotted wing drosophila (Diptera: Drosophilidae) infestation in the Midwest US 2016. Journal: Journal of Economic Entomology.
- Multi-species mating disruption in Wisconsin cranberries: preliminary evidence using a flowable emulsion 2016. Journal: Journal of Economic Entomology.
- Predatory efficiency of four spider species on *Bemisia tabaci* (Gennadius) (Hemiptera: Alyrodidae) 2016. Journal: Journal of Economic Entomology.
- Effectiveness of two cultural management techniques for reducing Japanese beetle populations in vineyards 2016. Journal: HortScience.
- Cost-effective trap-bait combinations for use in mass trapping *Rhynchophorus palmarum* (Coleoptera: Curculionidae) in ornamental palm polycultures 2016. Journal: Journal of Economic Entomology.
- Biological parameters of *Duponchelia fovealis* (Lepidoptera: Crambidae) in two food substrates 2016. Journal: Journal of Economic Entomology.

- Investigating bottom-up effects of different tomato cultivars on *Tuta absoluta* (Lep.: Gelechiidae): application of age-stage, two-sex life table 2016. Journal: Journal of Economic Entomology.
- Sources of plant resistance to thrips: a potential core component in cotton IPM 2016. Journal: Entomologia Experimentalis et Applicata.
- Effects of adults body length and larvae diet on the fecundity and viability of eggs laid by *Xylotrechus arvicola* (Coleoptera: Cerambycidae) females 2016. Journal: Journal of Economic Entomology.
- Developing a degree-day model to predict billbug (Coleoptera: Curculionidae) seasonal activity in Intermountain west turfgrass 2016. Journal: Journal of Economic Entomology.
- Nanocapsulation of some plant essential oils by MCM-41 for improving their fumigant toxicity against *Tetranychus urticae* Koch 2016. Journal: Experimental and Applied Acarology.
- Evaluation of thiacloprid and clothianidin as adulticide, larvicide and ovicide against Mediterranean fruit fly (Diptera: Tephritidae) in deciduous fruits 2016. Journal: Journal of Economic Entomology.
- Feeding behaviours of cabbage aphids on various oilseed rape cultivars with developmental stages monitored by electrical penetration graph technology 2016. Journal: Journal of the Kansas Entomological Society.
- Impact of *Bactrocera dorsalis* on development of Asian citrus psyllid nymphs: increased the psyllid nymphs' emergence rate 2016. Journal: Journal of Economic Entomology.
- Effect of vermicompost, humic fertilizer and plant growth promoting rhizobacteria, on population growth attributes of *Tuta absoluta* (Meyrick) (Lepidoptera: Gelechiidae) 2016. Journal: Journal of Economic Entomology.
- Effect of bio-insecticides on survival and development of whitefly *Bemisia tabaci* (Hemiptera: Aleyrodidae) 2016. Journal: Journal of Plant Diseases and Protection.
- Brown stink bug (Hemiptera: Pentatomidae) damage to pecans at different phenological nut development stages 2016. Journal: Journal of Economic Entomology.
- High temperature, not photoperiod, induces summer diapause of *Eocanthecona furcellata* eggs 2016. Journal: Journal of Economic Entomology.
- Ecology of the invasive Asiatic oak weevil in Missouri 2015. Grant Application: Agency; University of Missouri Research Board, Kansas City, MO.
- Boosting the efficacy of biological control agents of citrus mealybugs through olfactory conditioning 2015. Grant Application: Agency; The Netherlands Organization for Scientific Research, Council for Earth and Life Sciences, The Hague, Netherlands.
- Additive and synergistic interactions amongst *Orius laevigatus* (Heteroptera: Anthocoridae), entomopathogens and neem for controlling western flower thrips (Thysanoptera: Thripidae) 2015. Journal: Journal of Economic Entomology.
- Attraction of female fungus gnats *Lycoriella ingenua* to mushroom-growing substrates and the green mold *Trichoderma aggressivum* 2015. Journal: Entomologia Experimentalis et Applicata.
- Survival and development of *Amblypelta nitida* Stål, *A. l. lutescens* Distant (Hemiptera: Coreidae) and the egg parasitoid, *Anastatus* sp. (Hymenoptera: Eupelmidae) at constant rearing temperature 2015. Journal: Journal of Economic Entomology.
- Comparative soil distribution and dissipation of phoxim and thiamethoxam and their efficacy to control *Bradysia odoriphaga* Yang and Zhang in Chinese chive ecosystems 2015. Journal: Crop Protection.
- Determinants of non-target insect susceptibility to ultra-low volume insecticides used for mosquito management: *Hippodamia convergens* (Coleoptera: Coccinellidae) and permethrin 2015. Journal: Journal of Economic Entomology.
- Response of wheat genotypes carrying Cmc4 and Wsm2 to wheat curl mite, wheat streak mosaic virus and wheat mosaic virus 2015. Internal Review: Department of Entomology; Kansas State University, Manhattan, KS.
- Evaluation of site-specific tactics using bifentazate and *Neoseiulus californicus* for management of twospotted spider mites in strawberries 2015. Journal: Journal of Economic Entomology.

- Effect of insecticide rotations on density and species composition of thrips (Thysanoptera) in Florida strawberry 2015. Journal: Journal of Economic Entomology.
- Predatory ability of *Dalotia coriaria* against *Drosophila suzukii* depends on larval infestation density 2015. Journal: Journal of Pest Science.
- Timing of application of *Beauveria bassiana* for control of *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae) based on demography 2015. Journal: Scientific Reports.
- Effect of heat shock on female and male adult of life table parameters in F1 and F2 offspring of *Frankliniella occidentalis* (Thysanoptera: Thripidae), under high temperature (45°C) condition 2015. Journal: Journal of Economic Entomology.
- Seasonal and spatial dispersal patterns of ambrosia beetles (Coleoptera: Curculionidae: Scolytinae) from forest habitats into production nurseries 2015. Journal: Journal of Economic Entomology.
- Evaluation of bio-efficacy of ecofriendly components in the management of grapevine mealybug *Maconelliococcus hirsutus* Green 2015. Journal: Proceedings of the National Academy Sciences, India Section B: Biological Sciences (NASB).
- Feeding deterrence and inhibitory effects of bee balm (*Monarda didyma*) leaves on fall armyworm 2015. Journal: HortScience.
- The effect of adhesives and solvents on trap capture and specimen quality of small insects on coloured sticky traps 2015. Journal: Journal of Economic Entomology.
- Temperature-dependent age-specific demography of grapevine moth (*Lobesia botrana*) (Lepidoptera: Tortricidae): jackknife vs. bootstrap techniques 2015. Journal: Journal of Economic Entomology.
- Foraging and growth responses of the armyworm *Spodoptera litura* to the biophysical characteristics of five cotton varieties 2015. Journal: Phytoparasitica.
- Sustainable management of mango mealybug (Homoptera: Margarodidae) 2015: Journal: Journal of Economic Entomology.
- Acaricide population-level effects on the predatory mite *Neoseiulus baraki* 2015. Journal: Experimental and Applied Acarology.
- Occurrence and seasonality of *Philus antennatus* (Coleoptera: Vesperidae), a new pest of pamalo in Taiwan 2015. Journal: Journal of Economic Entomology.
- A review of the McMorran diet for rearing Lepidoptera species with addition of a further 39 Species 2015. Journal: Journal of Economic Entomology.
- Resistance of *Ipomoea batatas* genotypes to *Tetranychus ludeni* (Acari: Tetranychidae) 2015. Journal: Journal of Economic Entomology.
- Methods of applying plant-derived products to agricultural crops: implications for pest and disease management 2015. Journal: Phytoparasitica.
- Selectivity and behavioral responses of *Blaptostethus pallelescens* (Hemiptera: Anthocoridae) predator of *Chrysodeixis includes* (Lepidoptera: Noctuidae) to insecticides 2015. Journal of Economic Entomology.
- Development and reproduction of *Panonychus citri* on different species and varieties of citrus plants 2015. Journal: Journal of Economic Entomology.
- Performance of *Eriopis connexa* (Coleoptera: Coccinellidae) resistant to lambda-cyhalothrin after extended recovery from knockdown 2015. Journal: Biocontrol Science and Technology.
- Rainfall influences performance of insecticides on codling moth in apples 2015. Journal: Journal of Economic Entomology.
- Fecundity, development and longevity of a new grape pest, *Xylotrechus arvicola* (Coleoptera: Cerambycidae) 2015. Journal: Journal of Economic Entomology.
- Effects of different nitrogen rates and sources on the population dynamics and host preference of *Blissus insularis* (Hemiptera: Blissidae) on 'Captiva' and 'Floratam' St. Augustinegrass 2015. Journal: Journal of Economic Entomology.
- Compatibility of a plant growth-promoting microbial inoculant with selected pesticides and entomopathogenic nematodes in greenhouse plant production 2015. Journal: HortTechnology.

- Effect of host plants and supplemental foods on life history characteristics of *Thrips hawaiiensis* 2015. Journal: Journal of Economic Entomology.
- Joint action of three neonicotinoids with some insecticides against the cowpea aphid, *Aphis craccivora* (Koch) 2015. Journal: Journal of Plant Protection Research.
- Cereal residue and planting date affect adult colonization and leaf damage of pea, *Pisum sativum* L., by the pea leaf weevil, *Sitona lineatus* (L.). (Coleoptera: Curculionidae) 2015. Journal: Journal of Economic Entomology.
- Overwintering, oviposition, and larval survival of hunting billbugs (Coleoptera: Curculionidae) and implications for adult damage in North Carolina turfgrass 2015. Journal: Journal of Economic Entomology.
- Sublethal and transgenerational effects of benzothiazole at low-lethal concentrations on *Bradysia odoriphaga* (Diptera: Sciaridae) 2015. Journal: Journal of Economic Entomology.
- Survey of arthropod assemblages responding to live yeasts in an organic apple orchard 2015. Journal: Journal of Economic Entomology.
- Effect of greenhouse insecticides on larvae of the potential biological control agents: *Hippodamia variegata* Goeze (Coleoptera: Coccinellidae) and *Micromus tasmaniae* Walker (Neuroptera: Hemerobiidae) 2015. Journal: Journal of Insect Science.
- Sublethal and transgenerational effects of benzothiazole on *Bradysia odoriphaga* (Diptera: Sciaridae) 2015. Journal: Journal of Economic Entomology.
- Combined effect of pyriproxyfen and hexaflumuron on developmental stages of eggs and larvae of *Bradysia odoriphaga* (Y) (Diptera: Sciaridae) in the laboratory 2015. Journal: Journal of Economic Entomology.
- Combinatorial effect of different cowpea cultivars and neem oil dosages on the ovipositioning and embryonic development of the whitefly *Bemisia tabaci* biotype B 2015. Journal: Journal of Economic Entomology.
- Chemical composition and acaricidal activity of essential oil from *Indigofera suffruticosa* Millar against *Tetranychus urticae* Koch 2015. Journal: Experimental and Applied Acarology.
- Screening of onion cultivars for resistance against *Thrips tabaci* Lindeman in relation to weather conditions 2014. Journal: Journal of Economic Entomology.
- Behavioural responses of the melon fruit fly, *Bactrocera cucurbitae* (Diptera: Tephritidae) to colour pheromone traps 2014. Journal: Journal of Economic Entomology.
- The biological activity and residual effects of toxic baits containing spinosad and malathion on adult *Anastrepha fraterculus* (Diptera: Tephritidae) 2014. Journal: Journal of Economic Entomology.
- Lethal and behavioral effects of selected novel pesticides on adults of *Trichogramma pretiosum* (Trichogrammatidae: Hymenoptera) 2014. Journal: Pest Management Science.
- Non-target effects of sunflower seed treatments on *Orius insidiosus* (Hemiptera: Anthracoridae) 2014. Journal: Pest Management Science.
- Potential of laelapidae mites (Acari: Mesostigmata) and entomopathogenic nematodes (Nematoda: Rhabditida) as control agents of *Frankliniella occidentalis* (Insecta: Thysanoptera) 2014. Journal: Experimental and Applied Acarology.
- Induction of caterpillar resistance in sunflower using silicon and acibenzolar-S-methyl 2014. Journal: Journal of Agricultural Science and Technology.
- Variation in arborvitae leafminer damage on *Thuja* in the Morton Arboretum collection 2014. Journal: Journal of Environmental Horticulture.
- Insecticides evaluated as immersion treatments to eliminate larval Japanese beetle (Coleoptera: Scarabaeidae) from small diameter field-grown nursery plants 2014. Journal: Journal of Economic Entomology.
- Activity and within-plant distribution of two mixed whitefly populations on cucumbers in a greenhouse 2014. Journal: Journal of Economic Entomology.

- The effect of jasmonic acid methyl ester and acibenzolar-S-methyl on population density of European red mite (*Panonychus ulmi*) in apple orchard 2014. Journal: Horticultural Science.
- Effect of spirotetramat on development and reproduction of the green peach aphid *Myzus persicae* (Hemiptera: Aphididae) 2014. Journal: Journal of Economic Entomology.
- Plant cultivar and flowering influence the incidence of striped cucumber beetles (Coleoptera: Chrysomelidae) with implications for trap cropping 2014. Journal: HortScience.
- Effect of temperature on the development of *Echinothrips americanus* Morgan (Thysanoptera: Thripidae) with special inference to the number of generations in Beijing, China 2014. Journal: Journal of Economic Entomology.
- Comparative biology and life table parameters of *Tetranychus urticae* Koch (Acari: Tetranychidae) on different varieties of country bean 2014. Journal: Journal of Economic Entomology.
- Evidence of *Protaphorura fimata* (Collembola: Poduromorpha: Onychiuridae) feeding on germinating lettuce in the Salinas valley of California 2014. Journal: Journal of Economic Entomology.
- Incidence and severity of buprestid infestation in field-grown *Acer platanoides* related to cardinal orientation of understock bud union 2014. Journal: Journal of Environmental Horticulture.
- Integration of chemical control with sowing date for management of insect pests on okra 2014. Journal: Journal of Economic Entomology.
- Comparative selectivity of various pesticides on the aphid parasitoid *Aphidius colemani* 2014. Journal: Journal of Pest Science.
- Modulating effect of nitrogen fertilizer on biological parameters of cowpea aphid, *Aphis craccivora* Koch (Hemiptera: Aphididae) and associated productivity losses in common globe amaranth, *Gomphrena globosa* L. (Amaranthaceae) 2014. Journal: International Journal of Pest Management.
- Biological activity of trans-2-hexenal against *Bradysia odoriphaga* (Diptera: Sciaridae) at different developmental stages 2014. Journal: Journal of Pest Science.
- Susceptibility of the carmine spider mite, *Tetranychus cinnabarinus* and the two-spotted spider mite, *T. urticae* to selected acaricides on strawberries 2014. Journal: Journal of Insect Science.
- Yellow sticky card offers composite attractiveness to western flower thrips and greenhouse whitefly 2014. Journal: Journal of Economic Entomology.
- Trapping the ambrosia beetle *Xylosandrus germanus* in ethanol-soaked excised stems of American beech 2014. Journal: Journal of Environmental Horticulture.
- New products for the control of strawberry mite (*Phytonemus pallidus* Banks) on strawberry plantation in Poland after fruit harvest 2014. Journal: HortScience.
- Activity of spirotetramat to *Cacopsylla pyri* L. (Hemiptera: Psyllidae): laboratory and field tests 2014. Journal: Journal of Economic Entomology.
- Sex-specific transmission efficacy of tomato spotted wilt virus by western flower thrips (*Frankliniella occidentalis*) 2014. Journal: Journal of Applied Entomology.
- Catch of leafhoppers, thrips and non-target insects as affected by color, height, and size of sticky traps in grapevine ecosystem 2014. Journal: Journal of Economic Entomology.
- Evaluation of insecticides, entomopathogenic nematodes, and physical soil barriers for control of *Diaprepes abbreviatus* (Coleoptera: Curculionidae) in citrus 2014. Journal: Journal of Economic Entomology.
- Screening for broad mite resistance in a gene pool of *Rhododendron simsii* hybrids 2014. Journal: HortScience.
- Life history characteristics of *Frankliniella occidentalis* and *F. intonsa* (Thysanoptera: Thripidae) in constant and fluctuating temperatures 2014. Journal: Journal of Economic Entomology.
- Evaluation of insecticides and application methods to protect onions from onion and seedcorn maggot (Diptera: Anthomyiidae) damage 2014. Journal: Journal of Economic Entomology.
- Organic management of apple flea weevil, a reemergent pest of commercial apples 2014. Journal: Journal of Economic Entomology.

- Rainfall influences performance of insecticides on codling moth in apples 2014. Journal: Journal of Economic Entomology.
- Japanese maple scale: A pest of nursery and landscape trees and shrubs. 2013. University of Maryland Extension Publication.
- Antifeeding and insecticidal effects of *Capparis spinosa* L. on *Spodoptera littoralis* (Boisduval) larvae 2013. Journal: Journal of Agricultural Science and Technology.
- Interplanting floral resource plants with vegetable plants enhances beneficial arthropod abundance in a home garden 2013. Journal: HortScience.
- Effects of juvenile hormone analogues and ecdysone on adult eclosion of Chinese fruit fly 2013. Journal: Journal of Economic Entomology.
- Phototactic behavior of *Trialeurodes vaporariorum* adults to light-emitting diodes (LEDs) in laboratory conditions 2013. Journal: Journal of Insect Behavior.
- Evaluation of insecticides against the western flower thrips, *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae), in fruiting vegetables and impacts on natural enemies and competitor thrips 2013. Journal: Crop Protection.
- Insecticides and biotic resistance for integrated management of the western flower thrips, *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae), in fruiting vegetables 2013. Journal: Journal of Economic Entomology.
- Microbial control of black vine weevil (Coleoptera: Curculionidae) larvae in cranberry 2013. Journal: HortScience.
- Reproductive performance of striped mealybug on water-stressed cotton plants subjected to nitrogen fertilization 2013. Journal: Journal of Pest Science.
- Concentration levels of imidacloprid and olefin-imidacloprid metabolite in the walnut husk maggot 2013. Journal: Forests.
- Efficiency and economic feasibility of pest control systems in watermelon cropping 2013. Journal: Journal of Economic Entomology.
- Assessing the role of contact time of chemical and botanical insecticides on the mortality and knockdown effect of *Frankliniella occidentalis* Pergande (Thysanoptera: Thripidae) 2013. Journal: Journal of Plant Protection Research.
- Effect of the insecticide spirotetramat on the reproduction and developmental duration of *Myzus persicae* (Hemiptera: Aphididae) 2013. Journal: Journal of Economic Entomology.
- Hazards of neonicotinoid, neonicotinoid-pyrethroid premix, and anthranilic diamide insecticides to four beneficial insect species in turf 2013. Journal: Journal of Economic Entomology.
- The influence of life stages of *Tetranychus urticae* (Acari: Tetranychidae) on some biological parameters of *Scolothrips sexmaculatus* (Thysanoptera: Thripidae) 2013. Journal: European Journal of Entomology.
- Carbon dioxide influences growth, development, insect performance and nutrient concentration of petunias and zinnias grown at cooler-than-recommended temperatures—A growth chamber study 2013. Journal: HortScience.
- Dryocosmus kuriphilus*-induced chestnut galls and their inhabitants 2013. Journal: HortScience.
- Survival and development of Colorado potato beetles on potatoes treated with phosphite 2013. Journal: Journal of Economic Entomology.
- Lethal and sublethal effects of commercial insecticides on *Philodromus buxi*, a potential predator of defoliating Lepidoptera in *dehesa* woodland in southern Spain 2013. Journal: BioControl.
- Symptomatology and morphological analysis of the toxic effect of chlorantraniliprole on the silkworm *Bombyx mori* (Lepidoptera: Bombycidae) 2013. Journal: Journal of Economic Entomology.
- Relative toxicity and related activity of insecticides used in blueberry pest management: Mortality of natural enemies 2013. Journal: Journal of Economic Entomology.
- Susceptibility to insecticides and carboxylesterase activity in leafminers (Diptera: Agromyzidae) and their associated hymenopterous parasitoids 2013. Journal: Journal of Economic Entomology.

- Effects of orchard pesticides on *Galendromus occidentalis*: Lethal and sublethal effects 2013. Journal: Journal of Economic Entomology.
- BioDelear: A low cost non-toxic bait for the Mediterranean fruit fly 2013. Journal: Journal of Economic Entomology.
- Curative activity contributes to control of spotted wing drosophila and blueberry maggot in highbush blueberry 2013. Journal: Journal of Economic Entomology.
- Caterpillar feeding responses to sorghum leaves with lowered lignin levels 2013. Journal: Entomologia Experimentalis et Applicata.
- Clothianidin and imidacloprid residues in *Poa annua* (L.) and their effects on *Listronotus maculicollis* (Coleoptera: Curculionidae) 2013. Journal: Journal of Economic Entomology.
- Demographic comparison of *Bradysia odoriphaga* Yang and Zhang reared on artificial diet and different host plants based on an age-stage, two-sex life table 2013. Journal: Journal of Insect Science.
- Effect of host fruits on development and reproduction of *Grapholita molesta* Busck 2013. Journal: Journal of Economic Entomology.
- Spinosad resistance, esterase isoenzymes and temporal synergism in *Frankliniella occidentalis* (Pergande) in Australia 2013. Journal: Pest Management Science.
- Insect and arthropod pest identification and management in the greenhouse. 2012. Collaboration among University of Georgia, Clemson University, and University of Virginia Extension Publication.
- Off-season survival of the sapodilla seed borer, *Trymalitis margarias* Meyrick in India—a clue for an effective cultural management strategy 2012. Journal: Journal of Economic Entomology.
- Direct and indirect effects of nine insecticides on four natural enemies of *Spodoptera exigua* 2012. Journal: Crop Protection.
- The impact of insecticides applied in apple orchards on the predatory mite *Kampimodromus aberrans* (Acari Phytoseiidae) 2012. Journal: Biological Control.
- Biotic and abiotic influences on tunnel characteristics of mole crickets (*Scapteriscus* spp.) 2012. Journal: Journal of Economic Entomology.
- Changes in abundance of larval and adult *Popillia japonica* (Coleoptera: Scarabaeidae) and other white grub species with relation to temperature 2012. Journal: Journal of Economic Entomology.
- Imidacloprid uptake in young citrus trees and impact on *Homalodisca vitripennis* (Hemiptera: Cicadellidae) 2012. Journal: Journal of Economic Entomology.
- Phytoseiid mites on the leaves of *Acer platanoides*—Short Communication 2012. Journal: Horticultural Science.
- Navel orangeworm pheromone trap color preferences 2012. Journal: Journal of Economic Entomology.
- Rove beetles (Coleoptera: Staphylinidae) associated with soybean aphid (*Aphis glycines* Matsumura) and bean leaf beetle (*Ceratoma trifurcata* (Forster) populations in soybean-hedgerow landscapes 2012. Journal: The Canadian Entomologist.
- Evaluation of some new insecticides against the pomegranate aphid, *Aphis punicae* 2012. Journal: Journal of Insect Science.
- Effect of selected insecticides to egg parasitoid, *Trichogramma chilonis* and *Trichogramma brasiliensis* 2012. Journal: Biocontrol Science & Technology.
- The control of light brown apple moth, *Epiphyas postvittana* (Walker) (Lepidoptera: Tortricidae) eggs on viburnum, *Viburnum tinus* L., foliage using insecticides and horticultural mineral oil sprays 2012. Journal: Journal of Economic Entomology.
- Enumerative and binomial sampling of *Tetranychus urticae* (Koch) (Acari: Tetranychidae) on peppermint in California 2012. Journal: Journal of Economic Entomology.
- Report and population changes of *Bradysia difformis* (Diptera: Sciaridae) on *Eucalyptus* spp. in Brazil 2012. Journal: The Florida Entomologist.
- Seasonal abundance of adult *Diaprepes abbreviatus* (Coleoptera: Curculionidae) in Southern California 2012. Journal: Annals of the Entomological Society of America.

- Responses of *Myzus persicae* (Sulzer) to three Lamiaceae essential oils obtained by microwave-assisted and conventional hydrodistillation 2012. Journal: Journal of Pest Science.
- Efficacy of entomopathogenic nematodes (Rhabditida: Steinernematidae and Heterorhabditidae) against the chive midge, *Bradysia odoriphaga* 2012. Journal: Biological Control.
- Wireworm management II: Damage protection versus wireworm mortality in potatoes 2012. Journal: Journal of Economic Entomology.
- Effects of planting date and resistant barley varieties on Russian wheat aphid in Colorado, Kansas, and Nebraska 2012. Journal: Journal of Economic Entomology.
- Evaluation of spirotetramat for control of the mealybug *Planococcus ficus* (Hemiptera: Pseudococcidae) in table grape vineyards in California 2012. Journal: Crop Protection.
- Chemical composition and phytotoxicity of the essential oil of cinnamon, *Cinnamomum zeylanicum* on some stored-product pests 2012. Journal: Journal of Insect Science.
- Vertical and horizontal movements of Fuller's rose weevil (Coleoptera: Curculionidae) in Australian citrus groves 2012. Journal: Journal of Economic Entomology.
- Green peach aphid (Hemiptera: Aphididae) control using Brassicaceae ethyl-ester oil sprays 2012. Journal: Journal of Economic Entomology.
- Reproductive biology of solenopsis mealybug, *Phenacoccus solenopsis*: oosorption in response to a male-deficient environment 2012. Journal: Bulletin of Entomological Research.
- Transovarial transmission of novaluron in obliquebanded leafroller, *Choristoneura rosaceana* (Lepidoptera: Tortricidae) 2012. Journal: Journal of Economic Entomology.
- Tritrophic effects of plant growth regulators in an aphid-parasitoid system 2012. Journal: Biological Control.
- Silicon does not bioaccumulate in *Capsicum annum* leaves at sufficient levels to control *Scirtothrips dorsalis* Hood (Thysanoptera: Thripidae) 2012. Journal: The Florida Entomologist.
- Effects of spinosad and λ -cyhalothrin on spider diversity in cabbage fields in South Texas 2012. Journal: Journal of Economic Entomology.
- Spatial distribution of brown marmorated stink bug injury in apple orchards in Mid-Atlantic states 2012. Journal: Journal of Economic Entomology.
- Modeling the impact of climate change on potential geographic distribution of invasive mealybug *Phenacoccus solenopsis* Tinsley (Hemiptera: Pseudococcidae) in India using DIVA-GIS and MAXENT 2012. Journal: International Journal of Pest Management.
- Field test and cost comparison of the efficacy of emamectin benzoate against cotton thrips, *Thrips palmy Karyi* (Thysanoptera: Thripidae) with various spray application techniques in an orchid nursery 2012. Journal: Crop Protection.
- Caterpillar feeding responses to sorghum leaves with altered lignin levels 2012. Journal: Entomologia Experimentalis et Applicata.
- Mechanisms underlying imidacloprid-induced outbreaks of spider mites on boxwood shrubs: Effects on natural enemies and fecundity of *Eurytetranychus buxi* (Acari: Tetranychidae) 2011. Journal: Journal of Economic Entomology.
- Use of spinosad and predatory mites (Acari) for the management of *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae) in low-tunnel grown strawberry 2011. Journal: Entomologia Experimentalis et Applicata.
- Effects of X radiation on *Tuta absoluta* (Lepidoptera: Gelechiidae): Implications for the inherited sterility approach 2011. Journal: Journal of Economic Entomology.
- Combining *Beauveria bassiana* (Balsamo) Vuillemin with low-dosage spinosad against *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae) 2011. Journal: Pest Management Science.
- Investigating a replacement for malathion in bait sprays for fruit fly control in South African citrus orchards 2011. Journal: Journal of Economic Entomology.
- Insecticide screening of western flower thrips, *Frankliniella occidentalis* (Thysanoptera: Thripidae) in laboratory 2011. Journal: Journal of Economic Entomology.

- Field cage study of spinosad-based bait efficacy on *Bactrocera cucurbitae*, *Dacus ciliatus* and *Dacus demmerezi* (Diptera: Tephritidae) in Reunion Island 2011. Journal: Journal of Economic Entomology.
- Effect of mulch type and insecticide on incidence of tomato spotted wilt, plant growth and yield of tomato 2011. Journal: HortScience.
- Ultra violet light emitting trap (UV LED) for the West Indian sweet potato weevil, *Euscepes postfascistus* (Fairmaire) (Coleoptera: Curculionidae) 2011. Journal: Journal of Economic Entomology.
- Study on the relationship between a new invasive mealybug *Phenacoccus solenopsis* Tinsley (Hemiptera: Pseudococcidae) and the native ant *Pristomyrmex pungens* in China 2011. Journal: Journal of Insect Behavior.
- Synthetic insecticides in agro-ecosystems: how detrimental to non-target fauna are they? 2011. Journal: Biological Control.
- Effects of azadirachtin on *Tetranychus urticae* (Acari: Tetranychidae) and compatibility with predatory mites (Acari: Phytoseiidae) on strawberry 2011. Journal: Experimental and Applied Acarology.
- Toxicity of insecticidal soaps to the Asian citrus psyllid (*Diaphorina citri*) and natural enemies 2011. Journal: Journal of Economic Entomology.
- Evaluation of the quality of two lyophilized artificial diets for *Euschistus heros* (Heteroptera: Pentatomidae), using damage and development of the egg parasitoids, *Telenomus podisi* and *Trissolcus basalus* (Hymenoptera: Platygasteridae), as criteria 2011. Journal: Journal of Economic Entomology.
- The effect of emamectin benzoate on two parasitoids, *Aphidius colemani* Viereck (Hymenoptera: Aphidiinae) and *Eretmocerus mundus* Mercet (Hymenoptera: Aphelinidae) used in pepper greenhouses 2011. Journal: Crop Protection.
- Repellent effect of leaf vegetables treated with neem formulation on the cabbage armyworm: laboratory and field findings 2011. Journal: HortScience.
- New greenhouse structures and the challenges of pest and disease management 2011. Journal: Annuals of Applied Biology.
- Growth performance of the red palm weevil, *Rhynchophorus ferrugineus* on semiartificial diets 2011. Journal: Journal of Economic Entomology.
- Effect of *Plutella xylostella* genotype and spinosad and lambda-cyhalothrin insecticides on two natural enemies, *Diadegma insulare* (Hymenoptera: Ichneumonidae) and *Coleomegilla maculata* (Coleoptera: Coccinellidae) 2011. Journal: Journal of Economic Entomology.
- Cross-resistance and biochemical mechanisms of abamectin resistance in the western flower thrips, *Frankliniella occidentalis* 2011. Journal: Pest Management Science.
- Impact of UV-absorbing nets on the spatio-temporal dynamics of *Macrosiphum euphorbiae* (Hemiptera: Aphididae) in lettuce crops 2011. Journal: HortScience.
- Repellent effects of the essential fruit oil from *Pittosporum undulatum* Vent. (Pittosporales: Pittosporaceae) against *Aphis fabae* Scopoli (Homoptera: Aphididae) 2011. Journal: Crop Protection.
- Effect of temperature on prey consumption of *Scolothrips longicornis* on *Tetranychus urticae* 2011. Journal: Journal of Economic Entomology.
- Acaricidal and repellent effects of essential oils from Australian Myrtaceae family against two-spotted spider mite, *Tetranychus urticae* Koch (Acari: Tetranychidae) 2011. Journal: Australian Journal of Entomology.
- The impact of 9 insecticides on the natural enemies of *Spodoptera exigua* 2011. Journal: Biological Control.
- Larval and pupal susceptibility of the hoverfly, *Episyrphus balteatus* (DeGeer) to selected insecticides 2011. Journal: Journal of Pest Science.
- Possibility to convert insect pest to beneficial for greenhouse crops; Case of fungus gnat (*Bradysia impatiens*) 2011. Journal: Journal of Applied Entomology.
- Long-term persistence and efficacy of spinosad against beet armyworm, *Spodoptera exigua* (Lepidoptera: Noctuidae), in pepper foliage 2011. Journal: Journal of Economic Entomology.

- Attraction and oviposition responses of the fungus gnat *Bradysia impatiens* to microbes and microbe-inoculated seedlings in laboratory bioassays 2011. Journal: *Entomologia Experimentalis et Applicata*.
- Managing mango fruit flies (Diptera: Tephritidae) with an environmentally sound technique: The use of spinosad-based protein bait sprays and sanitation in mango orchards in Benin, West Africa 2011. Journal: *Journal of Economic Entomology*.
- Toxicity of different acaricides to *Typhlodromus pyri* adult females 2011. Journal: *BioControl*.
- Rearing and insecticide screening of western flower thrips, *Frankliniella occidentalis* (Thysanoptera: Thripidae) in laboratory 2011. Journal: *Journal of Economic Entomology*.
- Insecticidal activity of plant essential oils against the vine mealybug *Planococcus ficus* (Hemiptera: Pseudococcidae) 2011. Journal: *Journal of Pest Science*.
- Impact of UV-absorbing nets on the spatio-temporal dynamics of *Macrosiphum euphorbiae* (Hemiptera: Aphididae) in lettuce crops 2010. Journal: *HortScience*.
- Reducing fertilization: a management tactic against western flower thrips on roses 2010. Journal: *Journal of Economic Entomology*.
- Natural biological control of pest mites in Brazilian sun coffee agroecosystems 2010. Journal: *Recent Patents on Food, Nutrition, and Agriculture*.
- Activities of essential oil from *Asarum heterotropoides* var. *mandshuricum* against two-spotted mite (*Tetranychus urticae* Koch) 2010. Journal: *Phytoparasitica*.
- Effect of soluble silicon on biochemical defense responses induced in bean leaves by the two-spotted spider mite 2010. Journal: *Environmental and Experimental Botany*.
- Management of Nantucket pine tip moth (Lepidoptera: Noctuidae) in Virginia pine Christmas trees using insecticides and mechanical shearing 2010. Journal: *Journal of Economic Entomology*.
- An analytical model to predict the number of parasitic wasps needed for controlling herbivorous pests in greenhouses 2010. Journal: *BioControl*.
- Antiproliferative effect of azadirachtin A on *Spodoptera litura* S1-1 cell line through cell cycle arrest and apoptosis induced by up-regulation of p53 2010. Journal: *Pesticide Biochemistry and Physiology*.
- Influence of irrigation and temperature on two-spotted spider mite and aphid populations in container-grown roses 2010. Journal: *HortScience*.
- Flight-mill performance of the green lacewing, *Chrysoperla sinica* (Tjeder) (Neuroptera: Chrysopidae) as function of age, temperature, and relative humidity 2010. Journal: *Journal of Economic Entomology*.
- Field efficacy of entomopathogenic nematode formulations against *Helicoverpa armigera* in chickpea ecosystem 2010. Journal: *Journal of Biopesticides*.
- Compatibility of deltamethrin and spinosad with three indigenous *Trichogramma* species of interest in integrated control against *Prays oleae* (Lepidoptera, Hyponomeutidae) 2010. Journal: *Journal of Economic Entomology*.
- Plant essential oils toxicity to *Tetranychus urticae* Koch (Acari: Tetranychidae) 2010. Journal: *Journal of Agricultural Science and Technology*.
- Biological control of the citrus red mite *Panonychus citri* (McGregor) (Acarina: Tetranychidae) by predator mite *Typhlodromus athiasae* Porath and *Swirskii* (Acari: Phytoseiidae) on two citrus cultivars in greenhouse 2010. Journal: *Biological Control*.
- Fertilization affects constitutive and wound-induced chemical defenses in *Gerbera jamesonii* 2010. Journal: *Journal of the American Society of Horticultural Sciences*.
- Biological and growth regulating activities of PONNEEM, a phytopesticidal oil formulation against *Spodoptera litura* (Fab.) and its biosafety on *Trichogramma chilonis* Ishnii 2010. Journal: *Journal of Pesticide Science*.
- Mini-aspirator: a new device for collection and infestation of small arthropods 2010. Journal: *Entomologia Experimentalis et Applicata*.
- Effects of fertilization of four hemlock species on *Adelges tsugae* (Hemiptera: Adelgidae) growth and feeding preferences of its predator 2010. Journal: *Journal of Economic Entomology*.

- Potential of winter squash varietal mixtures to improve striped cucumber beetle trap crop performance in organic cucumber production 2010. Journal: Pest Management Science.
- Chemical composition and mosquito larvicidal activities of the essential oils of *Salvia* L. (Lamiaceae) 2010. Journal: Biochemical Systematics and Ecology.
- The efficacy of two neem-based formulations to control the cabbage aphid, *Brevicoryne brassicae* (L.) 2010. Journal: Journal of Applied Entomology.
- Chemical characterization of essential oils cultivated in Colombia and their repellent activity towards *Tribolium castaneum* (Herbst) 2010. Journal: Bulletin of Entomological Research.
- Toxicity of three insecticides to *Lysiphlebus fabarum* (Marshall) (Hymenoptera: Braconidae), a thelytokous parasitoid of the black bean aphid 2010. Internal Review: Department of Entomology; Kansas State University, Manhattan, KS.
- Descriptions of injury and damage caused by flower thrips, *Frankliniella* spp. to rabbiteye blueberries, *Vaccinium ashei*, and implications for management decisions 2009. Journal: Pest Management Science.
- Xylem transport models optimize effectiveness of systemic insecticide applications for controlling hemlock woolly adelgid 2009. Journal: Journal of Economic Entomology.
- Insecticidal effect of four commercially available grain protectants against nine stored product insects 2009. Journal: Journal of Insect Science.
- Imidacloprid-induced cascade effect on some chemical elements in rice plants and the brown planthopper *Nilaparvata lugens* (Hemiptera: Delphacidae) 2009. Journal: Journal of Economic Entomology.
- Efficacy of an esfenvalerate plus methoprene aerosol for the control of eggs and fifth instars of the Indianmeal moth (Lepidoptera: Pyralidae) 2009. Journal: Insect Science (internal review).
- Understanding the dynamics of neonicotinoid activity in the management of *Bemisia tabaci* whiteflies on poinsettias 2009. Journal: Crop Protection.
- Effects of pyrethroid insecticides bifenthrin and cyfluthrin on *Populus* saplings 2009. Journal: Journal of Economic Entomology.
- Dispersal and development of bagworm larvae on three host 2009. Journal: Environmental Entomology.
- Developmental, growth and reproductive costs for *Coccinella undecimpunctata* fed on *Myzus persicae* treated with pirimicarb or pymetrozine 2009. Journal: BioControl.
- Impact of Synergy-505 on the biology and life table parameters of a non-target assassin bug, *Rhynocoris marginatus* (Fabricius) 2009. Journal: Journal of Insect Science.
- Population dynamics and within plant distribution of *Frankliniella* spp. thrips (Thysanoptera: Thripidae) in cotton 2009. Journal: Environmental Entomology.
- Efficacy of mixtures of bifenazate and organophosphates on organophosphate resistant *Tetranychus urticae* strains 2009. Journal: Experimental and Applied Acarology.
- Efficacy of pymetrozine against *Myzus persicae* (Hemiptera: Aphididae) and in reducing Potato Virus Y transmission on tobacco plants 2009. Journal: Journal of Economic Entomology.
- Toxicity of selected insecticides to the two-spot ladybird *Adalia bipunctata* 2009. Journal: Phytoparasitica.
- Evaluation of organic insecticides to control *Murgantia histrionica* and *Microtheca ochroloma* on leafy greens 2009. Journal: International Journal of Vegetable Science.
- Responses of green peach aphid and arthropod community to garlic as a deterrent crop in flue-cured tobacco fields 2009. Journal: Journal of Pest Science.
- Effects of botanical pesticides and biological agents on *Orius laevigatus*—*Frankliniella occidentalis* dynamics in a Mediterranean greenhouse 2009. Journal: BioControl.
- Effects of botanical pesticides and biological agents *Orius laevigatus* (Fieber)—*Frankliniella occidentalis* (Pergande) dynamics in a cold Mediterranean greenhouse 2009. Journal: Journal of Pest Science.
- Evaluation of lethal and sublethal effects of neonicotinoid insecticides on biocontrol agents of glassy-winged sharpshooters 2008. Grant Proposal: California Department of Food and Agriculture; Pierce's Disease Grant Management, Sacramento, CA.

- Efficacy of pymetrozine against *Myzus persicae* (Hemiptera: Aphididae) and in reducing potato virus Y transmission on tobacco plants 2008. Journal: Journal of Economic Entomology.
- Mating behavior of the cabbage beetle, *Colaphellus bowringi* Baly (Coleoptera: Chrysomelidae) 2008. Journal: Insect Science.
- Reproductive biology of the predatory mite *Parasitus consanguineus* (Acari: Parasitidae) fed on phorid and sciarid larvae 2008. Journal: Experimental and Applied Acarology.
- Selected miticides for use on ornamental plants 2008. Fact sheet: University of Florida Mid-Florida Research and Education Center; Cut Foliage Research, Note RH-08-A.
- Pear psylla nymphal feeding resistance in a diverse collection of *Pyrus* germplasm 2008. Journal: HortScience.
- The effects of temperature, humidity and light on the mating frequency of *Bradysia odoriphaga* 2008. Journal: Journal of Pest Science.
- Sublethal effects of fenpyroximate on life table parameters and biological performance of *Phytoseius plumifer* (Acari: Phytoseiidae) predator of *Tetranychus urticae* (Acari: Tetranychidae) 2008. Journal: Journal of Economic Entomology.
- Effect of constant temperatures on the developmental biology of the mealybug, *Paracoccus marginatus* Williams and Granara de Willink (Hemiptera: Pseudococcidae) 2008. Journal: Journal of Economic Entomology.
- Population dynamics of *Phorodon humuli* and predators within hop cones: Control and influence on crop quality parameters 2008. Journal: HortScience.
- The effect of time of whitefly infestation on plant nutrition and the development of tomato irregular ripening disorder 2008. Journal: HortTechnology.
- Insecticides Applaud and Lorsban efficacy on vine mealybug 2008. Journal: Journal of Economic Entomology.
- Nutrient availability affects western flower thrips feeding damage and subsequent accumulation of jasmonic acid in *Gerbera jamesonii* 2008. Journal: Journal of the American Society for Horticultural Science.
- Differences in defoliation of fruit genotypes by Japanese beetle (Coleoptera: Scarabaeidae) feeding 2008. Journal: HortScience.
- Combined effects of *Bacillus thuringiensis* and botanicals on the feeding, growth and development of the bollworm, *Helicoverpa armigera* 2008. Journal: Journal of Insect Science.
- Effect of insecticides against the mealybug, *Cataenococcus ensete*, attacking *Ensete ventricosum* in Southern Ethiopia 2008. Journal: Journal of Insect Science.
- Growth and yield of young orange trees treated with insecticides 2008. Journal: HortScience.
- Tackling trouble: your Northeast home and garden problem solver—The IPM way 2008. Book Review: Cornell University Press; Ithaca, NY.
- Insect-killing fungi and predatory mites with banker plants for thrips IPM. 2008. Grant Proposal (American Floral Endowment).
- Same-shape distribution model and rate-summation prediction of Russian wheat aphid reproduction under variable temperatures 2007. Journal: Environmental Entomology.
- Insecticide resistance management strategies in *Frankliniella occidentalis* 2007. Journal: Pest Management Science.
- Management of weeping fig thrips (*Gynaikothrips uzeli*) inside galls 2007. Journal: HortTechnology.
- Mating behavior of the Japanese pine sawyer, *Monochamus alternatus* (Coleoptera: Cerambycidae) 2007. Journal: Insect Science.
- Metarhizium anisopliae* as an alternative for the control of the cotton stainer bug *Dysdercus peruvianus* (Hemiptera: Pyrrhocoridae) 2007. Journal: Pest Management Science.
- Characterization of boll weevils (Coleoptera: Curculionidae) captured during non-cotton season and survival of adults after feeding on selected pollens 2007. Journal: Insect Science.

- Susceptibilities to insecticides of the aphid, *Lipaphis erysimi*, three predacious ladybirds and two parasitoid wasps 2007. Journal: Insect Science.
- Phenolic profiles of cranberry leaves: variation in concentration of possible insect feeding deterrents 2007. Journal: HortScience.
- Biological control of twospotted spider mite with predatory mite, *Neoseiulus californicus*, in strawberries 2007. Journal: Experimental and Applied Acarology.
- Development of entomopathogenic nematodes and beneficial insects for biological plant protection in greenhouses 2007. Grant Proposal: Science Center Programs—U. S. Department of State.
- Pesticides sublethal effects disturb the growth increase rate and the olfactory response of a predatory mite 2007. Journal: Biological Control.
- Toxicity of neonicotinoids to tephritid fruit flies 2007. Journal: Journal of Insect Science.
- Evaluation of some insecticides against Enset root mealybug (*Cataenococcus ensete*) in Southern Ethiopia 2007. Journal: International Journal of Pest Management.
- Extracts of *Juglans regia* leaves against *Tetranychus viennensis* and *Tetranychus cinnabarinus* (Acari: Tetranychidae) 2007. Journal: Journal of Economic Entomology.
- Side-effects of three acaricides on predatory mite, *Phytoseiulus persimilis* Athias-Henriot (Acari: Phytoseiidae) in laboratory conditions 2007. Journal: Journal of Agricultural Science and Technology.
- Predation of edaphic arthropods and nematodes on the mites *Ologamasus* sp. and *Protogamasellopsis dioscorus* (Acari: Rhodacaroida: Ologamasidae and Rhodacaridae) 2007. Journal: Bulletin of Entomological Research.
- Biological control of *Bradysia matogrossensis* (Diptera: Sciaridae) in mushroom cultivation with predatory mites 2006. Journal: Experimental and Applied Acarology.
- ‘AC Felix Leclerc’ Canadian Artist Rose 2006. Journal: HortScience.
- Larvicidal activity of novaluron, a chitin synthesis inhibitor, against *Musca domestica* 2006. Journal: Journal of Insect Science.
- The effect of garlic extract and root substrate on soil-borne fungal pathogens 2006. Journal: HortTechnology.
- Factors influencing the use of trap plants in potted chrysanthemum for the control of *Frankliniella occidentalis* (Thysanoptera: Thripidae) in greenhouses 2006. Journal: Environmental Entomology.
- Control of carrot weevil, *Listronotus oregonensis* (LeConte), by seed treatment, in-furrow, and foliar application of pesticides in processing carrots 2006. Journal: Journal of Agricultural and Urban Entomology.
- Biotechnology of secondary metabolites of fungi as resources for the development of new pesticides 2006. Grant Proposal: Science Center Programs—U. S. Department of State.
- Controlling foliage diseases and Japanese beetle feeding damage using biopesticides in roses and oakleaf hydrangea 2006. Journal: HortScience.
- Hot water drenches for the control of fungus gnat infestations of New Guinea impatiens and poinsettia potting media 2006. Journal: HortScience.
- Tetranychus urticae* and *Panonychus ulmi* (Tetranychidae) mortality and oviposition in responses to new-chemistry insecticides 2006. Journal: Journal of Entomological Science.
- Response of whiteflies, twospotted spider mites, and predatory mites to *Citrullus* accessions 2005. Journal: HortScience.
- Six year investigation of a citrus block in Florida with brown citrus aphids 2005. Journal: HortScience.
- Manipulating fertilization: A management tactic against *Frankliniella occidentalis* (Pergande) (Thysanoptera: Thripidae) on potted chrysanthemum 2005. Journal: Journal of Economic Entomology.
- Frankliniella occidentalis* Pergande chemical control: residues associated with the three consecutive spray strategy 2005. Journal: Australian Journal of Experimental Agriculture.
- Monitoring thrips presence in flue-cured tobacco using yellow sticky traps 2005. Journal: Journal of Entomological Science.

- Insecticides differentially affect gas exchange, vegetative and floral development, and overall quality of gerbera (*Gerbera jamesonii* var. Festival Salmon) 2005. Journal: HortScience.
- Host associations and biology of *Erythmelus* sp. (Hymenoptera: Mymaridae), an egg parasitoid of lace bugs (Hemiptera: Tingidae) in Missouri, USA with particular reference to *Corythucha arcuata* 2005. Journal: Journal of the Kansas Entomological Society.
- Greenhouse and field evaluation of neonicotinoids against the greenhouse whitefly, *Trialeurodes vaporariorum* on tomato 2005. Journal: Pest Management Science.
- Effects of *Paecilomyces fumosoroseus* and *Encarsia formosa* on the control of greenhouse whitefly: preliminary assessment of a tritrophic interaction investigation 2005. Journal: BioControl.
- Quick visual estimates of thrips (Thysanoptera: Thripidae) densities on cucumber and rose crops 2005. Journal: Journal of Economic Entomology.
- Survey for *Nosema bombi* and other potential causal agents for the decline of *Bombus* species in North America 2005. Grant Proposal: Research Board; University of Illinois, Champaign-Urbana, IL.
- Utilization of systemic action of botanical insecticides in control of cultural crops against insect pests 2005. Grant Proposal: Czech Science Foundation; Czechoslovakia, Central Europe.
- Combined effect of digestive enzyme inhibitor and predator in biological control of stored mite pest *Acarus siro* 2005. Journal: Biological Control.
- Summer weeds as hosts for *Frankliniella occidentalis* Pergande and *F. fusca* (Hinds) (Thysanoptera: Thripidae) and as reservoirs for tomato spotted wilt virus in North Carolina 2004. Journal: Journal of Economic Entomology.
- Ecologically based IPM of major insect pests of ornamentals and vegetables grown in controlled environments 2004. Hatch Proposal: Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL.
- Zohar LQ-125, a biorational detergent for controlling the sweetpotato whitefly, *Bemisia tabaci* 2004. Journal: Pest Management Science.
- Controlling a major aquatic plant pest China mark moth, *Nymphuliella daeckealis* (Haimbach) 2004. FactSheet: University of Maryland Extension Publication.
- Effect of insecticides on the parasitization rate of *Tiphia vernalis* (Hymenoptera: Tiphidae) on *Popillia japonica* (Coleoptera: Scarabaeidae) larvae 2004. Journal: Journal of Economic Entomology.
- Parasitism success of *Tiphia vernalis* (Hymenoptera: Tiphidae) against Japanese beetle, *Popillia japonica* (Coleoptera: Scarabaeidae), as affected by in vitro exposure to insecticides 2004. Journal: Journal of Economic Entomology.
- Evaluation of alternative control agents for control of European corn borer (*Ostrinia nubilalis* Hubner) or corn flea beetle (*Chaetocnema pulicaria* Melsheimer) attacking sweet corn 2004. Journal: Journal of Vegetable Crop Production.
- Interiorscape insect pest management. 2004. FactSheet: University of Florida Extension publication..
- Soil and *Diaprepes abbreviatus* root weevil spatial variability and biological zoning in a poorly drained citrus grove in Florida. 2003. Journal: Soil Science Society of America Journal.
- Research on the impacts of the anti-stress commercial preparation on the flower quality in carnation. 2003. Journal: Acta Agriculturae Scandinavica Section B.
- Integrated pest management for park districts. Safer Pest Control Project. 2003. Publication: Manual.
- Tissue P, but not N, in *Impatiens wallerana* affects western flower thrips (*Frankliniella occidentalis*) population growth and plant damage. 2003. Journal: HortScience.
- Interactions between native and exotic parasitoids attacking the native evergreen bagworm in central Illinois. 2003. Grant Proposal (Research Board): Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL.
- Reducing pesticide use in commercial greenhouses through the use of nematodes for biological control of fungus gnats, *Bradysia* spp. 2003. Grant Proposal (Minnesota).

- Field and laboratory evaluations of *Bacillus thuringiensis* to control elm leaf beetle, *Xanthogaleruca luteola* (Muller) (Coleoptera: Chrysomelidae) 2003. Journal: Journal of Economic Entomology.
- Evaluation of *Amblyseius cucumeris* (Acari: Phytoseiidae) and *Orius insidiosus* (Hemiptera: Anthocoridae) for control of *Frankliniella occidentalis* (Thysanoptera: Thripidae) on greenhouse tomatoes 2002. Journal: Biological Control.
- Yellow sticky card traps equipped with light-emitting diodes for catching whiteflies (Homoptera: Aleyroididae) and other insects in greenhouses 2002. Journal: Journal of Economic Entomology.
- Verbena cultivars differentially attract adult western flower thrips but not whiteflies 2002. Journal: HortScience.
- Effects of parasitoid density and arena size on progeny production of *Anaphes iole* Girault (Hymenoptera: Mymaridae) 2002. Journal: Journal of Entomological Science.
- Feeding preference of western flower thrips for pollen of different amaryllis genotypes 2002. Journal: HortScience.
- Biological substitutes for pesticides 2002. Journal: Trends in Biotechnology.
- The entry of sweetpotato whiteflies (Homoptera: Aleyrodidae) into greenhouses through screened roof vents 2002. Journal: Journal of Economic Entomology.
- Integrated pest management of fungus gnat *Bradysia* spp. in commercial greenhouses 2002. Grant Proposal: University of Minnesota; Minneapolis, MN.
- Controlling a major nursery pest-black vine weevil, *Otiorynchus sulcatus* (Fabricius) 2002. FactSheet: University of Maryland Extension Publication.
- Effects of fertilization on insect resistance of woody ornamental plants: Reassessing an entrenched paradigm 2001. Journal: Environmental Entomology.
- Effect of soilless potting media and water management on development of fungus gnats (Diptera: Sciaridae) and plant growth 2001. Journal: HortScience.
- Controlled atmosphere anoxia treatments as a potential disinfestation technique for arthropod pests in greenhouses 2000. Journal: Journal of Economic Entomology.
- A survey of biological control users in midwest greenhouse operations 2000. Journal: American Entomologist.
- Dole, J. M., and H. F. Wilkins. 1999. Chapter 8: Pest management, pp. 105-122. *In* Floriculture: Principles and Species, Prentice-Hall, Inc. 613 pgs. Publication: Book Chapter.
- Lawncare pesticide application equipment: A guide to selection and calibration of granular spreaders PPP-46. Purdue University Cooperative Extension Service; West Lafayette, IN 1999. Extension Publication: Manual.
- Control of black wine weevil, *Otiorynchus sulcatus* in greenhouse and perennial plants 1999. Journal: HortScience.
- Glucosinolate-rich cultivars and mulches as replacements for pesticides 1999. Grant Proposal: Department of Natural Resources and Environmental Sciences; University of Illinois, Urbana, IL.
- Whitefly (Homoptera-Aleyrodidae) control in greenhouses. 1999. FactSheet: University of Maryland Cooperative Extension Publication.
- 7. Promotion and Tenure Documentation Reviewed**
- West Virginia University: College of Agriculture, Natural Resources, and Design; Morgantown, WV. Dr. Daniel L. Frank; Promotion from Assistant Professor to Associate Professor. 2017.
- University of Idaho: College of Agricultural and Life Sciences; Department of Plant, Soil and Environmental Sciences, Moscow, ID. Dr. James Barbour; Promotion from Associate Professor to Full Professor. 2013.
- Ohio State University: College of Biological Sciences; College of Food, Agricultural & Environmental Sciences, Department of Entomology, Columbus, OH. Dr. Luis Canas; Promotion from Assistant Professor to Associate Professor. 2008.

University of California—Riverside: College of Agricultural and Natural Sciences; Department of Entomology, Riverside, CA. Dr. Frank Byrne; Promotion from Assistant Specialist to Associate Research Entomologist. 2008.

Texas A & M University: College of Agriculture and Life Sciences; Department of Entomology, College Station, TX. Dr. Carlos Bogran; Promotion from Assistant Professor and Extension Specialist to Associate Professor and Extension Specialist. 2007.

MISCELLANEOUS

1. Undergraduate Projects: California Polytechnic State University—San Luis Obispo; San Luis Obispo, CA

Fungicide efficacy on *Pythium ultimum* of bedding plant seedlings 1990.

Fungicide efficacy on *Xanthomonas campestris* pv. *syngonii* on *Syngonium* ‘White Butterfly’ and ‘Tri-leaf Wonder’ 1990.

Herbicide trials with bedding plants and ground covers. Ronstar 2G and Ronstar 50WP weed control and phytotoxicity using various annual bedding plants 1990.

2. Memberships

Entomological Society of America (ESA).

American Phytopathological Society (APS).

American Society for Horticultural Sciences (ASHS).

International Organization for Biological Control (IOBC).

Phi Kappa Phi Honor Society.

Gamma Sigma Delta.

Association of Education and Research Greenhouse Curators (AERGC)

Epsilon Sigma Phi (Cooperative Extension Professionals’ Organization)

3. Conferences/Workshops/Symposiums Organized

Kansas Greenhouse Growers Association Educational Workshop; October 18, 2016. Manhattan, KS.

Thirty-five attended the educational workshop.

Kansas Greenhouse Growers Association Educational Workshop; October 21, 2015. Manhattan, KS.

Fifty individuals attended the educational workshop.

Kansas Greenhouse Growers Association Educational Program; October 28, 2013. Manhattan, KS. Forty-five individuals attended the educational program.

Kansas Greenhouse Growers Association Educational Program; October 25, 2012. Manhattan, KS. Thirty-five individuals attended the educational program.

Kansas Greenhouse Growers Association Educational Program; October 27, 2011. Manhattan, KS. Forty individuals attended the educational program.

Society of American Florists 24th Annual Conference on Pest and Disease Management in Ornamentals; February 28-March 1, 2008. Atlanta, GA.

Greenhouse Pest Management Symposium: Research, Implementation, and Opportunities. December 9, 2007. Entomological Society of America Annual Meeting, San Diego, CA.

Seventh Annual Greenhouse Management Workshop; June 8, 2005. Bloomington, IL. Twenty-five individuals attended the workshop.

Sixth Annual Greenhouse Management Workshop; August 12, 2004. Bloomington, IL. Thirty-one individuals attended the workshop.

Fifth Annual Greenhouse Management Workshop; August 5, 2003. Bloomington, IL. Thirty individuals attended the workshop.

Fourth Annual Greenhouse Management Workshop; June 4, 2002. Naperville, IL. Sixty individuals attended the workshop.

NCR-125 Symposium: Biological Control in Urban Environments and Interior Plantscapes; March 27, 2002. North Central Branch Entomological Society of America Annual Meeting; East Lansing, MI. Third Annual Greenhouse Management Workshop; June 11, 2001. Springfield, IL. Forty individuals attended the workshop.

Second Annual Greenhouse Management Workshop; June 20, 2000. Naperville, IL. One-hundred and eleven individuals attended the workshop.

First Annual Pest Management in Greenhouses Workshop; June 24, 1999. Urbana, IL. Seventy-five individuals attended the workshop.

Formal Conference: Arthropod Pests of Ornamentals. 1997. Entomological Society of America Annual Meeting, Nashville, TN.

Formal Conference: Arthropod Pests of Ornamentals. 1996. Entomological Society of America Annual Meeting, Louisville, KY.

Midwest Graduate Student Committee for Biological Control Conference. 1995. North Central Branch Entomological Society of America Annual Meeting; Lexington, KY.

4. Department Opportunities: Department of Entomology; Purdue University, West Lafayette, IN

Member of Linnaean Team 1992-93:

* Entomological Society of America Annual Meeting Champions; Baltimore, MD 1992.

* North Central Branch Annual Meeting Champions; Fargo, ND 1993.

Assistant: Insect Expo; Indianapolis, IN 1993.

Department Liaison: Committee for the Education of Teaching Assistants (CETA) 1993-95.

Planning Committee Member: Purdue Pest Control Conference 1996-1998.

Sign Manager: Purdue Pest Control Conference 1994-1997.

Participant: Eighth Annual Student Paper Competition; Cincinnati, OH. October 26, 1993.

Participant: Tenth Annual Student Paper Competition; Lexington, KY. November 4, 1995.

Public Speaker Listing 1993-1995.

Graduate School Representative for Thomas Say Society 1995-1996.

Participant: Master Gardener Training Program Workshops 1996, 1997, and 1998.

5. Department Opportunities: Department of Ornamental Horticulture: California Polytechnic State University—San Luis Obispo; San Luis Obispo, CA

Pesticide Applicator 1988-1990.

Greenhouse Manager 1990.

Tissue Culture Club President 1989-1990.

Tissue Culture Club Treasurer 1986-1988.

Associated Landscape Contractors of America (ALCA) Competition:

A. San Luis Obispo, CA: April 8-10, 1988

* First Place: Woody Plant Identification

* First Place: Disease and Pest Identification

* First Place: Interior Plant Identification

B. Milwaukee, WI: April 7-9, 1989

* First Place: Disease and Pest Identification

* First Place: Interior Plant Identification

* Second Place: Woody Plant Identification

* Team Captain

C. Fort Collins, CO: April 6-8, 1990

* First Place: Woody Plant Identification

* First Place: Interior Plant Identification

* Third Place: Weed and Turf Identification

* Second Place Superstar Overall

6. Additional Miscellaneous Activities

Grant Writing Workshop Certification of Completion 2001.

Insects: Stewardship days (October 10, 2002. DeWitt County, IL).

Insects: Stewardship days (October 9, 2001. DeWitt County, IL).

Insects: Stewardship days (October 4 and 5, 2000. DeWitt County, IL).

Entomology Judge. Illinois State Fair Junior Department: Illinois State Fair; Springfield, IL. August 15, 2002.

Entomology Judge. Illinois State Fair Junior Department: Illinois State Fair; Springfield, IL. August 15, 16, and 18, 2001.

Entomology Judge. Illinois State Fair Junior Department: Illinois State Fair; Springfield, IL. August 15 and 16, 2000.

Entomology Judge. Illinois State Fair Junior Department: Illinois State Fair; Springfield, IL. August 15 and 21, 1999.

Foreign exploration in Honduras, Central America. 1997. Search for potential natural enemies (parasitoids) of the giant whitefly, *Aleurodicus dugesii*. Funding provided by Texas A & M; College Station, TX.

Treasurer of Pi Alpha Xi 1994-1995.

S-255 Annual Report for Indiana. 1994. C. R. Edwards, L. W. Bledsoe, M. N. Anwar, and R. A. Cloyd. Department of Entomology; Purdue University; West Lafayette, IN.

Garden writer for Monterey Peninsula Landscape Gardeners Association (MPLGA) 1987-1992. Column: Pest management in the garden and landscape.

Chairperson: Lafayette Orchid Society 1998-1999.

Vice-President: Central Illinois Orchid Society 2000-2006.

Faculty Advisor: Illini Orchid Club 2002-2006.

Co-organizer: Kansas State University; Department of Entomology, Research-Extension Updates. November 22-23, 2010; Manhattan, KS.

“Bugs”: Stonehouse-pre-school class; Kansas State University, Manhattan, KS. April 6, 2010.

Insect Zoo volunteer guide for Randolph County School sixth graders (~15 children). May 5, 2010. Kansas State University; Department of Entomology Insect Zoo, Manhattan, KS.

Entomology expert for Sick Plant Clinic. Shawnee County Extension Master Gardeners. July 6, 2010. Topeka, KS.

Entomology expert for Sick Plant Clinic. Shawnee County Extension Master Gardeners. July 5, 2011. Topeka, KS.

Poster judge for undergraduate poster competition. American Society of Horticultural Science Annual Conference; September 25, 2011. Waikoloa, HI.

Grower solutions. Ohio Florists' Association Short Course; July 10-11, 2011. Columbus, OH.

What are insects? Children's educational day; Kansas State University Stonehouse. April 6, 2011. Manhattan, KS.

Entomology expert for Sick Plant Clinic. Shawnee County Extension Master Gardeners; July 5, 2012. Topeka, KS.

MeisterPro Board of Review for 2013 *Crop Protection Handbook*; MeisterMedia Worldwide, Willoughby, OH.

Entomology expert for Sick Plant Clinic. Shawnee County Extension Master Gardeners; July 8, 2013. Topeka, KS.

Insects in the movies. Kansas State University Open House: Department of Entomology Display; April 20, 2013. Manhattan, KS.

MeisterPro Board of Review for 2014 *Crop Protection Handbook*; MeisterMedia Worldwide, Willoughby, OH.

Entomology expert for Sick Plant Clinic. Shawnee County Extension Master Gardeners; July 7, 2014. Topeka, KS.

- Cloyd, R. A. 2014. Climate change reconsidered II: biological impacts. Summary for Policymakers: Nongovernmental International Panel on Climate Change; The Heartland Institute, Chicago, IL (Served as author and reviewer).
- Peer review panel member: served as a panelist for the USDA-NIFA Plant Production and Protection SBIR Phase II Grant Program; May 20-23, 2014. FY 2014 USDA AFRI NIFA Fellowship Grant Program; Washington, D.C. (reviewed five grant proposals for funding).
- Reviewed grant proposal entitled “Biological control of thrips and whitefly in greenhouse roses” (file 12656) for the Technology Foundation STW; Dutch funding agency in the Netherlands.
- Reviewed grant proposal entitled ‘Insecticide resistance management of the western flower thrips’ for the American Floral Endowment; Alexandria, VA.
- Insects in the movies: “big-bug” 1950’s science fiction movies. Kansas State University Open House: Department of Entomology Display; April 5, 2014. Manhattan, KS.
- Entomology expert for Sick Plant Clinic. Shawnee County Extension Master Gardeners; July 6, 2015. Topeka, KS.
- Insects in the movies: “big-bug” 1950’s science fiction movies. Kansas State University Open House: Department of Entomology Display; April 11, 2015. Manhattan, KS. Approximately 623 attendees.
- Assisted Lea Westervelt (Greenhouse Manager: Department of Horticulture and Natural Resources; Kansas State University, Manhattan, KS) in revitalizing orchid collection by helping repot the existing orchids. March 9 and April 20, 2016.
- Provided insect educational display for Horticultural Sciences Day (February 12, 2016. Johnson County Community College; Overland Park, KS).
- Assisted Dr. Kimberly Williams (Professor: Department of Horticulture and Natural Resources; Kansas State University, Manhattan, KS) in providing students associated with interiorscape class (HORT 377: Interior Landscaping) information, (in both lecture and laboratory format, on how to identify and manage insect and mite pests. February 3, 2016.
- Provided educational training for both the Horticulture and Popenoe Entomology Club at the Willow Lake Student Farm (Manhattan, KS) regarding plant protection of outdoor grown vegetable crops. October 8, 2016. There were a total of 8 individuals present.
- Entomology expert for Sick Plant Clinic. Shawnee County Extension Master Gardeners; July 11, 2016. Topeka, KS.
- Insects in the movies: “big-bug” 1950’s science fiction movies Kansas State University Open House: Department of Entomology Display; April 16, 2016. Manhattan, KS. Approximately 547 attendees.
- Provided educational training for both the Horticulture and Popenoe Entomology Club at the Willow Lake Student Farm (Manhattan, KS) regarding plant protection of outdoor grown vegetable crops; July 22, 2017. There were a total of 10 individuals present.
- Judge for 10-minute Student Paper Competition: P-IE, Biological Control, Parasitoids. Entomological Society of America Annual Meeting; November 6, 2017. Denver, CO.
- Undergraduate mentor for Mary Conner (Junior; Horticulture Major). Fall Semester 2017. Research Project: Predation by insidious flower bug, *Orius insidiosus*, adults on western flower thrips, *Frankliniella occidentalis*, adults under laboratory and greenhouse conditions. Presented poster at Entomology Department: College of Agriculture, Undergraduate Research Symposium (December 7, 2017. K-State Student Union; Kansas State University, Manhattan, KS).
- Insects in the movies: “big-bug” 1950’s science fiction movies. Kansas State University Open House: Department of Entomology Display; April 1, 2017. Manhattan, KS. Approximately 587 attendees.

7. Graduate Students

Meredith Blumthal (MS)

Ana Cabrera (MS)

Katharina Rothwangl (MS)

Theresa Meers (MS)

Erick Caamano (MS)
Paul Thomas Tiddens (MS)
Brian Hogendorp (MS)
Brian Hogendorp (PhD)
Heather Lash (MS)
Nanette Kalscheur (MS)
Wendy Johnson (PhD)
Amy Willmott (MS)
Erik Echegaray (PhD)
Jessica Kivett (MS)
Yinping Li (PhD)

8. International Student Interns or Visiting Scholars

Eva Birken (Germany): August through October 2005.

Astrid Racancoj Racancoj Coyoy (Guatemala): January through April 2013 (Zamorano University; Honduras, Central America).

Ivan Grijalva (Ecuador): January through April 2014 (Zamorano University; Honduras, Central America).

9. Undergraduate and Non-Undergraduate Research Technicians

Joshua D. Gillespie (undergraduate technician)
Nicholas R. Timmons (undergraduate technician)
Jessica M. Goebel (undergraduate technician)
Nikki DePaola (undergraduate technician)
Amy Dickinson (research technician)
Amy Willmott (research technician)
Nathan Herrick (research associate)
Mark/Congxing Zhu (research assistant)

Up-dated: June 12, 2018