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Education

2001. Ph.D. Oklahoma State University, Department of Entomology and Plant Pathology.

1998. M.S. Oklahoma State University, Department of Entomology and Plant Pathology.

1995. B.S. Fort Hays State University, Department of Biology.

Professional Employment

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| Aug. 2008 to present | Adjunct Professor | Clemson University |
| July 2014 to present | Co-Director, Center for Invasive Species and Ecosystem Health | University of Georgia |
| July 2017 to present | Professor | University of Georgia |
| July 2012 to June 2017 | Associate Professor | University of Georgia |
| Dec. 2006 to June 2012 | Assistant Professor | University of Georgia |
| Dec. 2002 to Nov. 2006 | Postdoctoral Research Entomologist | USDA ARS CGAHR |
| April 2001 to Nov. 2002 | Postdoctoral Research Associate | Kansas State University |

Consulting Experience

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| March 2012 to Nov. 2013 | Expert Witness | OneBeacon Insurance Co. |
| June 2001 to Nov. 2002 | Pest Management Consultant | Anheuser Busch Co., Inc. |

Graduate Student Committee Service (23 committees including 12 committee chairs)

Perez, Lauren. 2017 to present. M.S. student in entomology at UGA (committee chair).

Bowers, Carson. 2017 to present. M.S. student in entomology at UGA (committee member).

Moore, Logan. 2016 to present. Dual M.S. student in Crop and Soil Sciences at UGA and the University of Padova (Italy) (committee co-chair).

Hobby, Sarah. 2016 to present. MPPPM student in Entomology at UGA (research advisor).

Bostick, Nancy. 2016 to present. MPPPM student in Entomology at UGA (research advisor).

Houunkpati, Brad. 2013 to present. Ph.D. student in Entomology at UGA (committee member).

Brown, Lydia. 2017 graduate (M.S.) in the Dept. of Entomology at the University of Arizona (committee member).

Portier, William. 2017 graduate (M.S.) in the Dept. of Entomology at UGA (committee member).

Knight, Ian. 2017 graduate (Ph.D.) in the Dept. of Entomology at UGA (committee chair).

Evans, Richard. 2016 graduate (M.S.) in the Dept. of Entomology at UGA (committee member).

Hadden, Whitney. 2016 graduate (M.S.) in the Dept. of Entomology at UGA (committee chair).

Wei, Xing. 2016 graduate (MPPPM) in the Dept. of Entomology at UGA (research advisor).

Stubbins, Francesca. 2016 graduate (Ph.D.) in the College of Agriculture, Forestry and Life Sciences at Clemson University (committee member).

Blount, Joni. 2016 graduate (Ph.D.) in the Dept. of Entomology at UGA (committee member).

Murphy, James. 2015 graduate (M.S.) in the Dept. of Entomology at UGA (committee co-chair).

Little, Brian. 2014 graduate (M.S.) in the Dept. of Entomology at UGA (committee chair).

Marasigan, Kathleen. 2014 graduate (M.S.) in the Dept. of Entomology at UGA (committee member).

Knight, Ian. 2014 graduate (M.S.) in the Dept. of Entomology at UGA (committee chair).

Aduba, Obinna. 2013 graduate (Ph.D.) in the Dept. of Entomology at UGA (committee member).

Pulakkatu-thodi, Ishakh. 2013 graduate (Ph.D.) in the Dept. of Entomology at UGA (committee chair).

Pilkay, Grant. 2013 graduate (Ph.D.) in the College of Agriculture, Forestry, and Life Sciences at Clemson University (committee member).

Huang, Ta-I. 2012 graduate (Ph.D.) in the Dept. of Entomology at UGA (committee chair).

Reeves, Richard. 2009 graduate (M.S.) in the Dept. of Entomology, Soils, and Plant Sciences at Clemson University (committee member).

Post-Doctoral Advising/Mentoring (3)

Lahiri, Sriyanka. 2017-present. Worked on biological control and management of sugarcane aphid.

Pulakkatu-thodi, Ishakh. 2014. Worked on cultural control of stink bugs in cotton and soybean.

Herbert, John. 2009-2011. Worked on biology and ecology of stink bugs in the farmscape.

Other Mentoring (5)

Jackson, Marchan. 2014. Biology teacher from Dougherty County Public Schools spent 4 weeks in my laboratory as a participant in the Georgia Intern-Fellowships for Teachers Program.

Wei, Xing. 2013-2014. Research Scholar from Jilin Jinqing Seed Company, LLC working on use of chemigation to management stink bugs in cotton.

Hunter, Jamal. 2012-2014. Undergraduate student from Abraham Baldwin Agricultural College conducted an independent research project in my lab from June 2012 to March 2013. Project was sponsored by the ASSETS (achievement through student support and experiential training in science) Scholars Program (funded by NSF).

Soria, Miguel Ferreira. 2011. Visiting Ph.D. student from the Federal University of Grande Dourados, Mato Grosso do Sul, Brazil spent 9 months conducting research in my laboratory.

Perrin, Anna. 2009. Biology Teacher from Tift County High School spent 4 weeks in my laboratory as a participant in the Georgia Intern-Fellowships for Teachers Program.

University Teaching Experience

ENTO 8820 (Concepts in Integrated Pest Management). Instructor of record (25%). Spring 2017 (19 students).

ENTO 4250/6250 (Pesticides and Transgenic Crops). Guest lecturer on non-target effects of insecticides. 50-minute lecture. February 22, 2016 (30 students).

ENTO 8820 (Concepts in Integrated Pest Management). Instructor of record (25%). Spring 2015 (19 students).

ENTO 4250/6250 (Pesticides and Transgenic Crops). Guest lecturer on non-target effects of insecticides. 50-minute lecture. March 5, 2014 (25 students).

ENTO 8500 (Insect Ecology). Instructor of record (33%). Fall 2013 (12 students).

ENTO 8820 (Concepts in Integrated Pest Management). Instructor of record (33%). Spring 2013 (10 students).

ENTO 4250/6250 (Pesticides and Transgenic Crops). Guest lecturer on non-target effects of insecticides. 50-minute lecture. February 25, 2013 (28 students).

ENTO 8900 (Problems in Entomology). Project coordinator (100%). Fall 2012 (1 student).

ENTO 8900 (Problems in Entomology). Instructor of record (100%). Fall 2011 (1 student).

ENTO 8900 (Problems in Entomology). Instructor of record (100%). Fall 2010 (1 student).

ENTO 8500 (Insect Ecology). Instructor of record (25%). Fall 2009 (9 students).

ENTO 3740 (Insect Pest Management). Guest lecturer on cotton insects. Two 50-minute lectures and a 105-minute lab. Dec. 9 & 11, 2009 (10 students).

CRSS 430 (Crop Production and Management-university of Georgia). Guest lecturer on the role of an entomologist in crop production. 75-minute lecture. Dec. 5, 2009 (10 students).

AESC 3920 (Agricultural and Environmental Sciences Internship). Instructor of record (100%). Summer 2009 (1 student).

ENTO 3740 (Insect Pest Management). Guest lecture on cotton insects. 50-min lecture and 120-minute lab. December 3, 2008 (9 students).

GRSC 651 (Food and Feed Product Protection-Kansas State University). Guest lecturer on sanitation, sampling, and pest management. 2 lectures and lab sessions each in 2003 and 2005 (20 students).

GRSC 710 (Fundamentals of Grain Storage-Kansas State University). Guest lecturer on insect identification and use of residual insecticides. 2 lectures in 2001 (12 students).

ENTO 3421 (Horticultural Insects-Oklahoma State University). Teaching assistant responsible for 8 wk of lecture and lab material. 8 lectures and labs in spring 1999 (21 students).

ENTO 2003. (Insects and Society-Oklahoma State University). Teaching assistant responsible for classroom set up, testing, grading, and class management. Fall 1998 and 1999 (160 students).

Patents

Haidekker, M. A., M. D. Toews, and J. Xia. 2013. Non-invasive methods and apparatus for detecting insect-induced damage in a plant. United States Patent and Trademark Office patent no. 8,384,046 (issued February 26, 2013).

Haidekker, M. A., M. D. Toews, and J. Xia. 2014. Non-invasive methods and apparatus for detecting insect-induced damage in a plant. IP Australia patent no. 2010208133 (issued June 19, 2014).

Haidekker, M. A., M. D. Toews, and J. Xia. Non-invasive methods and apparatus for detecting insect-induced damage in a plant. Full patent application pending in India and Brazil.

Peer Reviewed Publications (60 total)

Asterisks () designate manuscripts written by Toews lab students or post docs*

- *Knight, E.A., P.M. Roberts, W.A. Gardner, K.M. Oliver, F.P.F. Reay-Jones, D.D. Reisig and M.D. Toews. Spatial distribution of *Megacopta cribraria* (Hemiptera: Plataspidae) adults, eggs and parasitism by *Paratelenomus saccharalis* (Hymenoptera: Playgastridae) in soybean. *Environmental Entomology* (in press).
- *Knight, E.A., P.M. Roberts, W.A. Gardner, K.M. Oliver, A. Jacobson and M.D. Toews. Effect of *Beauveria bassiana* (Hypocreales: Clavicipitaceae) and fungicide applications on 10 *Megacopta cribraria* (Hemiptera: Plataspidae) in soybean. *Crop, Forage and Turfgrass Management* (in press).

- Evans, R.K., M.D. Toews, and A.A. Sial. 2017. Diel periodicity of *Drosophila suzukii* (Diptera: Drosophilidae) under field conditions. PLOS ONE 12(2) DOI:10.1371/journal.pone.0171718.
- *Wei, X, P.M. Roberts, W.M. Porter, C.D. Perry, and M.D. Toews. 2017. A laboratory evaluation of chemigation to manage stink bugs. Journal of Economic Entomology 110: 471-478.
- *Knight, Ian, G. Rains, A. Culbreath, and M. Toews. 2017. Thrips counts and disease incidence in response to reflective particle films and conservation tillage in cotton and peanut cropping systems. Entomologia Experimentalis et Applicata 162: 19-29.
- *Soria, M. F., P. E. Degrande, A. R. Panizzi and M.D. Toews. 2016. Economic injury level of the neotropical brown stink bug, *Euschistus heros* (F.), on cotton plants. Neotropical Entomology (in press) DOI 10.1007/s13744-016-0454-2.
- Stubbins, F.L, J.K. Greene, M.D. Toews, and F.P.F. Reay-Jones. 2016. Assessment of a cross-vane trap as a tool for sampling the invasive *Megacopta cribraria* in soybean with associated evaluations of female reproductive status. Environmental Entomology 45:1262-1270.
- Ni, X., Cottrell, T. E., Toews, M. D., Tillman, P. G. and Buntin, G. D. 2016. Diurnal activities of the brown stink bug (Hemiptera: Pentatomidae) in and near tasseling corn fields. Journal of Entomological Science 51: 226-237.
- Blount., J., P. Roberts, M. Toews, W. Gardner., J. All., J. Davis, and D. Buntin. 2016. Season population dynamics of *Megacopta cribraria* (Hemiptera: Plataspidae) in kudzu and soybean, and implication for insecticidal control in soybean. Journal of Economic Entomology, 110:157-167.
- Marasigan, K., M. Toews, R. Kemerait, Jr., M.R. Abney, A. Culbreath, and R. Srinivasan. 2016. Evaluation of alternatives to carbamate and organophosphate insecticides against thrips and tomato spotted wilt virus in peanut production. J. Econ. Entomol. 109:544-557.
- *Knight, I., G. Rains, A. Culbreath, and M.D. Toews. 2015. Conservation tillage and thiamethoxam seed treatments as tools to reduce thrips densities and disease in cotton and peanut. Crop Protection 76:92-99.
- Pilkay, G.L., F.P.F. Reay-Jones, J.K. Greene, M.D. Toews, and W.C. Bridges. 2015. Spatial and temporal dynamics of stink bugs (Hemiptera: Pentatomidae) in southeastern farmscapes. Journal of Insect Science 15:1-13.
- Ni, X., J.P. Wilson, M.D. Toews, G.D. Buntin, X. Li, Z. Lei, K. He, W. Xu, X. Li, A. Huffaker, and E.A. Schmelz. 2014. Evaluation of spatial and temporal patterns of insect damage and aflatoxin level in the pre-harvest corn fields to improve management tactics. Insect Science 21:572-583.
- Ni, Xinzhi, M.D. Toews, G.D. Buntin, J.E. Carpenter, A. Huffaker, E.A. Schmelz, T.E. Cottrell, and Z. Abdo. 2014. Influence of brown stink bug feeding, planting date and sampling time on common smut infection of maize. Insect Science 21:564-571.
- *Pulakkatu-thodi, I., D. Reisig, J.K. Greene, F. Reay-Jones, and M.D. Toews. 2014. Within-field spatial distribution of stink bug induced boll injury in commercial cotton fields of the southeastern USA. Environmental Entomology 43:744-752.
- Kamminga, K., D.A. Herbert, M.D. Toews, S. Malone, and T. Kuhar. 2014. *Halyomorpha halys* (Hemiptera: Pentatomidae) feeding injury on cotton bolls. Journal of Cotton Science 18:68-74.

- *Pulakkatu-thodi, I., D. Shurley, and M.D. Toews. 2014. Influence of planting date on stink bug injury, yield, fiber quality and economic returns in Georgia cotton. *Journal of Economic Entomology* 107:646-653.
- Arthur, F.H., J.F. Campbell, and M.D. Toews. 2013. Distribution, abundance, and seasonal patterns of stored product beetles in a commercial food storage facility. *Journal of Stored Products Research* 56:21-32.
- Stewart, S.D., D.S. Akin, J. Reed, A. Catchot, D. Cook, J. Gore, G.M. Lorenz, B.R. Leonard, A. Herbert, R.E. Jackson, M. Toews, P. Roberts, J. Bacheler, D. Reisig, J. Greene, D.L. Kerns, G. Studebaker, K. Tindall, and S. Micinski. 2013. Regional survey of thrips species composition across the upland cotton belt. *Journal of Cotton Science* 17:263-269.
- Gardner, W.A., H.B. Peeler, J. LaForest, P.M. Roberts, A.N. Sparks, J.K. Greene, D. Reisig, D.R. Suiter, J.S. Bacheler, K. Kidd, C.H. Ray, X.P. Hu, R.C. Kemerait, E.A. Scocco, J.E. Eger, Jr., J.R. Ruberson, E.J. Sikora, D.A. Herbert, Jr., C. Campana, S. Halbert, S.S. Stewart, G.D. Buntin, M.D. Toews, and C.T. Barger. 2013. Confirmed distribution and occurrence of *Megacopta cribraria* (F.) (Hemiptera: Heteroptera: Plataspidae) in the southeastern United States. *J. Entomol. Sci.* 42:118-127.
- Mustafic, A., E.E. Roberts, M.D. Toews, and M.A. Haidekker. 2013. LED-induced fluorescence and image analysis to detect stink bug damage in cotton bolls. *Journal of Biological Engineering* 7:1-9.
- Arthur, F.H., J.F. Campbell, E.A. Fontenot, and M.D. Toews. 2013. Assessing effects of esfenvalerate aerosol applications on resident populations of *Tribolium castaneum* (Herbst), the red flour beetle, through direct and indirect sampling. *Journal of Stored Products Research* 53:1-6.
- Arthur, F.H., J.F. Campbell, and M.D. Toews. 2013. Distribution, abundance, and seasonal patterns of *Plodia interpunctella* (Hübner) in a commercial food storage facility. *Journal of Stored Products Research* 53:7-14.
- Ruberson, J.R., Takasu, K., G.D. Buntin, J.E. Eger, Jr., W.A. Gardner, J. Greene, T.M. Jenkins, W.A. Jones, D.M. Olson, P.M. Roberts, D.R. Suiter, and M.D. Toews. 2013. From Asian curiosity to eruptive American pest: *Megacopta cribraria* (Hemiptera: Plataspidae) and prospects for biological control. *Applied Entomology and Zoology* 48:3-13.
- *Herbert, J.J., and M.D. Toews. 2012. Seasonal abundance and population structure of *Chinavia hilaris* and *Nezara viridula* (Hemiptera: Pentatomidae) in Georgia farmscapes containing corn, cotton peanut and soybean. *Annals of the Entomological Association of America* 105:582-591.
- *Huang, T-I., and M.D. Toews. 2012. Feeding preference and movement of *Nezara viridula* (L.) and *Euschistus servus* (Say) (Hemiptera: Pentatomidae) on individual cotton plants. *Journal of Economic Entomology* 105:847-853.
- Edde, P.A., M.D. Toews, and T.W. Phillips. 2011. Effects of various semiochemicals on the responses of *Rhyzopertha dominica* (F.) to pheromone traps in the field. *Annals of the Entomology Society of America* 104:1297-1302.
- Xia, J., A. Mustafic, M.D. Toews, and M.A. Haidekker. 2011. Stink bug feeding induces fluorescence in developing cotton bolls. *Journal of Biological Engineering* 5:11 1-9.
- *Herbert, J.J., and M.D. Toews. 2011. Seasonal abundance and population structure of the brown stink bug in farmscapes containing corn, cotton, peanut and soybean. *Annals of the Entomological Association of America* 104:909-918.

- Adedoyin, A., C. Li, and M.D. Toews. 2010. Characterization of single cotton fibers using a laser diffraction system. *Textile Research Journal* 81:355-367.
- Toews, M.D., R.S. Tubbs, D.Q. Wann, and D. Sullivan. 2010. Thrips (Thysanoptera: Thripidae) mitigation in seedling cotton using strip tillage and winter cover crops. *Pest Management Science* 66:1089-1095.
- Toews, M.D., J.F. Campbell, and F.H. Arthur. 2010. The presence of flour affects the efficacy of aerosolized insecticides used to treat the red flour beetle, *Tribolium castaneum*. *Journal of Insect Science* 10:196 1-14.
- Reeves, R.B., J.K. Greene, F.P.F. Reay-Jones, M.D. Toews, and P.D. Gerard. 2010. Effects of adjacent habitat on populations of stink bugs (Heteroptera: Pentatomidae) in cotton as part of a variable agricultural landscape in South Carolina. *Environmental Entomology* 39:1420-1427.
- Reay-Jones, F.P.F., M.D. Toews, J.K. Greene, and R.B. Reeves. 2010. Spatial dynamics of stink bugs (Hemiptera: Pentatomidae) and associated boll injury in southeastern cotton fields. *Environmental Entomology* 39:956-969.
- Campbell, J.F., M.D. Toews, F.H. Arthur, and R.T. Arbogast. 2010. Long term monitoring of *Tribolium castaneum* in two flour mills: seasonal patterns and impact of fumigation. *Journal of Economic Entomology* 103:991-1001.
- Campbell, J.F., M.D. Toews, F.H. Arthur, and R.T. Arbogast. 2010. Long term monitoring of *Tribolium castaneum* populations in two flour mills: rebound after fumigation. *Journal of Economic Entomology* 103:525-532.
- Reay-Jones, F.P.F., M.D. Toews, J.K. Greene, and R.B. Reeves. 2010. Development of sampling plans for cotton bolls injured by stink bugs (Hemiptera: Pentatomidae). *Journal of Economic Entomology* 103:252-532.
- Reay-Jones, F.P.F., J.K. Greene, M.D. Toews, and R.B. Reeves. 2009. Sampling stink bugs (Hemiptera: Pentatomidae) for population estimation and pest management in southeastern cotton production. *Journal of Economic Entomology* 102:2360-2370.
- Nansen, C., P. Flinn, D. Hagstrum, M.D. Toews, and W.G. Meikle. 2009. Interspecific associations among stored grain beetles. *Journal of Stored Products Research* 45:254-260.
- Toews, M.D., and W.D. Shurley. 2009. Crop juxtaposition affects cotton fiber quality in Georgia farmscapes. *Journal of Economic Entomology* 102:1515-1522.
- Toews, M.D., E.L. Blinka, J.W. Van Duyn, D.A. Herbert Jr., J.S. Bachelier, P.M. Roberts, and J.K. Greene. 2009. Fidelity of external boll feeding lesions to internal damage for assessing stink bug damage in cotton. *Journal of Economic Entomology* 102:1344-1351.
- Toews, M.D., F.H. Arthur, and J.F. Campbell. 2009. Monitoring flour beetles in pilot-scale warehouses treated with β -cyfluthrin: are residual insecticides and trapping compatible? *Bulletin of Entomological Research* 99:121-129.
- Jia, F., M.D. Toews, J.F. Campbell, and S.B. Ramaswamy. 2008. Survival and reproduction of the lesser grain borer, *Rhyzopertha dominica* (F.) (Coleoptera: Bostrichidae) on flora associated with native habitats in Kansas. *Journal of Stored Products Research* 44:366-372.
- Toews, M.D., J. Perez-Mendoza, J.E. Throne, F.E. Dowell, E.B. Maghirang, F.H. Arthur, and J.F. Campbell. 2007. Rapid assessment of insect fragments in flour milled from wheat infested with known densities of immature and adult *Sitophilus oryzae* (L.) (Coleoptera: Curculionidae). *Journal of Economic Entomology* 100:1714-1723.

- Subramanyam, Bh., M.D. Toews, K.E. Ileleji, D.E. Maier, G.D. Thompson, and T.J. Pitts. 2007. Evaluation of spinosad as a grain protectant on three Kansas farms. *Crop Protection*. 26:1021-1030.
- Toews, M.D., J.F. Campbell, F.H. Arthur, and S.B. Ramaswamy. 2006. Outdoor flight activity and immigration of *Rhyzopertha dominica* into seed wheat warehouses. *Entomologia Experimentalis et Applicata* 121:73-85.
- Toews, M.D., J.F. Campbell, and F.H. Arthur. 2006. Temporal dynamics and response to fogging or fumigation of stored-product coleoptera in a grain processing facility. *Journal of Stored Products Research*. 42:480-498.
- Toews, M.D., T.C. Pearson, and J.F. Campbell. 2006. Imaging and automated detection of *Sitophilus oryzae* L. (Coleoptera: Curculionidae) pupae in hard red winter wheat. *Journal of Economic Entomology* 99:583-592.
- Toews, M.D., J.F. Campbell, F.H. Arthur, and M. West. 2005. Monitoring *Tribolium castaneum* (Herbst) (Coleoptera: Tenebrionidae) in pilot- scale warehouses treated with residual applications of (S) hydroprene and cyfluthrin. *Journal of Economic Entomology* 98:1391-1398.
- Edde, P.A., T.W. Phillips, and MD. Toews. 2005. Responses of *Rhyzopertha dominica* (Coleoptera: Bostrichidae) to its aggregation pheromones as influenced by trap design, trap height, and habitat. *Environmental Entomology* 34:1549-1557.
- Toews, M.D., T.W. Phillips, and M.E. Payton. 2005. Estimating populations of grain beetles using probe traps in wheat-filled concrete silos. *Environmental Entomology*. 34:712-718.
- Toews, M.D., F.H. Arthur, and J.F. Campbell. 2005. Role of food and structural complexity on capture of *Tribolium castaneum* (Herbst) (Coleoptera: Tenebrionidae) in simulated warehouses. *Environmental Entomology* 34:164-169.
- Huang, F., Bh. Subramanyam, and M.D. Toews. 2004. Susceptibility of laboratory and field strains of four stored-product insect species to spinosad. *Journal of Economic Entomology* 97:2154-2159.
- Toews, M.D., and Bh. Subramanyam. 2004. Survival of stored-product insect natural enemies in spinosad-treated wheat. *Journal of Economic Entomology* 97:1174-1180.
- Toews, M.D., Bh. Subramanyam, and J.M. Rowan. 2003. Knockdown and mortality of eight stored-product beetles exposed to four surfaces treated with spinosad. *Journal of Economic Entomology* 96:1967-1973.
- Toews, M.D., and Bh. Subramanyam. 2003. Contribution of contact toxicity and wheat condition to mortality of stored-product insects exposed to spinosad. *Pest Management Science* 59:538-544.
- Toews, M.D., T.W. Phillips, and D. Shuman. 2003. Electronic and manual monitoring of *Cryptolestes ferrugineus* (Stephens) (Coleoptera: Laemophloeidae) in stored wheat. *Journal of Stored Products Research*. 39:541-554.
- Toews, M.D., and T.W. Phillips. 2002. Factors affecting capture of *Cryptolestes ferrugineus* (Coleoptera: Laemophloeidae) in traps placed in stored wheat. *Journal of Economic Entomology* 95:200-207.
- Toews, M.D., T.W. Phillips, and G.W. Cuperus. 2001. Effects of wheat cultivar and temperature on suppression of *Rhyzopertha dominica* (Coleoptera: Bostrichidae) by the parasitoid *Theocolax elegans* (Hymenoptera: Pteromalidae). *Biological Control* 21:120-127.

Toews, M.D., G.W. Cuperus, and T.W. Phillips. 2000. Susceptibility of eight U.S. wheat cultivars to infestation by *Rhyzopertha dominica* (Coleoptera: Bostrichidae). *Environmental Entomology* 29:250-255.

C. Submitted Peer Reviewed Research Publications (2 total)

Asterisks () designate manuscripts written by my graduate students or post docs*

*Huang, T-I, and M.D. Toews. Local dispersal of stink bugs and associated changes in cotton fiber quality. *Journal of Cotton Science*. (Accepted pending minor revisions).

Reisig, D.D. Insecticides for managing thrips (Thysanoptera: Thripidae) in southeast US cotton: impacts of populations, seedling injury, plant growth and yield. *Journal of Economic entomology*. (Submitted August 2016).

Book Chapters (6)

Toews, M.D. and P.M. Roberts. 2016. Stink bugs. *In* D. Kerns (ed.) *Compendium of cotton diseases, pests and disorders*. American Phytopathological Society Press, St. Paul, MN.

Greene, J.K., E.P. Benson, J.A. Baum, C.S. Bundy, W.A. Jones, G.G. Kennedy, J.E. McPherson, F.R. Musser, M.D. Toews and J.F. Walgenbach. 2016. General insect management. Pp. xxx-xxx. *In* J.E. McPherson (ed.), *Biology of invasive stink bugs and related species*. CRC Press, New York.

Esquivel, J.F., J. Grazia, J. Greene, W. A. Jones, R.M. McPherson, D.L ;Musolin. W. Rabitsch, C.F. Schwertner and M.D. Toews. 2016. *Nezara viridula* (L.). Pp. xxx-xxx. *In* J.E. McPherson (ed.), *Biology of invasive stink bugs and related species*. CRC Press, New York.

Toews, M.D. and C. Nansen. 2012. Trapping and interpreting captures of stored grain insects. *In* Hagstrum, D.W, T.W. Phillips, and G. W. Cuperus (eds.). *Stored Product Protection*, Kansas State University, Manhattan, KS. Available online: <http://www.entomology.ksu.edu/p.aspx?tabid=764>.

Hutchinson, J.M.S., J.F. Campbell, M.D. Toews, T.J. Vought, Jr., and S.B Ramaswamy. 2011. Designing a local-scale microsimulation of lesser grain borer population dynamics and movements. *In* S. Clay (ed.) *GIS Applications in Agriculture, Volume Three: Invasive Species*, CRC Press, Boca Raton, FL. pp. 207-232.

Toews, M. D., and Bh. Subramanyam. 2002. Sanitation in grain storage and handling, pp. 481-497. *In* Y.H. Hui, B.L. Bruinsma, J.R. Gorham, W. Nip, P.S. Tong, and P. Ventresca (eds.), *Food Plant Sanitation*. Marcel Dekker, Inc., New York.

Awarded Competitive Grant Funding (\$14,905,695 lifetime, \$13,799,968 at UGA)

Asterisks () designate grants written by graduate students or post docs in my lab*

Tomberlin, J., K. Wooley and M.D. Toews. Microbial camouflage of valued resources as a mechanism for manipulating fungal pest response. US Defense Advanced Research Projects Agency. 7/1/2017 to 12/31/2018 (\$613,835 total, \$79,520 to UGA).

Toews, M.D. and P.M. Roberts. Collaborative efforts to manage insect pests of cotton in the southeast. 1/1/2017 to 12/31/2017 (\$16,969).

Toews, M.D. and P.M. Roberts (Understanding food webs to engineer more sustainable cotton production systems. 1/1/2017 to 12/31/2017 (20,000).

Toews, M.D. and K.L. Flanders. Dissemination of grain storage information in the southeastern US. 1/1/2017 to 12/31/2017 (\$12,361).

- Toews, M.D., K.L. Flanders, and X. Ni. Economics of safe corn storage in the southeastern US. Georgia Corn Commission 1/1/2017 to 12/31/2017 (\$18,943).
- Tubbs, R.S., W.S. Monfort, M. Toews, T. Grey, P. Ji, A. Hagan, K.B. Balkcom, and K.S. Balkcom. Agronomic management and cropping systems research for peanut. National Peanut Board – Southeast Peanut Research Initiative. 1/1/2017 to 12/31/17 (\$85,500 total, \$81,000 to UGA).
- Walgenbach, J., E. Beers, K. Daane, L. Gut, T. Kuhar, T. Leskey, M. Toews, D. Crowder, K. Hoelmer, A. Nielsen, J. Harper, S. Young, A. Agnello, P. Jentsch, A. Hajek, A. Sial, R. Bessin, R. Villanueva, J. Obrycki, P. Shrewsbury, C. Hoods, J. Wilson, B. Hutchinson, B. Koch, C. Philips, D. Reisig, G. Kennedy, C. Welty, N. Wiman, V. Walton, R. Hilton, C. Kaiser, G. Krawczyk, G. Hamilton, M. Cooper, L. Godfrey, F. Zalom, M. Hoddle, D. Weber, J. Lee, D. Alston, L. Spears, and C. Bergh. Management of brown marmorated stink bug in US specialty crops. USDA NIFA SCRI. 9/1/2016 to 8/31/2021 (\$9,164,909 total, \$275,924 to UGA).
- Toews, M.D., and P.R. Roberts. An investigation of cotton pathogens transmitted by stink bugs. Cotton Incorporated. 1/1/16 to 12/31/16 (\$21,208).
- Toews, M.D., and P.R. Roberts. Collaborative efforts to manage insect pests of cotton in the southeast. Cotton Incorporated. 1/1/2016 to 12/31/2016 (\$16,777).
- Toews, M.D., K. Flanders, N. Smith, and X. Ni. 2016. Research and economics of safe corn storage in the southeastern US. Alabama Wheat and Grain Feed Association. 1/1/16 to 12/31/16 (\$19,397).
- Toews, M.D., K. Flanders, N. Smith, and X. Ni. 2016. Research and economics of safe corn storage in the southeastern US. Georgia Corn Commission. 1/1/2016 to 12/31/2016 (\$26,374).
- Toews, M.D., P.R. Roberts, and W. Porter. Efficacy and practicality of chemigation for managing stink bugs (Yr. 2). Georgia Cotton Commission. 1/1/16 to 12/31/16 (\$21,400).
- Toews, M.D., and G. Tillman. Establishment of a brown marmorated working group in the southern US. Southern IPM Center. 3/1/16 to 2/28/17 (\$10,000).
- Ni, X., J.E. Knoll, M.D. Toews, and G.D. Buntin. Screenings of unique inbred lines and experimental hybrids for resistance to whorl-, ear- and kernel-feeding insects and aflatoxin accumulation. Georgia Agricultural Commodity Commission for Corn. 1/1/2016 to 12/31/2016 (\$13,750).
- Toews, M.D., J.H. LaForest, C.T. Barger, T.B. Brenneman, J.M. Schmidt, A.K. Culbreath, and D.G. Buntin. Design and implementation of qualitative data networks. USDA-NIFA Crop Protection and Pest Management. 9/1/2015 to 8/31/2018 (\$174,306).
- Tubbs, R.S., W.S. Monfort, M. Toews, T. Grey, P. Ji, A. Hagan, K.B. Balkcom, and K.S. Balkcom. Agronomic management and cropping systems research for peanut. National Peanut Board – Southeast Peanut Research Initiative. 1/1/2015 to 12/31/15 (\$183,000 total, \$145,000 to UGA).
- Roberts, P., and M.D. Toews. Improving thrips management in Georgia cotton. Georgia Cotton Commission. 1/1/16 to 12/31/16 (\$21,639).
- Toews, M.D. and K.L. Flanders. Testing grain protectants for safe corn storage in the southeastern US. Alabama Wheat and Grain Feed Association. 1/1/15 to 12/31/15 (\$19,740).
- Brown, L., S. Naranjo, M. Toews, and G. Frisvold. Brown stink bug management in an established cotton IPM program: a benefit-cost analysis. Western IPM Center. 3/1/15 to 2/29/2016 (\$29,659 total, \$0 to UGA).

- Toews, M.D., and P. Roberts. 2015. Southeast regional cotton thrips working group proposal. Cotton Incorporated. 1/1/15 to 12/31/15 (\$16,687).
- Toews, M.D., N. Smith, and X. Ni. Research and economics of safe corn storage in the southeastern US. Georgia Agricultural Commodity Commission for Corn. 1/1/2015 to 12/31/2015 (\$24,080).
- Toews, M.D., P.M. Roberts, and W. Porter. Efficacy and practicality of chemigation for managing stink bugs. Georgia Cotton Commission. 1/1/15 to 12/31/15 (\$21,400).
- Tubbs, R.S., M. Toews, T. Grey, P. Ji, N. Smith, A. Hagan, and K.B. Balkcom. Cropping systems and agronomic management research for peanut. National Peanut Board-Southeastern Peanut Research Initiative. 7/1/2014 to 6/30/2015 (\$145,740 total, \$120,000 to UGA).
- Toews, M.D., and K.L. Flanders. Testing grain protectants for safe corn storage in the southeastern US. Alabama Wheat and Feed Grain Association. 1/1/14 to 12/31/2015 (\$22,290).
- Reisig, D., F.P.F. Reay-Jones, P. Moore, and M.D. Toews. Dispersal and life history of *Megacopta cribraria* from kudzu and implications for management in soybean. USDA NIFA S-RIPM. 1/1/14 to 12/31/16 (\$168,644 total, \$82,383 to UGA).
- Toews, M.D., P.M. Roberts, D.D. Reisig, F.P.F. Reay-Jones, and J.K. Greene. Threshold verification and investigation of border sprays for managing the invasive *Megacopta cribraria* in commercial soybean production. USDA NIFA PMAP. 3/1/14 to 2/29/16 (\$199,876).
- Tubbs, R.S., M. Toews, T. Grey, P. Ji, N. Smith, and A. Hagan. Cropping systems research for peanut. National Peanut Board. 1/1/2013 to 12/31/2013 (\$80,740).
- Tubbs, R.S., M. Toews, G. Harris, G. Collins, W. Shurley, and A. Smith. Fertilization and cover crop interactions for strip-till cotton production. Georgia Cotton Commission. 1/1/2013 to 12/31/2013 (\$10,000).
- Tubbs, R.S., M.D. Toews, T. Grey, P. Ji, N. Smith, and A. Hagan. Cropping systems, organic production and rotation research for peanut. Georgia Peanut Commission. 3/10/2012 to 6/30/2013 (\$77,603).
- Srinivasan, R., A. Culbreath, S. Tubbs, M. Toews, and R. Kemerait. Alternatives to Temik and Thimet, integration of their usage with current peanut production practices, and evaluation of cotton as a thrips and TSWV reservoir. National Peanut Board. 1/1/2013 to 12/31/2013 (\$40,000).
- Roberts, P.M., W. Gardner, D. Buntin, J. All, and M.D. Toews. Management of kudzu bugs on soybean in Georgia. Georgia Soybean Commission. 1/1/2012 to 12/31/2013 (\$20,000).
- Toews, M.D., and P.M. Roberts. SE Regional cotton thrips working group proposal. Cotton Incorporated. 1/1/2013 to 12/31/2013 (\$16,000).
- Toews, M.D., X. Ni, and G.D. Buntin. Aflatoxin mitigation with Bt cultivars and In-field identity preserve (yr. 2). Georgia Corn Commission. 1/1/2013 to 12/31/2013 (\$29,892).
- Greene, J.K., F.P.F. Reay-Jones, P. Roberts, G.D. Buntin, W.A. Gardner, M.D. Toews, D. Reisig, and J.S. Bacheler. Management of the kudzu bug/bean plataspid, *Megacopta cribraria* (Hemiptera: Plataspidae), in soybeans in the southeastern USA. United Soybean Board. 4/1/13 to 3/31/14 (\$143,906 total; \$94,464 to UGA).
- Toews, M.D., and P.M. Roberts. Managing seedling plant stresses in a modern production environment. Georgia Cotton Commission. 1/1/2012 to 12/31/2012 (\$12,000).

- Toews, M.D. Foreign travel assistance to Daegu, South Korea. University of Georgia, Office of the Vice President for Research, Faculty Research Grants Program. 5/13/2012 (\$1763).
- Balkcom, K., R.S. Tubbs, K. Balkcom, A. Hagan, G. Harris, J. Howe, N. Smith, B. Srinivasan, and M. Toews. 2012. Fertilization, tillage, and phorate interaction on thrips and TSWV incidence in early planted peanuts. National Peanut Board Southeastern Peanut Research Initiative. 1/1/2012 to 12/31/2012 (\$26,200 total, \$15,000 to UGA).
- Srinivasan, R., A. Culbreath, R.S. Tubbs, M. Toews, Al. Culbreath, and B. Kemeraite. 2012. Alternatives to Temik and Thimet, integration of their usage with current peanut production practices, and evaluation of cotton as a thrips and TSWV reservoir. National Peanut Board. 3/10/12 to 6/30/13 (\$33,000).
- Toews, M.D., X. Ni, and G.D. Buntin. 2012. Aflatoxin mitigation with Bt cultivars and in-field identity preserve. Georgia Corn Commission. 1/1/12 to 12/31/12 (\$29,000).
- Greene, J.K., F.P.F. Reay-Jones, P. Roberts, G.D. Buntin, W.A. Gardner, M.D. Toews, D. Reisig, and J.S. Bacheler. 2012. Management of the kudzu bug/bean plataspid, *Megacopta cribraria* (Hemiptera: Plataspidae), in soybeans in the southeastern USA. United Soybean Board. 4/1/12 to 3/31/13 (\$143,906).
- Toews, M.D., R.S. Tubbs, G.H. Harris, R. Srinivasan, and P.M. Roberts. 2012. Managing early season thrips in seedling cotton using a seed treatment, starter fertilizer, and foliar insecticides. Cotton Incorporated. 1/1/12 to 12/31/12 (\$68,486 total, \$18,486 to UGA).
- Tubbs, R.S., M.D. Toews, G.H. Harris, G.D. Collins, W.D. Shurley and A.R. Smith. 2012. Fertilization and cover crop interactions for strip-till cotton production. Georgia Cotton Commission. 1/1/2012 to 12/31/2012 (\$10,000).
- Toews, M.D. 2012. Improved insecticide selection and foliar timing for mitigating thrips in seedling cotton. Georgia Cotton Commission. 1/1/2012 to 12/31/2012 (\$16,145).
- Toews, M.D., J.J. Herbert, R.S. Tubbs, G.H. Harris, R. Srinivasan, and P.M. Roberts. 2011. Managing early season thrips in seedling cotton using a seed treatment, starter fertilizer, and foliar insecticides. Cotton Incorporated. (\$61,800 total, \$13,000 to UGA) 1/1/2011 to 12/31/2011.
- *Herbert, J.J. and M.D. Toews. 2011. Managing early season thrips in seedling cotton using a seed treatment, starter fertilizer, and foliar insecticides. Georgia Cotton Commission. (\$10,500).
- Toews, M.D., X. Ni, and D. Buntin. 2011. A novel strategy for reducing aflatoxin contamination. Georgia Corn Commission (\$20,000).
- Toews, M.D., J. Herbert, F.P. Reay-Jones, D. Reisig, and J. Greene. 2011. Ecologically driven stink bug management in commercial farmscapes. USDA NIFA S-RIPM (\$140,167 total, \$53,626 to UGA).
- Tubbs, R.S., T.L. Grey, M.D. Toews, P. Ji, and A.K. Hagan. 2011. Cropping systems research for peanut. National Peanut Board Southeastern Peanut Research Initiative (\$104,740 total, \$99,000 to UGA).
- Balkcom, K.S., K.B. Balkcom, A.K. Hagan, G.H. Harris, J.A. Howe, N.B. Smith, R. Srinivasan, M.D. Toews, and R.S. Tubbs. 2011. Fertilization, tillage, and phorate interaction on thrips and TSWV incidence in early planted peanuts. National Peanut Board Southeastern Peanut Research Initiative (\$28,640 total, \$19,200 to UGA).
- Tubbs, R.S., G. Harris, W. Shurley, M. Toews, A. Smith, and G. Collins. 2011. Fertilization and cover crop interactions for strip-till cotton production. Georgia Cotton Commission. (\$10,000).

- *Herbert, J. and M.D. Toews. 2011. Stink bug distribution and reproductive capacity in Georgia cotton farmscapes. Georgia Cotton Commission (\$10,000).
- Toews, M.D. 2011. Understanding stink bug feeding preferences and movement on individual cotton plants. Georgia Cotton Commission. (\$21,313).
- Toews, M.D., J.R. Ruberson and P.M. Roberts. 2010. Preservation of Georgia Cotton Fiber. USDA NIFA Special Research Grants (\$322,011).
- Bacheler, J., A. Herbert, P. Roberts, J. Greene, and M.D. Toews. 2010. Development, production and distribution of a pocket-sized field instrument to improve stink bug management on cotton. Enhancement Grants-Special Projects-Southern Region IPM Center (\$25,000).
- Tubbs, R.S., M.D. Toews, A. Hagan, and B. Goodman. 2010. Cropping systems research for peanut. National Peanut Board Southeastern Peanut Research Initiative (\$98,999).
- Tubbs, R. S., M. D. Toews, W. D. Shurley, A. R. Ziehl, G. H. Harris, and R. D. Lee. 2010. Nutrient cycling and cover crop decomposition in strip-till and conventional cotton tillage systems. Georgia Cotton Commission. (\$20,000).
- Balkcom, Ki, Kr. Balkcom, A. Hagan, G. Harris, J. Howe, M. Toews, and R.S. Tubbs. 2010. Fertilization, tillage, and phorate interaction on thrips and TSWV incidence in early planted peanuts. National Peanut Board Southeastern Peanut Research Initiative (\$30,572).
- Toews, M. D., M. A. Haidekker, and J. Xia. 2010. Rapid detection of damaged cotton bolls using fluorescence. Georgia Cotton Commission. (\$12,500).
- Toews, M. D. 2010. In-field border insecticide applications to manage stink bugs. Georgia Cotton Commission. (\$15,000).
- Toews, M. D., J. R. Ruberson, and P. Roberts. 2009. Cotton insect management and quality. USDA/CSREES Special Research Grants Program (\$322,571).
- Toews, M. D., M. A. Haidekker, and J. Xia. 2009. Rapid detection of damaged cotton bolls using fluorescence. Cotton Incorporated. (\$14,000).
- Tubbs, R. S., M. D. Toews, W. D. Shurley, A. R. Ziehl, G. H. Harris, and R. D. Lee. 2009. Nutrient cycling and cover crop decomposition in strip-till and conventional cotton tillage systems. Georgia Cotton Commission. (\$20,000).
- Li, C. and M. D. Toews. 2009. Development of a rapid sensing technology for detection of stink bug infested (internally damaged) cotton bolls. Georgia Cotton Commission. (\$17,252).
- Reay-Jones, F.P.F., J. K. Greene, M. D. Toews, and C. Carpio. 2009. Farmscape ecology of stink bugs and the development of environmentally friendly control strategies. USDA CSREES S-RIPM (\$153,946 total, 32,050 to UGA).
- Toews, M. D., J. R. Ruberson, and P. M. Roberts. 2008. Cotton insect management and quality. USDA/CSREES Special Research Grants Program (\$343,542).
- Herbert, A., J. Bacheler, E. Blinka, and M. D. Toews. 2008. Refinement and validation of a new time-saving technique for hemipterous pests of cotton based on external feeding symptoms. USDA CSREES Southern Region IPM Center (\$25,000).
- Toews, M. D. 2008. Marking methods for stink bugs (yr 2). Cotton Incorporated. (\$19,895).
- Toews, M. D. 2008. Optimization of sampling methods for stink bugs (yr 2). Georgia Cotton Commission (\$17,500).
- Ruberson, J. R., P. M. Roberts, and M. Toews. 2008. Insecticide resistance monitoring of Heliothines in Cotton. Georgia Cotton Commission and Cotton Incorporated (\$22,000).
- Pettis, G., M. D. Toews, and J. K. Greene. 2007. Development of a Georgia PMSP. Critical and Emerging Issues, Southern Region IPM Center. (\$5000).

- Toews, M. D. 2007. Landscape scale movement of stink bugs. University of Georgia College of Agriculture and Environmental Sciences (\$23,500).
- Toews, M. D. 2007. Marking methods for stink bugs. Cotton Incorporated. (\$19,895).
- Toews, M. D. 2007. Optimization of sampling methods for stink bugs. Georgia Cotton Commission (\$17,500).
- Zhu, K. Y., F. H. Arthur, J. F. Campbell, M. D. Toews, and M. R. Langemeier. 2006. Aerosol applications as a methyl bromide alternative for milling, processing, and food storage. USDA/CSREES/Methyl Bromide Transitions (\$369,181).
- Phillips, T. W., F. H. Arthur, J. F. Campbell, M. D. Toews, J. Criswell, and M. Casada. 2005. Pest management strategies for stored products: raw grain and value added products. USDA/CSREES/PMAP (\$196,205).
- Phillips, T. W., F. H. Arthur, J. F. Campbell, M. D. Toews, and J. T. Criswell. 2003. Alternatives to organophosphates as stored grain protectants and for use in food processing. USDA/CSREES/PMAP (\$165,009).
- Ramaswamy, S., M. D. Toews, J. Campbell, and F. Arthur. 2003. Implementation of a monitoring program to reduce pesticide application at certified seed stock facilities. US-EPA Region VII (\$24,370).
- Subramanyam, Bh., and M. D. Toews. 2002. Fate and efficacy of spinosad for insect management in farm stored grain. USDA/CSREES/PMAP (\$199,195).
- Subramanyam, Bh., C. R. Reed, M. D. Toews. 2002. Stored wheat insect management with spinosad and aeration. Kansas Wheat Commission (\$61,811).
- Subramanyam, Bh., and M. D. Toews. 2002. Sixth National Stored-Product IPM Training Conference. USDA/ARS, IPM (\$20,000).
- Subramanyam, Bh., M. D. Toews, and C. Reed. 2001. Pesticide alternatives and pollution prevention techniques in response to FQPA for postharvest ecosystems. US-EPA Region VII (\$69,956).

Submitted Grant Funding (\$1,257,156 total)

- D. Franklin, M. Cabrera, M. Habteselassie, and M. Toews. Managing soil biome to increase macronutrient availability and build agroecosystem resiliency. USDA NIFA AFRI. 1/1 2018 to 12/31/2020 (\$932,504).
- J. Tucker, D. Hancock, W. Hudson, M. Toews, W. Anderson, J. Dubeux, X. Martini, G. Mbata, C. Prevatt, E. Rios and H. Singh. Development of IPM strategies and tools to manage *Artherigona reversura* (Bermudagrass Stem Maggot) an invasive pest of forage grasses in the southeastern U.S. USDA NIFA 9/30/2017 to 9/29/2020 (\$324,652).

Industry Partnership (\$315,773 total)

- Toews, M.D. Aflatoxin production in drought resistant corn cultivars. Monsanto Co. 1/1/2017 to 12/31/2017 (\$10,000).
- Toews, M.D. Evaluation of new insecticides for use in cotton. Bayer CropSciences. 1/1/2017 to 12/31/2017 (3,000).
- Toews, M.D. Assessment of novel compounds for management of cotton pests insects. Bayer CropScience. 1/1/2016 to 12/31/2016 (\$10,000).
- Toews, M.D. Aflatoxin production in drought resistant corn cultivars. Monsanto Co. 1/1/2016 to 12/31/2016 (\$11,000).

- Toews, M.D. Evaluation of new insecticides for use in cotton. Bayer CropSciences. 1/1/2015 to 12/31/2015 (9,000).
- Toews, M.D. Effect of PIP on non-target arthropods. Monsanto Co. 1/1/2015 to 12/31/2015 (\$25,000).
- Toews, M.D. Efficacy of new insect resistant cotton germplasm. Monsanto Co. 1/1/2015 to 12/31/2015 (\$18,750).
- Toews, M.D. Evaluation of new insecticides for use in cotton. Bayer CropSciences. 1/1/2014 to 12/31/2014 (\$11,000).
- Toews, M.D. Evaluation of new insect resistant cotton germplasm. Monsanto Co. 1/1/2014 to 12/31/2015 (\$20,000).
- Toews, M.D. Evaluation of experimental compounds for management of thrips in early planted cotton. Bayer CropScience 1/1/2013 to 12/31/2013 (\$5000).
- Toews, M.D. Acquisition of a hooded sprayer to support cotton production research. The Cotton Foundation. 7/1/2012 to 6/30/2013 (\$10,148).
- Toews, MD. Evaluation of GlyTol Liberty-Link TwinLink cotton in Georgia. Bayer CropSciences. 1/1/2012 to 12/31/2012 (\$5000).
- Toews, MD. 2011. Evaluation of Fastac EC, a new pyrethroid insecticide. BASF (\$1000).
- Toews, MD. 2011. Evaluation of novel chemistries for control of cotton pests. Bayer CropScience (\$4500).
- Toews, MD. 2011. Evaluation of cyazypyr for control of lepidoptera in cotton. E.I. du Pont de Nemours and Company (\$2500).
- Toews, M.D. 2010. Evaluation of foliar insecticide applications following preventative insecticide for control of thrips. The Cotton Foundation (\$700).
- Toews, M. D. 2010. Assessment of seed treatments and foliar oversprays for management of thrips in Georgia cotton. Bayer CropScience (\$6700).
- Toews, M. D. 2010. Evaluation of spinosad for managing stored grain pests in stored corn. Bayer CropScience (\$9,975).
- Toews, M. D. 2009. Evaluation of foliar sprays for managing whitefly population in Georgia cotton. Bayer CropScience (\$2000).
- Toews, M. D. 2009. Evaluation of foliar insecticide applications following preventative insecticide for control of thrips. The Cotton Foundation (\$1000).
- Toews, M. D. 2008. Assessment of cotton fiber quality following whitefly management regimes. Bayer CropScience (\$5,000).
- Toews, M. D. 2008. Evaluation of novel stink bug and lepidopteran insecticides. Bayer CropScience (\$6,000).
- Toews, M. D. 2007. Experimental compounds for management of plant bug/stink bugs in Georgia cotton. Bayer CropScience (\$4500).
- Toews, M. D. 2007. Experimental compounds for management of lepidopteran pests in Georgia cotton. BASF Corporation (\$5000).
- Toews, M. D. 2007. Experimental seed treatments for thrips management in seedling cotton. Valent USA Corp. (\$4000).
- Subramanyam, Bh, and M. D. Toews, 2002. Characterization of spinosad as a stored grain and stored products protectant. Dow AgroSciences (\$105,000).
- Subramanyam, Bh., M. D. Toews, F. Huang. 2001. Efficacy of actellic on sunflower seeds. Agriliance, LLC (\$20,000).

Other Research Publications (58)

Asterisks () designate manuscripts written by Toews' lab personnel*

- Herbert, A., D. Reisig, A. Huseeth, G. Kennedy, J. Greene, FPF Reay-Jones, P. Roberts, M. Toews, R. Smith, T. Reed and A. Jacobson. Managing thrips in cotton: research in the southeast region. Publication number 444-390. Virginia Cooperative Extension, Blacksburg (in press)
- Roberts, P.R. and M. Toews. 2014. Thrips management: use of foliar insecticide sprays to supplement preventive treatments based on thrips risk assessment. *In* D. Shurley, J. Snider, and J. Whitaker (eds.) 2013 Georgia Cotton Research and Extension Report. Annual Report 108. Georgia Cooperative Extension, University of Georgia College of Agricultural and Environmental Sciences, Athens.
- Tubbs, R.S., M.D. Toews, G. H. Harris, G.D. Collins, W.D. Shurley, and A.R. Smith. 2013. Fertilization and cover crop interactions for strip-till cotton. pp 60-72. *In* D. Shurley, J. Snider, and J. Whitaker (eds.) 2012 Georgia Cotton Research and Extension Report. Annual Report 108. Georgia Cooperative Extension, University of Georgia College of Agricultural and Environmental Sciences, Athens.
- *Pulakkatu-thodi, I., D. Shurley, and M.D. Toews. 2013. Planting date affects stink bug injury, yield, and fiber quality in Georgia cotton. Pp. 76-80. *In* D. Shurley, J. Snider, and J. Whitaker (eds.) 2012 Georgia Cotton Research and Extension Report. Annual Report 108. Georgia Cooperative Extension, University of Georgia College of Agricultural and Environmental Sciences, Athens.
- Tubbs, R.S., M.D. Toews, W.D. Shurley, A.R. Smith, G.H. Harris, and R. Dewey Lee. 2011. Nutrient cycling and cover crop decomposition in strip-till and conventional cotton tillage systems. *In* A. Smith & G. Collins (eds.) 2010 Georgia Cotton Research and Extension Report. UGA/CPES Research Extension Publication No. 7. Georgia Cooperative Extension, University of Georgia College of Agricultural and Environmental Sciences, Athens. Available online: http://commodities.caes.uga.edu/fieldcrops/cotton/rerpubs/2010/CottonRER2010_52.pdf.
- Roberts, P. and M. Toews. 2011. Temporal susceptibility of cotton to early season thrips. *In* A. Smith & G. Collins (eds.) 2010 Georgia Cotton Research and Extension Report. UGA/CPES Research Extension Publication No. 7. Georgia Cooperative Extension, University of Georgia College of Agricultural and Environmental Sciences, Athens. Available online: http://commodities.caes.uga.edu/fieldcrops/cotton/rerpubs/2010/CottonRER2010_88.pdf.
- Toews, M.D., Francis P.F. Reay-Jones, and Jeremy K. Greene. 2011. Application of border sprays to mitigate stink bugs in cotton. *In* A. Smith & G. Collins (eds.) 2010 Georgia Cotton Research and Extension Report. UGA/CPES Research Extension Publication No. 7. Georgia Cooperative Extension, University of Georgia College of Agricultural and Environmental Sciences, Athens. Available online: http://commodities.caes.uga.edu/fieldcrops/cotton/rerpubs/2010/CottonRER2010_98.pdf.
- Medrano, E.G., M.D. Toews, and A. A. Bell. 2011. Analysis of potential cotton pathogen reservoir based on *Nezara viridula* (L) collections from two different crop sources. Pp285-286. *In* Proceedings of the Beltwide Cotton Conferences, January 4-7, Atlanta, GA. National Cotton Council of America, Memphis, TN.
- *Herbert, J.J. and M.D. Toews. 2011. A landscape perspective on stink bugs in cotton, pp.1094. *In* Proceedings of the Beltwide Cotton Conferences, January 4-7, Atlanta, GA. National Cotton Council of America, Memphis, TN.

- Bacheler, J.S., D. Mott, A. Herbert, J. Greene, P. Roberts, M. Toews and E. Blinka. 2011. Concept to delivery: a pocket-sized decision aid for stink bug scouting in the southeast. pp 1093. *In* Proceedings of the Beltwide Cotton Conferences, January 4-7, Atlanta, GA. National Cotton Council of America, Memphis, TN.
- Akin, D. Scott, J. Reed, K. Allen, R.E. Jackson, J.S. Bacheler, A. Catchot, D. Cook, J. Gore, F. Greene, A. herbert, D.L. Kerns, R. Leonard, G.M. Lorenz III, S. Micinski, D. Reisig, P. Roberts, M. Toews, S. Stewart, G. Studebaker, and K. Tindall. 2011. Regional survey 2009-2010: thrips species composition across the upland cotton belt. Pp838-846. *In* Proceedings of the Beltwide Cotton Conferences, January 4-7, Atlanta, GA. National Cotton Council of America, Memphis, TN.
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Smartphone Apps Released (8)

- Laforest, J.H., M. Toews, P. Roberts, C.T. Bargerion, T.J. Daniel. 2015. EDDMapS IPM. iPhone App. (Version 1.2) [Mobile application software]. Available at: <https://itunes.apple.com/us/app/eddmapi-s-ipm/id976404248?mt=8>.
- Laforest, J.H., M. Toews, P. Roberts, C.T. Bargerion, T.J. Daniel. 2015. EDDMapS IPM. Android App. (Version 1.0.2) [Mobile application software]. Available at <https://play.google.com/store/apps/details?id=com.bugwood.eddmapi-s-ipm>.
- Toews, M. D., P. Roberts, C. T. Bargerion, J. H. LaForest & T. J. Daniel. 2014. GA Cotton Insect Advisor. iPhone App (Version 1.0.2) [Mobile application software]. Available at <https://itunes.apple.com/us/app/ga-cotton-insect-advisor/id787228535?mt=8>.
- Toews, M. D., C. T. Bargerion & T. J. Daniel. 2014. Stink Bug Scout. iPhone App (Version 1.0.1) [Mobile application software]. Available at <http://itunes.apple.com/us/app/stink-bug-scout/id546156573?ls=1&mt=8>.
- Toews, M. D., C. T. Bargerion, J. H. LaForest & T. J. Daniel. 2014. SE Agricultural Stink Bug ID iPhone App. (Version 1.0) [Mobile application software]. Available at <https://itunes.apple.com/us/app/se-agricultural-stink-bug-id/id793381537?mt=8>.
- Toews, M. D., P. Roberts, C. T. Bargerion, J. H. LaForest & R. L. David. 2014. GA Cotton Insect Advisor Android App. (Version 1.0.1) [Mobile application software]. Available at <https://play.google.com/store/apps/details?id=com.bugwood.stinkbugdecisionaid>.
- Toews, M. D., C. T. Bargerion & R. L. David. 2014. Stink Bug Scout Android App. (Version 2.0) [Mobile application software]. Available at <https://play.google.com/store/apps/details?id=com.bugwood.stinkbug>.
- Toews, M. D., C. T. Bargerion, J. H. LaForest & R. L. David. 2014. SE Agricultural Stink Bug

ID Android App. (Version 1.1) [Mobile application software]. Available at <https://play.google.com/store/apps/details?id=com.bugwood.stinkbugid>.

E-Learning Modules Published (4)

- Toews, M.D. 2016. Managing thrips in cotton: research in the southeast region. Module developed for the Focus on Cotton Webcast sponsored by the Plant Management Network. Available at: (<https://www.plantmanagementnetwork.org/>).
- Toews, M.D., and D. Riley. 2014. *Megacopta cribraria* (Heteroptera: Plataspidae) the “kudzu bug”. Module developed for the ProtectUS Community Invasive Species Network. Available at: (www.protectusnow.org).
- Toews, M.D. 2014. Kudzu bug takes over the southeastern U.S. Module developed for All Bugs Good and Bad Webinar Series hosted by eXtension. Available at: (http://extension.uga.edu/calendar/event.cfm?pk_id=3439).
- Toews, M.D. 2012. Managing thrips in seedling cotton with starter fertilizer and a single foliar application. Module developed for the Focus on Cotton Webcast sponsored by the Plant Management Network. Available at: (<https://www.plantmanagementnetwork.org/>).

Videos Published (4)

- Toews, M.D. 2016. Overview of thrips on cotton. Cotton Cultivated website sponsored by Cotton Incorporated <https://cottoncultivated.cottoninc.com/>.
- Toews, M.D. 2016. Overview of stink bugs in cotton. Cotton Cultivated website sponsored by Cotton Incorporated <https://cottoncultivated.cottoninc.com/>.
- Toews, M.D. 2016. Overview of spider mites on cotton. Cotton Cultivated website sponsored by Cotton Incorporated <https://cottoncultivated.cottoninc.com/>.
- Toews, M.D. 2016. Overview of whiteflies on cotton. Cotton Cultivated website sponsored by Cotton Incorporated <https://cottoncultivated.cottoninc.com/>.

Invited Research Presentations (32)

- Toews, M.D., T-I Huang, I. Pulakkatu-Thodi and R. Srinivasan. 2016. Understanding local dispersal to improve pest management. XXV International Congress of Entomology. September 29, Orlando.
- Toews, M.D. 2016. Applied ecology drives pest management. 80th Annual Meeting of the Georgia Entomological Society. April 7, Pine Mountain, GA.
- Toews, M.D. 2016. Stored grain insect control. 2016 Georgia/Florida Soybean & Small Grain Expo. February 4, Perry, GA. (110 participants, 25 min).
- Toews, M.D. 2016. Stored grain protectant efficacy in corn and return on investment. 2016 Corn Short Course and Annual Meeting of the Georgia Corn Growers Association. February 2, Tifton. (100 participants, 30 minutes)
- #Toews, M.D. 2016. Insect pest management in cotton. 2016 UGA Cotton Production Workshop. January 27, Tifton.
- #Toews, M.D. and I. Pulakkatu-thodi. 2014. Using GIS to map and manage stink bugs. 62nd Annual Meeting of the Entomological Society of America. November 16-19, Portland, OR.
- #Toews, M.D. 2014. Kudzu bug takes over the southeastern U.S. All Bugs Good and Bad Webinar Series hosted by eXtension. September 5.
- #Toews, M.D. 2014. Hints and tips for improving federal grant proposals. University of Georgia USDA/NIFA Competitive Programs Workshop. March 20, Athens.

- #Toews, M.D. 2014. Ecologically based strategies for sustainable pest management. Seminar at Department of Biology, Georgia Southern University. March 3, Statesboro.
- #Toews, M.D. 2014. Connecting field and corn storage insects. 2014 Corn Short Course and Annual Meeting of the Georgia Corn Growers Association Program, Tifton, GA. January 21.
- #Toews, M.D. 2014. Insect control research in cotton. Georgia Plant Food Educational Society, Inc. Tifton, GA, January 14.
- #Toews, M.D. 2013. Ecology of stored grain insects and their control with insecticides. Alabama corn and wheat short course. December 17, Shorter, AL.
- #Toews, M.D. 2013 Connecting agronomic practices with post-harvest insect and aflatoxin contamination. 61st Annual Meeting of the Entomological Society of America. November 10-13, Austin, TX.
- #Toews, M.D. 2013. Entomology research programs to support cotton pest management. Luncheon speaker at the Rotary Club of Thomasville. September 19. Thomasville, GA.
- #Toews, M.D. 2012. Stink bug dispersal and implications for pest management. Seminar at Department of Entomology, University of Georgia. November 26, Athens.
- #Toews, M.D. 2012. Stink bug dispersal and implications for pest management. Seminar at Department of Entomology, North Carolina State University. November 19, Raleigh.
- #Toews, M.D. 2012. Managing thrips in seedling cotton with starter fertilizer and a single foliar treatment. Crop Management Seminar, hosted by Cotton Incorporated's Agricultural & Environmental Research. November 8, Tunica, MS.
- #Toews, M.D., J. Herbert, T-I. Huang, I. Pulakkatu-thodi. 2012. Dispersal of *Euschistus servus* (Heteroptera: Penatomidae) in time and space. XXIV International Congress of Entomology. Aug. 21, Daegu, Korea.
- #Toews, M.D., T.M. Jenkins, D. Suiter, P. Roberts, D. Buntin, J. All, S. Sparks, J. Ruberson. W. Gardner. 2012. Urban and agricultural impact of *Megacopta cribraria* in the southeastern United States. XXIV International Congress of Entomology. Aug. 23, Daegu, Korea.
- #Toews, M.D. 2012. Insect ecology and the overactive imagination. Southwest Georgia Science Conference for educators. June 5-6, Camilla, GA.
- #Toews, M.D. 2011. A landscape perspective of stink bugs in Georgia field crops. Georgia Association of Professional Agricultural Consultants, Annual Meeting, February 9, Tifton.
- #Toews, M.D. 2010. Stink bug ecology in southeastern farmscapes. Seminar at Entomology and Nematology Department, University of Florida. November 4, Gainesville.
- #Toews, M.D. 2010. Stink bug dispersal and ecology in southeastern farmscapes. Seminar at Department of Entomology, Soils, and Plant Sciences, Clemson University. September 20, Clemson, SC.
- #Toews, M.D. 2010. Stink bug ecology in southeastern farmscapes. Tri State Pecan Convention & Trade Show. June 18, Vicksburg, MS.
- #Toews, M.D. 2010. Stink bug ecology in southeastern farmscapes. 103rd Annual Convention of the Southeastern Pecan Growers Association. February 27, Destin, FL.
- #Toews, M.D. 2010. Detecting insect damaged plants with medical technologies. University of Georgia-Tifton Campus Seminar Series. February 11, Tifton, GA.
- #Toews, M.D., P.M. Roberts and E.G. Medrano. 2010. Interrelationships among stink bug management, cotton fiber quality and boll rot. Beltwide Cotton Conferences. January 6, New Orleans, LA.
- #Toews, M.D. 2009. Cotton IPM tactics at the farmscape level. Sixth International Integrated Pest Management Symposium. March 25, Portland, OR.

- #Toews, MD. 2006. Mechanisms underlying the effectiveness of food processing IPM programs. Annual Meeting of the Northcentral Branch of the ESA, March 26, Bloomington, IL.
- #Toews, MD, T Pearson, F.H. Arthur, and J.F. Campbell. 2005. Rapid detection of internal insect infestations in bulk grain. 53rd Annual Meeting of the Entomological Society of America, December 9, Fort Lauderdale, FL.
- #Toews, M.D., J.F. Campbell, and F.H. Arthur. 2004. Monitoring red flour beetles in insecticide treated pilot scale warehouses. Annual Meeting of the Pacific Branch of the Entomological Society of America. June 21, Bozeman, MT.

Other Research Presentations (182)

Asterisks () designate presentations by Toews lab students, post docs or technicians*

Hastags (#) designate invited presentations

Plus symbols (+) indicate winning talks in student competitions

- Toews, M.D. Research on efficacy and stability of grain protectants. Alabama Cooperative Statewide Extension week. July 17-20, Dothan, Atmore, Selma & Madison (73 participants, 2.0 hr).
- Toews, M.D. Research on chemigation for insect pests in cotton. Stripling Irrigation Park Field Day. July 27, Camilla (121 participants, 10 min).
- Toews, M.D. and K. Flanders. 2017. Research and Demonstration of safe corn storage in the southeastern US. Annual meeting of the Alabama Wheat and Grain Feed Association. January 13, Montgomery, AL.
- Toews, M.D., K. Flanders, N. Smith, and X. Ni. 2017. Research and Economics of safe corn storage in the southeastern US. Research update for the Georgia Corn Commission. January 11, Tifton.
- Brown, L., P. Ellsworth, S. Naranjo, M. Toews and G. Frisvold. 2016. The ecology and economics of an emergent pest, the brown stink bug (*Euschistus servus*), in an established cotton IPM program. XXV International Congress of Entomology. September 26, Orlando.
- *Wei, X. and M. Toews. 2016. Efficacy of chemigation for managing stink bugs. XXV International Congress of Entomology. September 26, Orlando.
- *Hadden, W., J.F. Walgenbach and M. Toews. 2016. Edge effects of *Halyomorpha halys* (Stal), brown marmorated stink bug, in southeastern row crops. XXV International Congress of Entomology. September 26, Orlando.
- *Knight, I. and M. Toews. 2016. Spatial distribution of *Megacopta cribraria* egg masses and parasitism by *Paratelenomus saccharalis* in soybean. XXV International Congress of Entomology. September 26, Orlando.
- *Bostick, N, J. Schmidt, C.T. Barger, T. Brenneman, A. Culbreath, G.D. Buntin, J. LaForest and M. Toews. 2016. Improving crop pest management using qualitative data networks. XXV International Congress of Entomology. September 26, Orlando.
- *Esquivel, J.F., J. Grazia, J. Greene, W. A. Jones, R.M. McPherson, D. Musolin, W. Rabitsch, C. Schwertner and M. Toews. 2016. *Nezara viridula* (L.) – an agricultural pest without borders. XXV International Congress of Entomology. September 27, Orlando.
- *Blount, J.L., G.D. Buntin, P.M. Roberts, and M. Toews. 2016. Impact of *Megacopta cribraria* (Hemiptera: Plataspidae) in the soybean agro-ecosystem. XXV International Congress of Entomology. September 29, Orlando.
- Portier, T., P.M. Roberts, M.D. Toews and M.R. Abney. 2016. Influence of planting date on thrips (Thysanoptera: Thripidae) infestation and management in cotton. 80th Annual Meeting

- of the Georgia Entomological Society. April 7, Pine Mountain, GA.
- Hadden, W. and M.D. Toews. 2016. Distribution of brown marmorated stink bug in southeastern row crops. 80th Annual Meeting of the Georgia Entomological Society. April 7, Pine Mountain, GA.
- *Blount, J., M. Toews, D. Buntin, and P. Roberts. 2016. Effect of defoliating lepidopterans and *Megacopta cribraria* on soybean productivity. 80th Annual Meeting of the Georgia Entomological Society. April 7, Pine Mountain, GA.
- *Knight, I. and M. Toews. 2016. Spatial distribution of *Megacopta cribraria* (Hemiptera: Plataspidae) egg masses and parasitism by *Paratelenomus saccharalis* (Hymenoptera: Platygasteridae) in soybean. 80th Annual Meeting of the Georgia Entomological Society. April 7, Pine Mountain, GA.
- Reay-Jones, F., I. Knight, D. Reisig, and M. Toews. 2016. Dispersal of *Megacopta cribraria* from kudzu using a mark-recapture method and implications for management in soybean. 90th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 15, Raleigh, NC.
- Reisig, D., A. Babu, F. Reay-Jones and M. Toews. 2016. Tracking early season stink bug aggregation and movement into field crops. 90th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 15, Raleigh, NC.
- *Knight, I. and M. Toews. Spatial distribution of *Megacopta cribraria* (Hemiptera: Plataspidae) egg masses and parasitism by *Paratelenomus saccharalis* (Hymenoptera: Platygasteridae) in soybean. 90th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 15, Raleigh, NC.
- #Toews, M.D. 2016. Stored grain insect control. 2016 Georgia/Florida Soybean & Small Grain Expo. February 4, Perry, GA. (110 participants, 25 min).
- #Toews, M.D. 2016. Stored grain protectant efficacy in corn and return on investment. 2016 Corn Short Course and Annual Meeting of the Georgia Corn Growers Association. February 2, Tifton. (100 participants, 30 minutes)
- #Toews, M.D. 2016. Insect pest management in cotton. 2016 UGA Cotton Production Workshop. January 27, Tifton.
- Toews, M.D. and K. Flanders. 2016. Research and Demonstration of safe corn storage in the southeastern US. Annual meeting of the Alabama Wheat and Grain Feed Association. January 6, Montgomery, AL.
- Toews, M.D., K. Flanders, N. Smith, and X. Ni. 2016. Research and Economics of safe corn storage in the southeastern US. Research update for the Georgia Corn Commission. January 11, Tifton.
- Walgenbach, J.F., D.A. Herbert, T.P. Kuhar, D. Reisig and M. Toews. 2015. Distribution, pest status, and research programs for the brown marmorated stink bug in the southeastern US. 63rd Annual Meeting of the Entomological Society of America. November 15-18, Minneapolis, MN.
- Verdi, M., M. Toews, N. Hill and J.M. Schmidt. 2015. Influence of alternative cover cropping on ground dwelling predators in a cotton agroecosystem. 63rd Annual Meeting of the Entomological Society of America. November 15-18, Minneapolis, MN.
- Knight, I., F. Reay-Jones, D. Reisig, P. Moore and M. Toews. 2015. Measuring spatial distribution of seasonal dispersal of the kudzu bug, *Megacopta cribraria* (Hemiptera: Plataspidae) in kudzu and soybean. 63rd Annual Meeting of the Entomological Society of America. November 15-18, Minneapolis, MN.

- Wei, X. W. Porter, C. Perry, P. Roberts and M. Toews. 2015. Chemigation to manage stink bugs in cotton. 63rd Annual Meeting of the Entomological Society of America. November 15-18, Minneapolis, MN.
- Buntin, G.D., P.M. Roberts, A. Sparks, J. All, M. Toews, J.L. Blount and W. Gardner. 2015. Pest status and management of the kudzu bug, *Megacopta cribraria*, in Georgia crops. 63rd Annual Meeting of the Entomological Society of America. November 15-18, Minneapolis, MN.
- Blount, J.L., D. Buntin, P.M. Roberts, and M. Toews. 2015. *Megacopta cribraria* in the soybean agro ecosystem. 2015. 63rd Annual Meeting of the Entomological Society of America. November 15-18, Minneapolis, MN.
- Murphy, J., P. Moore, M. Toews and A. Erwin. 2015. Fitness consequences of host plant choice on kudzu bug, *Megacopta cribraria* (F.), development and dispersal. 63rd Annual Meeting of the Entomological Society of America. November 15-18, Minneapolis, MN.
- Toews, M., P. M. Roberts, D. Reisig, F. Reay-Jones, J. K. Greene and I. Knight. 2015. Distribution and management of kudzu bug in commercial soybean. 63rd Annual Meeting of the Entomological Society of America. November 15-18, Minneapolis, MN.
- Ni, X., K. Harris-Shultz, J. Knoll, M. Toews and G.D. Buntin. 2015. Effect of planting date on insect and bird damage among grain sorghum hybrids. 63rd Annual Meeting of the Entomological Society of America. November 15-18, Minneapolis, MN.
- Schmidt, J.M., D. Olson, T. Potter, R. Davis, M. Toews and A. Coffin. 2015. Maximizing ecosystem services in the design of agroecosystems: implications of integrating field to watershed heterogeneity. 63rd Annual Meeting of the Entomological Society of America. November 15-18, Minneapolis, MN.
- Toews, M.D. 2015. Update on stink bug chemigation in cotton. Georgia Cotton Commission Research Advisory Field Day, June 2, (15 min, 12 participants).
- Toews, M.D., P.M. Roberts, and C.T. Barger. 2015. Cotton insect advisor: an expert system for extension prescribed insecticide selection. 79th Annual Meeting of the Georgia Entomological Society. April 10, Jekyll Island, GA.
- Ni, X., T.E. Cottrell, G.D. Buntin, and M.D. Toews. 2015. Can we predict brown stink bug (Hemiptera: Pentatomidae) abundance in corn using previous pheromone trap capture and early season weather data? 79th Annual Meeting of the Georgia Entomological Society. April 10, Jekyll Island, GA.
- Roberts, P.M., M.D. Toews and S. Culpepper. 2015. Influence of pre-emergence herbicide injury on thrips management in cotton. 79th Annual Meeting of the Georgia Entomological Society. April 10, Jekyll Island, GA.
- Reay-Jones, Francis, D. Reisig, J.K. Greene, D.A. Herbert, P.M. Roberts and M. Toews. 2015. Within-plant distribution of thrips species in southeast cotton. 89th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 16-18, Biloxi, MS.
- Ni, X., M. Toews, D. Buntin, J. Knoll, and K. Harris-Shultz. 2015. Assessment of insect and bird damage on grain sorghum hybrids. 89th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 16-18, Biloxi, MS.
- Toews, M.D. 2015. The southeast stink bug smartphone app. 2nd Annual Meeting of the Southeast Row Crop Entomologists Working Group. February 9-10, Neeses, SC.
- Toews, M.D. 2015. Stink bug control research in cotton-2014. UGA Cotton Production Workshop. Tifton, January 28 (70 min, 60 participants).

- Greene, J.K., A. Herbert, D. Reisig, J.S. Bacheler, F. Reay-Jones, P. Roberts, M. Toews, D. Buntin, R. Smith, and T. Reed. 2014. Management strategies for important insects in soybeans in the southeast. 62nd Annual Meeting of the Entomological Society of America. November 16-19, Portland, OR.
- Reisig, D., J.S. Bacheler, J. Greene, D.A. Herbert, F. Reay-Jones, T. Reed, P. Roberts, R. Smith, M. Toews. 2014. Novel insecticide types and methods of application for thrips management in the southeast. 62nd Annual Meeting of the Entomological Society of America. November 16-19, Portland, OR.
- *Little, B., and M. Toews. 2014. Efficacy of three classes of insecticide for managing adult stink bugs (Hemiptera: Pentatomidae) in cotton. 62nd Annual Meeting of the Entomological Society of America. November 16-19, Portland, OR.
- Toews, M.D. 2014. Kudzu bug biology in Georgia. Southern Pest Management Seminar, October 6-9, Deer Valley, UT.
- *+Little, B.A. and M.D. Toews. 2014. Efficacy of selected classes of insecticide for managing stink bugs (Hemiptera: Pentatomidae) in Georgia cotton. 78th Annual Meeting of the Georgia Entomological Society. April 9-11, Valdosta, GA.
- *+Knight, I., A. Culbreath, and M.D. Toews. 2014. Cultural practices to reduce thrips densities and disease transmission in peanut. 78th Annual Meeting of the Georgia Entomological Society. April 9-11, Valdosta, GA.
- Marasigan, K. R. Srinivasan, M. Toews, M. Abney, and R. Kemerait, Jr. 2014. Role of cotton crop as a thrips reservoir and as a Tomato spotted wilt virus inoculum source: effects of thrips fitness and transmission of TSWV. 78th Annual Meeting of the Georgia Entomological Society. April 9-11, Valdosta, GA.
- Toews, M.D., C. T. Barger, P. Roberts and G.K. Douce. 2014. SE agricultural stink bug ID & GA cotton pest advisor: expanding the IPM box with IT. 78th Annual Meeting of the Georgia Entomological Society. April 9-11, Valdosta, GA.
- Roberts, P. and M.D. Toews. 2014. Thrips risk in cotton: are supplemental foliar insecticides needed? 78th Annual Meeting of the Georgia Entomological Society. April 9-11, Valdosta, GA.
- Toews, M.D. and P. Roberts. 2014. Using insect ecology to solve real world problems. 78th Annual Meeting of the Georgia Entomological Society. April 9-11, Valdosta, GA.
- *+Knight, I., A. Culbreath, G. Rains and M.D. Toews. 2014. Potential for managing thrips in seedling cotton using particle films. 88th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 2-4, Greenville, SC.
- Toews, M.D. 2014. Stored grain insect ecology and management. Georgia/Florida Soybean/Small Grain Expo. February 7, Perry, GA.
- Toews, M.D. 2014. Research update on cotton, corn, soybean and stored grain insects in Georgia. 1st Annual Meeting of the Southeastern Row Crop Entomology Working Group. February 3-4, Orangeburg, SC.
- *Little, B., J.M. Moore, T.W. Phillips, and M. Toews. 2014. Mitigation of cigarette beetle infestations at tobacco receiving stations. 46th Tobacco Workers' Conference. January 13-16, Pinehurst, North Carolina.
- *Griffin, D., M.D. Toews, J. Beasley and S. Tubbs. 2014. Cotton performance and insect pressure in a sod, cotton, peanut cropping system. Beltwide Cotton Conferences. January 6-8, New Orleans, LA.
- *Knight, I., and M.D. Toews. 2014. Cultural practices to decrease thrips densities in cotton

- production systems. Beltwide Cotton Conferences. January 6-8, New Orleans, LA.
- *+Little, B. and M.D. Toews. 2014. A comparison of organophosphates, pyrethroids, and neonicotinoids for managing stink bugs in cotton. Beltwide Cotton Conferences. January 6-8, New Orleans, LA.
- *Little, B. and M.D. Toews. 2013. A comparison of organophosphates, pyrethroids, and neonicotinoids for managing stink bugs in cotton. 61st Annual Meeting of the Entomological Society of America. November 10-13, Austin, TX.
- *Knight, I., G. Rains, and M.D. Toews. 2013. Cultural practices to decrease thrips densities in cotton and peanut production systems. 61st Annual Meeting of the Entomological Society of America. November 10-13, Austin, TX.
- Marasigan, K., R. Srinivasan, M. Toews, and R. Kemerait. 2013. Evaluation of new insecticides in selected peanut cultivars: effects on thrips (*Frankliniella fusca* Hinds) feeding behavior and transmission of tomato spotted wilt virus (TSWV). 61st Annual Meeting of the Entomological Society of America. November 10-13, Austin, TX.
- Toews, M.D. 2013. Improving thrips management in seedling cotton. 2013 Southern Crops Pest Conference, October 14-16, Las Vegas, NV.
- *+Little, B.S., J.M. Moore, T.W. Phillips, M.D. Toews, and F.F. Turpin. 2013. Management of cigarette beetle populations within tobacco receiving station by using mating disruption techniques. Annual Meeting of the Georgia Association of County Agricultural Agents. November 4-6. Lake Lanier Island, GA.
- *Hunter, J.H. and M.D. Toews. 2013. Will *Podisus maculiventris* control *Megacopta cribraria* populations? 74th Annual Meeting of the Association of Southeastern Biologists. April 10-13, Charleston, WV.
- Marasigan, K. M. Toews, R. Kemerait, R. Srinivasan. 2013. Efficacy of new insecticides in the management of thrips and tomato spotted wilt virus of peanut. 77th Annual Meeting of the Georgia Entomological Society. April 10-12, Dawsonville, GA.
- Jenkins, T. T. Eaton, J. Eager, D. Suiter, W. Gardner, D. Buntin, P. Roberts, J. Ruberson, M. Toews, A. Sparks, and J. Greene. 2013. The Asian plataspid which took the West: *Megacopta cribraria* population structure over three years of expansion in the Western Hemisphere. 77th Annual Meeting of the Georgia Entomological Society. April 10-12, Dawsonville, GA.
- Roberts, P. J. All, D. Buntin, M. Toews, and W. Gardner. 2013. Kudzu bug threshold for Georgia soybeans. 77th Annual Meeting of the Georgia Entomological Society. April 10-12, Dawsonville, GA.
- Toews, M.D., X. Ni, and D. Buntin. 2013. Aflatoxin mitigation using Bt cultivars and in-field identity preserve. 77th Annual Meeting of the Georgia Entomological Society. April 10-12, Dawsonville, GA.
- Jenkins, T., J. Eger, T. Eaton, D. Suiter, W. Gardner, D. Buntin, P. Roberts, M. Toews, A. Sparks, J. Greene, and J. Ruberson. 2013. Population genetic structure of *Megacopta cribraria* (Hemiptera: Plataspidae) discovered October 2009 in the Western Hemisphere. 87th Annual Meeting of the southeastern Branch. March 3-5, Baton Rouge, LA.
- *Pulakkatu thodi, I., J. K. Greene, F. Reay-Jones, M.D. Toews, and D.R. Reisig. 2013. Stink bug management in cotton using strip spray applications. . 87th Annual Meeting of the southeastern Branch. March 3-5, Baton Rouge, LA.
- Roberts, P.M., J. All, M. D. Toews, J. K. Greene, D. R. Reisig, and J.S. Bacheler. 2013. Summary of kudzu bug, *Megacopta cribraria*, small plot insecticide efficacy trials in

- southeastern soybeans. . 87th Annual Meeting of the southeastern Branch. March 3-5, Baton Rouge, LA.
- Ni, X., A. Patel, D. Buntin, and M.D. Toews. 2013. Effect of eastern gramagrass on fall armyworm and corn earworm development. . 87th Annual Meeting of the southeastern Branch. March 3-5, Baton Rouge, LA.
- *Griffin, J.D., I. Pulakkatu thodi and M. Toews. 2013. Increased stink bug damage in late planted cotton. Beltwide Cotton Conferences. January 7-10, San Antonio, TX.
- Toews, M.D., P. Roberts, S. Tubbs, G. Harris, R. Srinivasan, R. Smith, J.K. Greene, J.S. Bacheler, D. Reisig, and D.A. Herbert. 2013. Managing thrips in seedling cotton with starter fertilizer and a single foliar application (yr 2). Beltwide Cotton Conferences. January 7-10, San Antonio, TX.
- Kamminga, K., D.A. Herbert, and M. Toews. 2013. Assessment of brown marmorated stink bug damage to cotton. Beltwide Cotton Conferences. January 7-10, San Antonio, TX.
- Arthur, F.H., J.F. Campbell, E.A. Fontenot, and M.D. Toews. 2012. Assessing effects of esfenvalerate aerosol applications on resident populations of *Tribolium castaneum* (Herbst), the red flour beetle. 60th Annual Meeting of the Entomological Society of America, November 13, Knoxville, TN.
- *Pulakkatu-thodi, I., F.P.F. Reay-Jones, J.K. Greene, D.R. Reisig, and M.D. Toews. 2012. Managing stink bugs in cotton using strip spray applications. 60th Annual Meeting of the Entomological Society of America, November 12, Knoxville, TN.
- Toews, M.D. and I. Pulakkatu-thodi. 2012. Temporal trends in stink bug populations with implications for cotton planting date. 60th Annual Meeting of the Entomological Society of America, November 13, Knoxville, TN.
- Toews, M.D. 2012. Improving thrips management in seedling cotton. 2012 Southern Field Crops Pest Management Seminar, October 8-11, Sunriver, Oregon.
- *Crabtree, B. and M.D. Toews. 2012. Management of stored grain insect pests. Emanuel County Chapter of the Georgia Young Farmers Association. October 28, Swainsboro, GA.
- Roberts, P., J. All, D. Buntin, W.A. Gardner, J.R. Ruberson, and M.D. Toews. 2012. Kudzu bug: an invasive pest of Georgia soybeans. 76th Annual meeting of the Georgia Entomological Society. April 5, Statesboro, GA.
- *Herbert, J., M. Toews, and M. Soria. 2012. The effect of photoperiod on gonad development in stink bugs. 76th Annual meeting of the Georgia Entomological Society. April 5, Statesboro, GA.
- Pilkay, G.L., F.P.F. Reay-Jones, J.K. Green, and M.D. Toews. 2012. Border application of insecticide to control stink bugs (Hemiptera: Pentatomidae) in cotton. Joint Meeting of the Southeastern and Southwestern Branches of the Entomological Society of America. March 4-7, Little Rock, Arkansas.
- *⁺Pulakkatu-thodi, I., J. Greene, D. Reisig, F.P.F. Reay-Jones, and M.D. Toews. 2012. potential new strategy for spraying stink bugs in cotton. Joint Meeting of the Southeastern and Southwestern Branches of the Entomological Society of America. March 4-7, Little Rock, Arkansas.
- Akin, D.S., G. Lorenz, G. Studebaker, S.D. Stewart, D. Cook, J. Gore, A. Catchot, B.R. Leonard, S. Micinski, K.V. Tindall, A. Herbert, D.L. Kerns, R. Jackson, M.D. Toews, P.M. Roberts, J. Bacheler, D. Reisig, J. Greene, J.E. Howard. 2012. Evaluation of automatic applications of foliar insecticides for thrips across the upland cotton belt-2011. Joint Meeting of the

- Southeastern and Southwestern Branches of the Entomological Society of America. March 4-7, Little Rock, Arkansas.
- Roberts, P.M., J.K. Greene, J. All, G.D. Buntin, N.J. Seiter, and M.D. Toews. 2012. Pest status and management of *Megacopta cribraria* in soybean in the southeastern United States. Joint Meeting of the Southeastern and Southwestern Branches of the Entomological Society of America. March 4-7, Little Rock, Arkansas.
- Roberts, P.M., M. Toews, J. All, J.K. Greene, F.P.F. Reay-Jones, T.D. Reed, R. Smith, and B.L. Freeman. 2012. Thrips management in the lower southeast. Beltwide Cotton Conferences. January 3-6, Orlando, FL.
- Akin, D.S., G. Lorenz, G.E. Studebaker, M. Toews, D.R. Cook, J. Gore, A. Catchot, S. Stewart, B.R. Leonard, A. Herbert, R. Jackson, J.K. Greene, D.L. Kerns, J.S. Bacheler, D. Reisig, P. Roberts, S. Micinski, K.V. Tindall, and J.E. Howard. 2012. Evaluation of automatic application of foliar insecticides for thrips across the upland cotton belt. Beltwide Cotton Conferences. January 3-6, Orlando, FL.
- *Griffin, J.D., P. Roberts, J.J. Herbert, and M.D. Toews. 2012. Performance of selected in-furrow and foliar insecticides for managing seeding thrips. Beltwide Cotton Conferences. January 3-6, Orlando, FL.
- *Pulakkatu-thodi, I., J.K. Greene, F.P.F. Reay-Jones, D. Reisig, and M. Toews. 2012. A novel pesticide use strategy to manage phytophagous stink bugs in southeastern cotton. Beltwide Cotton Conferences. January 3-6, Orlando, FL.
- Smith, A.R., W.D. Shurley, R.S. Tubbs, M.D. Toews, G. H. Harris, and R.D. Lee. 2012. Economic analysis of the use of cover crops in Georgia cotton under conventional and strip-tillage production. Beltwide Cotton Conferences. January 3-6, Orlando, FL.
- Tubbs, R.S., D.Q. Wann, M. Toews, and G.H. Harris. 2012. Winter cover crop effect on nutrient cycling for cotton. Beltwide Cotton Conferences. January 3-6, Orlando, FL.
- Toews, M., P. Roberts, J. Herbert, S. Tubbs, G. Harris, R. Srinivasan, R. Smith, J.K. Greene, J.S. Bacheler, D. Reisig, and D. A. Herbert. 2012. Thrips management in seedling cotton with starter fertilizer and a single foliar application. Beltwide Cotton Conferences. January 3-6, Orlando, FL.
- *Huang, T-I. and M.D. Toews. 2011. Intercrop movement of stink bugs (Hemiptera: Pentatomidae) in Georgia. 59th Annual Meeting of the Entomological Society of America, November 13-16, Reno, NV.
- Pilkay, G., F.P.F. Reay-Jones, M.D. Toews, and J.K. Greene. 2011. Spatial and temporal dynamics of stink bugs (Hemiptera: Pentatomidae) in southeastern farmscapes. 59th Annual Meeting of the Entomological Society of America, November 13-16, Reno, NV.
- *Soria, M., J. Herbert, and M.D. Toews. Rearing the brown stink bug (*Euschistus servus*): maintaining a continuous colony. 59th Annual Meeting of the Entomological Society of America, November 13-16, Reno, NV.
- Reay-Jones, F.P.F., M.D. Toews, and P.G. Tillman. 2011. Seasonal movements of stink bugs and their natural enemies in South Carolina and Georgia. 59th Annual Meeting of the Entomological Society of America, November 13-16, Reno, NV.
- Toews, M.D., A. Mustafic, J. Xia, and M.A. Haidekker. 2011. Rapid detection of stink bug damaged cotton bolls. 75th Annual Meeting of the Georgia Entomological Society. April 6-8, Cordele, GA.

- *Herbert, J.J. and M.D. Toews. 2011. Seasonal abundance and reproductive biology of brown stink bugs. 2011. 75th Annual Meeting of the Georgia Entomological Society. April 6-8, Cordele, GA.
- *⁺Huang, Ta-I and Michael Toews. 2011. Movement of stink bugs across Georgia farmscapes. 75th Annual Meeting of the Georgia Entomological Society. April 6-8, Cordele, GA.
- Roberts, P.M and M.D. Toews. 2011. Temporal susceptibility of cotton to early season thrips. 75th Annual Meeting of the Georgia Entomological Society. April 6-8, Cordele, GA.
- *Herbert, J.J. and M.D. Toews. 2011. Tracking the movement and reproduction of stink bugs in Georgia farmscapes. 85th Annual Meeting of the Southeastern Branch of the Entomological Society of America, March 19-22, San Juan, Puerto Rico.
- Akin, D.S., J. Reed, J. Bachelier, A. Catchot, D. Cook, C. Daves, J. Gore, J. Greene, A. Herbert, D. Kerns, R. Leonard, G. Lorenz, S. Micinski, D. Reisig, P. Roberts, S. Stewart, G. Studebaker, K. Tindall, and M. Toews. 2011. Regional survey 2009 and 2010: Thrips species composition. 85th Annual Meeting of the Southeastern Branch of the Entomological Society of America, March 19-22, San Juan, Puerto Rico.
- Toews, M.D., R.S. Tubbs, and G. Harris. 2011. Addition of starter fertilizer to shorten susceptibility to thrips. 85th Annual Meeting of the Southeastern Branch of the Entomological Society of America, March 19-22, San Juan, Puerto Rico.
- Bachelier, J., A. Herbert, J. Greene, P. Roberts, and M. Toews. 2011. Scouting for stink bug damage in southeast US cotton: description and use of a pocket decision aid. 85th Annual Meeting of the Southeastern Branch of the Entomological Society of America, March 19-22, San Juan, Puerto Rico.
- Medrano, E.G., J. F. Esquivel, A.A. Bell, and M.D. Toews. 2011. Assessment of cotton boll damage caused by stink bug feeding and transmitted pathogens. Sucking Bugs: Issues and Approaches. February 22, Texas AgriLife Research and Extension Center, Corpus Christi, TX.
- Medrano, E.G, M.D. Toews, A.A. Bell and J. Esquivel. 2011. Analysis of potential cotton pathogen reservoirs based on *Nezara viridula* (L.) collections from two different crop sources. Beltwide Cotton Conferences. January 7, Atlanta, GA.
- Akin, D.S, G. Lorenz, G.E. Studebaker, S.D. Stewart, B.R. Leonard, S. Micinski, J.K. Greene, R. Jackson, K.C. Allen, A. Catchot, J. Reed, J. Gore, D.R. Cook. K.V. Tindall, D. Kerns, P. Roberts, M.D. Toews, A. Herbert, J.S. Bachelier and D.D. Reisig. 2011. Evaluation of automatic insecticide applications following preventative insecticides from thrips. Beltwide Cotton Conferences. January 7, Atlanta, GA.
- Bachelier, J, D.A. Herbert, J. Greene, P. Roberts and M.D. Toews. 2011. Concept to delivery: a pocket size scouting decision aid for stink bug scouting in the southeast. Beltwide Cotton Conferences. January 7, Atlanta, GA.
- *Herbert, J. and M.D. Toews. 2011. A landscape perspective of stink bugs in cotton. Beltwide Cotton Conferences. January 7, Atlanta, GA.
- Toews, M.D., J. Herbert, F.P.F. Reay-Jones and Jeremy Greene. 2011. Understanding colonization of cotton field by stink bugs. Beltwide Cotton Conferences. January 7, Atlanta, GA.
- Akin, D.S, J. Reed, G. Lorenz, G.E. Studebaker, S.D. Stewart, B.R. Leonard, S. Micinski, J.K. Greene, R. Jackson, K.C. Allen, A. Catchot, J. Reed, J. Gore, D.R. Cook. K.V. Tindall, D. Kerns, P. Roberts, M.D. Toews, A. Herbert, J.S. Bachelier and D.D. Reisig. 2011. Thrips

- species composition across multiple regions: a two-year summary. Beltwide Cotton Conferences. January 7, Atlanta, GA.
- *Griffin, J.D., R.S. Tubbs, G.H. Harris and M.D. Toews. 2011. Addition of starter fertilizer to shorten the window of susceptibility to thrips. Beltwide Cotton Conferences. January 7, Atlanta, GA.
- Adedoyin, A., C. Li and M.D. Toews. 2011. Single cotton fiber measurement using Fraunhofer diffraction. Beltwide Cotton Conferences. January 7, Atlanta, GA.
- Reay-Jones, FPF, J. Greene, M.D. Toews. 2010. Spatiotemporal dynamics of stink bugs across the farmscapes in South Carolina and Georgia. 58th Annual Meeting of the Entomological Society of America, December 12-15, San Diego, CA.
- Toews, M.D., FPF Reay-Jones, J. Greene, J. Herbert. 2010. A chronology of stink bug populations in Georgia Farmscapes. 58th Annual Meeting of the Entomological Society of America, December 12-15, San Diego, CA.
- *Herbert, J., and M.D. Toews. 2010. Connecting crop phenology with the reproductive capacity of stink bugs in Georgia farmscapes. 58th Annual Meeting of the Entomological Society of America, December 12-15, San Diego, CA.
- Bacheler, J.S., D.A. Herbert, J. Greene, P. Roberts, M.D. Toews. 2010. Scouting for stink bug damage in Southeast cotton: description and use of a pocket decision aid. 58th Annual Meeting of the Entomological Society of America, December 12-15, San Diego, CA.
- *Huang, T-I. and M.D. Toews. 2010. Movement of immature stink bugs on individual cotton plants. 58th Annual Meeting of the Entomological Society of America, December 12-15, San Diego, CA.
- Toews, M.D. 2010. Stink bug ecology and pest management. Israel Association of Field Crop Growers tour group, hosted by the Georgia Cotton Commission, November 9, Tifton, GA.
- McInnes, B., C. Li, X. Ni, M.D. Toews, JP. Wilson, and S. L. Brown. Using an electronic nose to monitor corn storage pest status. 74th Annual Meeting of the Georgia Entomological Society, 8 October, Hickory Knob State Park, McCormick, SC.
- *Huang, T-I. and M.D. Toews. 2010. Selection of cotton feeding sites by the southern green stink bug. 84th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 8, Atlanta, GA.
- Reay-Jones, F.P.F., J.K. Greene and M.D. Toews. 2010. Farmscape dynamics of stink bugs in South Carolina. 84th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 9, Atlanta, GA.
- *Herbert, J.J. and M.D. Toews. 2010. Stink bug reproductive potential in Georgia cotton, soybean, and peanut. 84th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 9, Atlanta, GA.
- Toews, M.D., R.S. Tubbs, D.Q. Wann, D Sullivan, and P.M. Roberts. 2010. Mitigating thrips populations with strip tillage and winter cover crops. 84th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 9, Atlanta, GA.
- Akin, D.S., G. Lorenz, G. Studebaker, R. Leonard, S. Stewart, J. Reed, A. Catchot, D. Cook, J. Gore, C. Daves, R. Jackson, C. Allen, D. Kerns, M. Toews, P. Roberts, K. Tindall, A. Herbert, J. Greene, and J. Bacheler. 2010. Evaluation of foliar insecticide applications following preventative insecticide for control of thrips. 84th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 9, Atlanta, GA.
- Bacheler, J., A. Herbert, E. Blinka, J. Greene, P. Roberts, M. Toews, J. Van Duyn, and R. Smith. 2010. Stink bug management on cotton in the Southeast: from concept to delivery. 84th

- Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 9, Atlanta, GA.
- Roberts, P.M. and M. Toews. 2010. Impact of thrips damage on cotton growth dynamics. 84th Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 9, Atlanta, GA.
- Roberts, P., J. Greene, and M. Toews. 2010. Evaluating critical periods of early season thrips control. Beltwide Cotton Conferences. January 6, New Orleans, LA.
- Bacheler, J., A. Herbert, E. Blinka, J. Greene, P. Roberts, J. Van Duyn, M. Toews, D. Mott, and R. Smith. 2010. Managing stink bugs in cotton: research in the southeast region. Beltwide Cotton Conferences. January 7, New Orleans, LA.
- *Griffin, D., S. Tubbs, D. Wann and M. Toews. 2010. Reduction of thrips populations with tillage and winter cover crops. Beltwide Cotton Conferences. January 7, New Orleans, LA.
- *Herbert, J. and M. Toews. 2010. Stink bug distribution and reproductive capacity in Georgia cotton farmscapes. Beltwide Cotton Conferences. January 7, New Orleans, LA.
- Reay-Jones, F.P.F., J.D. Greene, M.D. Toews and J. Herbert 2010. Border applications of insecticide to manage stink bugs in South Carolina and Georgia cotton. Beltwide Cotton Conferences. January 7, New Orleans, LA.
- Reed, J., S. Akin, J. Bacheler, A. Catchot, D. Cook, C. Daves, J. Greene, A. Herbert, D. Kerns, R. Leonard, G. Lorenz, P. Roberts, S. Stewart, G. Studebaker, K. Tindall and M. Toews. 2010. Regional thrips trial, 2009: thrips species composition. Beltwide Cotton Conferences. January 7, New Orleans, LA.
- Akin, S., G. Lorenz, G. Studebaker, R. Leonard, S. Stewart, J. Reed, A. Catchot, D. Cook, J. Gore, C. Daves, R. Jackson, K. Allen, D. Kerns, M. Toews, P. Roberts, K. Tindall, A. Herbert, J. Greene, and J. Bacheler. 2010. Evaluation of foliar insecticide applications following preventative insecticide for control of thrips. Beltwide Cotton Conferences. January 6, New Orleans, LA.
- Ruberson, J., S.R. Shaw, M.D. Thompson, M.D. Toews, and P.M. Roberts. 2009. Temperature and host stage suitability for the parasitoid, *Aridelus rufotestaceus*. 57th Annual Meeting of the Entomological Society of America, December 16, Indianapolis, IN.
- *Herbert, J.H. and M.D. Toews. 2009. Stink bug movement and distribution within a four crop system. 57th Annual Meeting of the Entomological Society of America, December 15, Indianapolis, IN.
- Reay-Jones, F.P.F., M.D. Toews, J. Greene, and R.B. Reeves. 2009. Sequential sampling of stink bugs and boll injury in cotton. 57th Annual Meeting of the Entomological Society of America, December 15, Indianapolis, IN.
- Toews, M.D., F.P.F. Reay-Jones, J. Greene, J. Xia, M. Haidekker, P.M. Roberts, R.B. Reeves, and D.A. Herbert. 2009. Improving detection of stink bugs in cotton. 57th Annual Meeting of the Entomological Society of America, December 15, Indianapolis, IN.
- Toews, M.D. 2009. Sampling progress on stink bugs in cotton. Cotton and Southern Corn IPM Seminar, Oct. 6, Point Clear, AL
- Greene, J., P. Roberts, J. Bacheler, M. Toews, D. Robinson, D. Mott. 2009. Current thresholds for boll-feeding bugs in southeastern cotton: a dynamic approach to a static problem. 83rd Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 10, Montgomery, AL.
- Roberts, P., M.D. Toews, J. Ruberson, J. Greene, J. Bacheler, J. Van Duyn, E. Blinka, A. Herbert and R. Smith. 2009. Boll feeding bugs in the southeast: where we have been and where are

- we going? 83rd Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 10, Montgomery, AL.
- Toews, M.D., P.M. Roberts, J.K. Greene, F. Reay-Jones, J.S. Bacheler, E. L. Blinka and D. A. Herbert Jr. 2009. Alternative sampling methods for stink bugs in southeastern cotton. 83rd Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 10, Montgomery, AL.
- Reeves, R.B., J.K. Greene, P.H. Adler, F.P.F. Reay-Jones, M.D. Toews, P.D. Gerard and A. Khalilian. 2009. Margin effects on stink bug (Heteroptera: Pentatomidae) densities in cotton as part of a variable agroecosystem. 83rd Annual Meeting of the Southeastern Branch of the Entomological Society of America. March 8, Montgomery, AL.
- Bacheler, J.S., P. Roberts, J. Greene, D. Mott, D. Robinson, M. Toews, J. Ruberson, D. Morrison, T. Pegram, F.P.F. Reay-Jones, T. Walker, C. Davis, and E. Blinka. 2009. Use of the dynamic stink bug threshold in southeastern cotton. Beltwide Cotton Conferences, January 8, San Antonio, TX.
- Blinka, E.L., D.A. Herbert, M.D. Toews, J. Bacheler, S. Malone, and J.W. Van Duyn. 2009. Comparison of two stink bug scouting techniques under field conditions. Beltwide Cotton Conferences, January 8, San Antonio, TX.
- Greene, J.K., J.S. Bacheler, P.M. Roberts, M.D. Toews, J.R. Ruberson, F.P.F. Reay-Jones, D. Robinson, D.W. Mott, D.E. Morrison, T. Pegram, T. Walker, and C. Davis. 2009. Continued evaluation of internal boll-injury treatment thresholds for stink bugs in the southeast. Beltwide Cotton Conferences, January 8, San Antonio, TX.
- Li, Changying, and M. Toews. 2009. A preliminary study of detecting stink bug infestation on cotton bolls using a gas sensor array. Beltwide Cotton Conferences, January 8, San Antonio, TX.
- Roberts, P.M., M. Toews, B. Freeman, T. Reed, R. Smith, J. Bacheler, A. Herbert, and J. Greene. 2009. Spider mites-pest status, southeastern region. Beltwide Cotton Conferences, January 8, San Antonio, TX.
- Roberts, P.M., M.D. Toews, and R.C. Kemerait. 2009. Impact of early season thrips control on root development and nematode management. Beltwide Cotton Conferences, January 8, San Antonio, TX.
- Toews, M.D., E.L. Blinka, A. Herbert, J. Bacheler, S. Malone, J. Van Duyn, P.M. Roberts, J. K. Greene, and W. Don Shurley. 2009. Balancing sampling size, accuracy, and time when monitoring stink bug damage. Beltwide Cotton Conferences, January 8, San Antonio, TX.
- Reeves, R.B., J.K. Greene, F.P.F. Reay-Jones, A. Khalilian, M.D. Toews, and P.D. Gerard. 2009. Spatial-temporal analysis of stink bug populations in cotton. Beltwide Cotton Conferences, January 7, San Antonio, TX.
- Roberts, P., M. Toews, J. Ruberson, J. Greene, J. Bacheler, J. Van Duyn, E. Blinka and A. Herbert. 2008. IPM for stink bugs in cotton: What do we know and what do we need to know? Symposium: New perspectives on stink bug biology, ecology, behavior, and management. 56th Annual Meeting of the Entomological Society of America. November 19, Reno, NV.
- Toews, M.D. 2008. Stink bug movement in Georgia farmscapes. 56th Annual Meeting of the Entomological Society of America. November 18, Reno, NV.
- Reeves, R.B., J. G. Greene, P.H. Adler, F.P.F. Reay-Jones, and M. D. Toews. 2008. Population dynamics of stink bugs (Heteroptera: Pentatomidae) in transgenic dual-toxin Bt cotton. 56th Annual Meeting of the Entomological Society of America. November 17, Reno, NV.

- Toews, M.D. 2008. Sampling stink bugs in Georgia and South Carolina cotton. Cotton Pest Seminar, October 8, Puerto Vallarta, Nuevo Vallarta, Nayarit, Mexico.
- Toews, M.D. 2008. A comparison of sampling methods for stink bugs in cotton. 72nd Annual Meeting of the Georgia Entomological Society. April 4. Cordele, GA.
- Roberts, P., J. Bachelier, J. Greene, J. Van Duyn, E. Blinka, M. Toews, J. Ruberson, and F.R. Jones. 2008. Progressive Spray tests, treatment thresholds, and fiber quality associated with stink bugs in cotton. 82nd Annual Meeting of the Southeastern Branch of the ESA. March 4, Jacksonville, FL.
- Reay-Jones, F.P. F., J.K. Greene, M.D. Toews, and R. B. Reeves. 2008. Stink bug sampling and associated injury in cotton in South Carolina. 82nd Annual Meeting of the Southeastern Branch of the ESA. March 4, Jacksonville, FL.
- Toews, M.D. 2008. Stink bug movement into cotton fields. 82nd Annual Meeting of the Southeastern Branch of the ESA. March 4. Jacksonville, FL.
- Bachelier, J.S., P.M. Roberts, J.K. Greene, M.D. Toews, D. W. Mott, J.W. Van Duyn, and J.R. Bradley. 2008. Relationship between cotton phenology and bug pressure v. yield and quality in a regressive spray environment. Beltwide Cotton Conferences, January 11, Nashville, TN.
- Bachelier, J., P. Roberts, J. Greene, J. Van Duyn, A. Herbert, M. Toews, J. Ruberson, E. Blinka, D. Mott, D. Robinson, T. Walker, C. Davis, R. Smith, D. Morrison, and T. Pegram. 2008. A southeastern perspective on hemipteran pests. Beltwide Cotton Conferences, January 11, Nashville, TN.
- Blinka, E., J. Bachelier, P. Roberts, J. Greene, M. Toews, D. Mott, J. Van Duyn, and J.R. Bradley. 2008. Evaluation of the relationship between stink bug pressure vs. yield under a regressive spray environment. Beltwide Cotton Conferences, January 11, Nashville, TN.
- Greene, J., P. Roberts, J. Bachelier, J. Ruberson, J. Van Duyn, M. Toews, E. Blinka, D. Robinson, D. Mott, T. Walker, C. Davis, and R. Reeves. 2008. Refining treatment thresholds for stink bugs in the southeast – 2007. Beltwide Cotton Conferences, January 11, Nashville, TN.
- Reeves, R.B., J.K. Greene, F.P.F. Reay-Jones, and M.D. Toews. 2008. Density and distribution of stink bugs (Hemiptera: Pentatomidae) in cotton, *Gossypium hirsutum*, as influenced by surrounding ecotones. Beltwide Cotton Conferences, January 11, Nashville, TN.
- Roberts, P., J. Ruberson, M. Toews, A. Knowlton, J. Bachelier, D. Mott, D. Morrison, T. Pegram, J. Greene, D. Robinson, T. Walker, and R. Smith. 2008. Influence of boll feeding bugs on cotton fiber quality. Beltwide Cotton Conferences, January 11, Nashville, TN.
- Toews, M.D., J. Greene, F.P.F. Reay-Jones, and R.B. Reeves. 2008. A comparison of sampling techniques for stink bugs in cotton. Beltwide Cotton Conferences, January 11, Nashville, TN.
- Toews, M.D., and D. Griffin. 2008. Performance of seed treatments for early season thrips management. Beltwide Cotton Conferences, January 11, Nashville, TN.
- Toews, M.D. 2007. Distribution of phytophagous stink bugs in Georgia cotton fields. 55th Annual Meeting of the Entomological Society of America, December 12, San Diego, CA.
- Toews, MD. 2007. Rapid assessment of insect fragments in flour. 71st Annual Meeting of the Georgia Entomological Society, May 18, Athens, GA.
- Toews, MD, JC Campbell, and FH Arthur. 2006. Do conventional pesticide applications decrease pest populations in refugia, or just our ability to detect them? 54th Annual Meeting of the Entomological Society of America, December 10-13, Indianapolis, IN.
- Toews, MD. 2006. Mechanisms underlying the effectiveness of food processing IPM programs. 5th National Integrated Pest Management Symposium, April 4-6, St. Louis, MO.

- Toews, MD & JF Campbell. 2006. Monitoring for pest activity. Kansas Pest Control Association Spring Conference and Exhibition, March 2, McPherson, KS.
- Toews, MD, FH Arthur, JF Campbell, and S. Ramaswamy. 2005. Immigration of lesser grain borers into seed wheat warehouses. 5th Annual Meeting of the Consortium for Integrated Management of Stored product Insects Pests (CIMSPIP). October 20-21, Manhattan, KS.
- Toews, M.D., T.C. Pearson, F.H. Arthur, and J.F. Campbell. 2005. Imaging and automated detection of rice weevil pupae in wheat. Rice Industry Alliance Meeting. May 25-26, Fayetteville, AR.
- Toews, M.D., J.F. Campbell, F.H. Arthur, and S.B. Ramaswamy. 2005. Beetle immigration into foundation seed warehouses. Annual Meeting of the North Central Branch of the Entomological Society of America. March 20-23, West Lafayette, IN.
- Toews, M.D., J.F. Campbell, F.H. Arthur, and S.B. Ramaswamy. 2004. Flight activity of the lesser grain borer near certified seed facilities. 52nd Annual Meeting of the Entomological Society of America, November 14-17, Salt Lake City, UT.
- Toews, M.D. 2004. Detection of internal insects in rough rice. Rice Industry Alliance Meeting. May 27, Fayetteville, AR.
- Toews, M.D., F.H. Arthur, and J.F. Campbell. 2003. Fumigation impact on stored product insects in a grain processing facility. 51st Annual Meeting of the Entomological Society of America. Oct. 26-29, Cincinnati, OH.
- Toews, M.D. and Bh. Subramanyam. 2003. Trials with surfaces & biocontrol agents. Spinosad data review and product update meeting. Presented by Dow AgroSciences and hosted by Kansas State University. May 20, Manhattan, KS.
- Toews, M.D., and Bh. Subramanyam. 2002. Compatibility of natural enemies and spinosad in stored wheat. Annual Meeting of the Entomological Society of America. November 17-20, Fort Lauderdale, FL.
- Toews, M.D. 2002. Lead trainer in the *prevention through sanitation* sessions and team trainer in the *monitoring insects in bulk grain* sessions at the Sixth National Stored Product IPM Training Conference. Aug. 19-21, Manhattan, KS.
- Toews, M.D. and Bh. Subramanyam. 2002. Development and validation of sequential sampling plans for *Sitophilus* species associated with pet specialty stores. 8th International Working Conference on stored Product Protection, July 23, York, UK.
- Toews, M.D., Bh. Subramanyam, and L. Fang. 2001. Method of exposure and grain condition on the time-mortality responses of two stored product insects. Annual Meeting of the Entomological Society of America. December 9-12, San Diego, CA.
- Toews, M.D. 2001. Pest management practices, use of pesticides, and pesticide residues in the US stored wheat marketing system. Third stored product pest management and heat treatment workshop. Aug 7, Kansas State University, Manhattan, KS.
- Toews, M.D., and T.W. Phillips. 2000. Use of traps to estimate insect population density in concrete silos. Joint Annual Meeting of the Entomological Society of Canada and the Entomological Society of America. December 3-6, Montréal, Québec, Canada.
- Toews, M.D. 2000. New methods for trapping insects. Television interview on SunUp, an agricultural based news program. Sept. 28, Stillwater, OK.
- Toews, M.D. 2000. Insect traps for grain storage. Television interview on SunUP, an agricultural based news program. June 22, Stillwater, OK.
- Toews, M.D., G.W. Cuperus, and T.W. Phillips. 1998. Decrease in population size of *Rhyzopertha dominica* (Coleoptera: Bostrichidae) at different temperatures in divergent

wheat cultivars by the parasitoid *Theocolax elegans* (Hymenoptera: Pteromalidae). 7th International Working Conference on Stored-product Protection, October 16, Beijing, China.
 Toews, M.D., G.W. Cuperus, T.W. Phillips, and E.L. Bonjour. 1997. Susceptibility of lesser grain borer to *Choetospila elegans* in 5 cultivars of stored wheat. Annual Meeting of the Entomological Society of America. December 14-18, Nashville, TN.

Extension Presentations (72)

- Toews, M.D. 2017. Using EDDMapS to improve recommendations. Georgia Cooperative Extension Service. online. February 20, (30 minutes, 5 people).
- Toews, M.D. 2017. Chemigation for management of stinkbugs. Georgia Cotton Commission's 10th Annual Meeting & UGA Cotton Production Workshop. January 25 (40 minutes, 78 people).
- Toews, M.D. 2016. Update on grain sorghum pest management. Southwest Georgia Research & Education Center Cotton & Peanuts Field Day. August 10, Plains, GA. (110 people)
- Toews, M.D. 2016. Invasive species outreach. Georgia Farm Bureau State Commodity Conference. August 4, Tifton, GA. (45 people).
- Toews, M.D. 2016. Update on stink bug management in cotton. 2016 UGA Cotton & Peanut Research Field Day. Sept. 7, Tifton. (225 people).
- Toews, M.D. 2016. Smartphone apps for agent use. Northwest District ANR agent update. Griffin. May 19 (90 minutes, 36 people).
- Toews, M.D. 2016. Smartphone apps for agent use. Northeast District ANR agent update. Athens. March 22 (90 minutes, 50 people).
- Toews, M.D. 2016. Smartphone apps for agent use. Southwest District ANR agent update. Tifton. March 1 (90 minutes, 60 people).
- Toews, M.D. 2016. Smartphone apps for agent use. Southeast District ANR agent update. Vidalia. February 9 (90 minutes, 80 people).
- Toews, M.D. 2016. Control of stored product pests & bin fumigation. Georgia Crop Improvement Association Seed Short Course. Tifton. January 19 (50 minutes, 22 attendees).
- Toews, M.D. 2016. Smartphone apps to make your life easier. Georgia Cooperative Extension Winterschool, Rock Eagle 4-H Center. January 13 (90 minutes, 21 people).
- Brown, L.M., P.C. Ellsworth, S.E. Naranjo, M. Toews, and G. Frisvold. 2015. Stink bug research update: management costs, damage dynamics & chemical efficacy. Field tour and indoor presentation by Lydia Brown and Peter Ellsworth at the Cotton Pest Losses Workshop, Maricopa, AZ. December 9 (12 attendees).
- Brown, L.M., P.C. Ellsworth, S.E. Naranjo, M. Toews, and G. Frisvold. 2015. Stink bug research update: management costs, damage dynamics & chemical efficacy. Presented by Lydia Brown at the Cotton Pest Losses Workshop, Parker, AZ. December 10 (7 attendees).
- Brown, L.M., P.C. Ellsworth, S.E. Naranjo, M. Toews, and G. Frisvold. 2015. Effects of Brown Stink Bug chemical controls on costs and other pests. Tour of field research presented by Lydia Brown at the 5th Annual Central Arizona Farmer Field Day, Maricopa, AZ, October 28 (65 attendees).
- Toews, M.D. 2015. Stored product insects. Georgia Pest Control Association-South Georgia Conference. Tifton, October 7 (60 minutes, 120 participants).
- Toews, M.D. 2015. Stored product insects and phosphine resistance. American Peanut Shellers Association-IPM Training Program. Colquitt, GA, September 10 (60 minutes, 95 participants).

- Toews, M.D. 2015. Managing stink bugs with chemigation. Tifton Campus Cotton & Peanut Research Field Day. Tifton, GA, September 9 (20 min, 150 participants).
- Toews, M.D. and P. Ellsworth. 2015. Roundtable discussion of stink bug feeding and management in the southwestern US. Blyth, CA, July 14 (60 min., 12 participants).
- Toews, M.D. 2015. Cotton insect control delivered using overhead irrigation. Stripling Irrigation Research Park Field Day, July 8 (15 min., 125 participants).
- Toews, M.D. 2015. Smartphone apps to make your life easier. ANR Annual Professional Development Improvement Conference. Lake Blackshear Resort, Cordele, April 2 (90 min, 55 participants).
- Toews, M.D. 2015. UGA smartphone apps for decision support and scheduling. Certified Crop Adviser Agronomic Seminar. Valdosta, January 23 (60 min, 32 participants).
- Toews, M.D. 2015. Improving stored corn management. Corn Short Course and Georgia Corn Growers Annual Meeting. Tifton, Jan. 20 (45 min, 199 participants).
- Toews, M.D. 2014. Mobile apps: current apps and identification of needs. Cotton Incorporated Crop Management Seminar. November 12, Tifton.
- Toews, M.D. 2014. Programs available from the Center for Invasive Species and Ecosystem Health. UGA Extension Program Planning Week. Athens, September 11.
- Toews, M.D. 2014. An expert system for making decisions to treat stink bugs. UGA Cotton & Peanut Research Field Day. Tifton, September 10.
- Toews, M.D. 2014. Update on thrips management in cotton. Corn, cotton, peanuts & soybeans field day. Plains, GA, August 20.
- Toews, M.D. 2014. Post –harvest facilities and ongoing research at UGA. AMCOE/SERAT Corn Field Day. June 18, Tifton.
- Toews, M.D. 2014. Control of stored product pests & bin fumigation. 2014 Georgia Crop Improvement Association Seed Short Course. February 28, Athens.
- Toews, M.D. 2014. GA cotton insect advisor, a new smartphone app for use by cotton growers and scouts. UGA Cotton Production Workshop, Tifton, GA January 22.
- Toews, M.D., X. Ni, and D. Buntin. 2014. Aflatoxin mitigation with *Bt* cultivars and in-field identity preserve. Georgia Agricultural Commodity Commission for Corn Budget Meeting, Tifton, GA, January 7.
- Toews, M.D. 2013. Update on stink bug management. 2013 UGA Cotton & Peanut Research Field Day. Tifton, GA, September 11.
- Toews, M.D., and J. Hunter. 2013. CSI: Tifton – Using insects to solve crimes. UGA-Tifton Campus Ag Awareness Day, May 9.
- Toews, M.D., X. Ni, and D. Buntin. 2013. Aflatoxin mitigation with *Bt* cultivars and in-field identity preserve. Georgia Agricultural Commodity Commission for Corn Budget Meeting, Tifton, GA, February 22.
- Toews, M.D. 2013. Border sprays for management of stink bugs in cotton. UGA Cotton Production Workshop, Tifton, GA, January 30.
- Toews, M.D. 2012. Update on stink bug management. 2012 UGA Cotton & Peanut Research Field Day. Tifton, GA, September 12.
- Toews, M.D. 2012. Managing cotton thrips without aldicarb. Cotton & Peanuts Field day, SWGA Research & Education Center, Plains, GA. Aug. 16.
- Toews, M.D. 2012. Update on cotton thrips management. Georgia Cotton Commission Field Day, Tifton, GA, June 29.

- Toews, M.D. 2012. Thrips management in cotton. Agronomic Crops Field Day Agent Training, Tifton, GA, June 28.
- Toews, M.D. 2012. Introduction to entomology for home gardeners. Master Gardener training, Albany, GA, April 17.
- Toews, M.D. 2012. Research update on stink bugs in cotton. UGA Cotton Production Workshop, Tifton, GA, February 1.
- Toews, M.D. 2011. Entomology and environmental impact. 8th Street Middle School, Environmental Science Class, Tifton, November 8.
- Toews, M.D. 2011. Stored product insects. 35th Annual Field Day and Workshop in Entomology, hosted by Florida A&M University. November 3, Tallahassee, FL.
- Toews, M.D. 2011. Cotton entomology. UGA Cotton & Peanut Research Field Day, September 7.
- Toews, M.D. 2011. Update on cotton entomology research. UGA cotton & peanut research field day. Tifton. September 7.
- Toews, M.D. 2011. Update on cotton pest management. Georgia Cotton Commission Field Day, July 8.
- Toews, M.D. 2011. Update on cotton insect research. County Agent Training Day, June 30.
- Toews, M.D. 2011. How animals and plants survive the Georgia heat. UGA-Tifton Campus Ag Awareness Day, May 5.
- Toews, M.D. 2011. Research update on thrips in cotton. UGA Cotton Production Workshop, Tifton, GA, January 26.
- Toews, M.D. 2010. Landscape management of stink bugs. UGA-Tifton Campus cotton and peanuts field day, Tifton, GA. September 8.
- Toews, M.D. 2010. Landscape management of stink bugs. SWREC Cotton, peanuts, and soybeans field day, Plains, GA, Aug. 26.
- Toews, M.D. 2010. Landscape management of stink bugs. SEREC Field Day, Midville, GA, Aug. 18.
- Toews, M.D. 2010. Cotton pest research update. Georgia Farm Bureau Commodity Conference. July 29, Tifton, GA.
- Toews, M.D. 2010. Thrips and stink bug update. Agronomic Crops Field Day, County Agent Training. June 24, Tifton, GA.
- Toews, M.D. 2010. Stink bug research update. Georgia Cotton Conference. Jan. 27, Tifton, GA.
- Toews, M.D. 2009. Stink bug movement and distribution in cotton. Cotton and Peanut Research Field Day. September 9, 2009. Tifton, GA.
- Toews, M.D. 2009. Stink bugs. SWREC Cotton, Peanuts and Soybeans Field Day. August 25, Plains, GA.
- Toews, M.D. 2009. Research update on thrips and stink bugs in cotton. Agronomic Crops Field Day, County Agent Training. June 25, Tifton, GA.
- Toews, M.D. 2009. Bug pests. Cotton Scout School. June 8, Tifton, GA.
- Toews, M.D. 2009. Cotton insect update. Georgia Cotton Conference. Jan. 28, Tifton, GA.
- Toews, M.D. 2008. Applied research in food processing ecosystems. 32nd Annual Field Day and Workshop in Entomology, hosted by Florida A&M University. November 6, Tallahassee, FL.
- Toews, M.D. 2008. Insect movement. Cotton and Peanut Research Field Day, Sept 10, Tifton, GA.

- Toews, M.D. 2008. Stink bugs in cotton. SEREC Field Day and Grand Re-opening. Aug. 20, Midville, GA.
- Toews, M.D. 2008. Cotton pest update. Agronomic Crops Field Day, County Agent Training. June 26, Tifton, GA.
- Toews, M.D. 2008. Insects of Georgia Cotton. RiverQuest Summer Camp Program. June 20, Albany, GA.
- Toews, M.D. 2008. Bug pests of cotton. Cotton Scout School. June 2, Tifton, GA.
- Toews, M.D. 2008. Stink bug scouting and management in cotton. Georgia Cotton Conference. Jan. 30, Tifton, GA.
- Toews, M.D. 2007. Cotton insect research. Georgia Cotton Research Tour. August 21, Tifton, GA.
- Toews, MD. 2006. Insecticide usage in post harvest ecosystems. State of Kansas Commercial Pesticide Applicator Training Program. October 17, Hays, KS.
- Toews, M.D. 2004. Insect management for grain storage and processing. State of Kansas Cooperative Extension Service commercial pesticide applicator training programs. October 22, Topeka, KS.
- Toews, M.D. 2002. Pantry pest identification and control, and monitoring for stored product insects. State of Kansas Cooperative Extension Service commercial pesticide applicator training programs. November 5-6, Garden City and Emporia, KS.
- Toews, M.D. 2002. Stored product insects: identification. Workshop organized for Agrilience Company's agronomy field scouts. May 15-16, Garden City, KS.
- Toews, M.D. 2002. Stored product insect biology and identification. April 15-16, presentation for the ProFume working group at Dow AgroSciences, Indianapolis, IN.
- Toews, M.D. 2001. Integrated pest management for stored product insects in commercial elevators. Missouri Dept. of Agriculture Pesticide Certification Training. January 29, Columbia, MO.

Journal Editorial Staff (1 journal)

- Journal of Cotton Science, Assistant Editor: 2012-present.

Peer Reviewer (34 journals; average 8-10 reviews per year)

- Annals of the Entomological Society of America
- Canadian Entomologist
- Crop Protection
- Crop Science
- Current Microbiology
- Ecological Entomology
- Environmental Entomology
- Entomologia Experimentalis et Applicata
- Florida Entomologist
- Insect Science
- International Journal of Pest Management
- Journal of Agricultural and Urban Entomology
- Journal of Applied Entomology
- Journal of Cotton Science

- Journal of Economic Entomology
- Journal of Entomological Science
- Journal of Integrated Pest Management
- Journal of Insectology
- Journal of Insect Behavior
- Journal of Insect Science
- Journal of Pest Science
- Journal of the Science of Food and Agriculture
- Journal of Stored Products Research
- Kuwait Journal of Science and Engineering
- Neotropical Entomology
- Pakistan Journal of Zoology
- Pest Management Science
- The Philippine Agricultural Scientist
- Physiological Entomology
- Phytoparasitica
- Plant Health Progress
- PLOS ONE
- Revista Colombiana de Entomologia
- Scientia Agricola

Presubmission Manuscript Reviewer (14 institutions)

- Clemson University
- Fort Valley State University
- Kansas State University
- North Carolina State University
- Texas A&M University
- University of Agriculture, Faisalabad, Pakistan.
- University of Florida
- University of Georgia
- University of Minnesota
- USDA-ARS APMRU
- USDA-ARS CGAHR
- USDA-ARS CGBRU
- USDA-ARS CMAVE
- USDA-ARS WICSRU

Grant Panelist (5)

- USDA NIFA, Plant-associated insects and nematodes-organismal biology (2013)
- USDA NIFA, Pest management alternatives program (2012)
- USDA NIFA, Agriculture and food research initiative-insects and nematodes (2011)
- Kentucky Science and Engineering Foundation (2009)
- California Department of Food and Agriculture (2007)

In-depth Reviewer for Promotion Panels (8)

- University of Hawaii at Manoa (2014)
- USDA-ARS CGAHR (2014)
- USDA-ARS CPMR (2014)
- USDA-ARS SPARC (2014)
- USDA-ARS CGAHR (2013)
- USDA-ARS CGBRU (2012)
- USDA-ARS CGAHR (2008)
- USDA-ARS CMAVE (2007)

Honors and Awards (7)

Oliver I. Snapp Award (best research paper by a regular member). 2015. Awarded by the Georgia Entomological Society, April 10.

Award for Excellence in Integrated Pest Management. 2015. Awarded by the Southeastern Branch of the Entomological Society of America, March 15.

Oliver I. Snapp Award (best research paper by a regular member). 2014. Awarded by the Georgia Entomological Society, April 11.

Friends of IPM Bright Idea Award. 2013. Awarded by the Southern Region IPM Center awarded to the Southeast Entomologists Working Group (Jack Bacheler, Phillip Roberts, Michael Toews, Jeremy Greene, Francis Reay-Jones, Dominic Reisig, and Ames Herbert), March 4.

Gary A. Herzog Award of Excellence for Junior Scientist-Research. 2010. Awarded by the University of Georgia, College of Agricultural and Environmental Science-Tifton Campus, April 27.

Oliver I. Snapp Award (best research paper by a regular member). 2008. Awarded by the Georgia Entomological Society, April 4.

John Henry Comstock Graduate Student Award (outstanding graduate student achievement). 2001. Awarded by the Entomological Society of America, February 27.

Dissertation Reading Committees (3)

Shahid, Muhammad Rafiq. Graduated in December 2015 with a Ph.D. from the University of Agriculture, Faisalabad, Pakistan.

Abbas, Qaisar. Graduated in August 2012 with a Ph.D. from the University of Agriculture, Faisalabad, Pakistan.

Haider, Karar. Graduated in May 2010 with Ph.D. from the University of Agriculture, Faisalabad, Pakistan.

Attendance at Professional Short Courses (4)

National IPM Coordinating Committee. 2014. September 23-24. Washington DC.

Winning teams and winning grants. 2011. Workshop on developing successful teams and grant proposals for large integrated grants, sponsored by the Southern Experiment Station & Extension Directors. December 13-14, Washington DC.

Congressional Briefing Conference. 2006. Workshop on understanding the federal budgeting process, sponsored by the Government Affairs Institute at Georgetown University. June 5-8, Washington DC.

How to be a super communicator. 2005. Workshop hosted by Padgett-Thompson Seminars. May 3, Topeka, KS.

Legislative Updates (2)

- Toews, M.D. 2012. Overview of entomology research. Presentation for US Congressman Austin Scott. October 3, Tifton.
- Toews, M.D. 2011. Overview of cotton entomology research at UGA. Presentation for US Congressman Austin Scott's congressional staffers. November 9, Tifton.

Popular Media Coverage of Research Projects (17)

- Dowdy, Sharon. 2015. There's an app for that. Southscapes. Spring 2015.
- Hill, Jordan. 2015. UGA entomologist says proper corn storage can lead to better market prices. Georgia FACES. March 5.
- Hill, Jordan. 2015. UGA entomologist researching ways to control maize weevil in corn. Georgia FACES. February 25.
- Thompson, Clint. 2014. New stink bug app could save farmers, scouts time and money. Georgia FACES. November 19.
- Thompson, Clint. 2014. Kudzu bug numbers are drastically lower. Georgia FACES. September 18.
- Thompson, Clint. 2014. Key to controlling kudzu bug populations could be parasitoid wasps. Georgia FACES. May 21.
- Thompson, Clint. 2014. Maize weevils can destroy stored corn crops from the inside out. Georgia FACES. April 10.
- Thompson, Clint. 2013. Apps helping farmers identify unwanted pests. Georgia FACES. August 2.
- Thompson, Clint. 2013. Childhood fascination becomes vocation for entomologist. Albany Herald. April 1.
- Thompson, Clint. 2013. Stink bugs costly, harmful to farmers' crops. Growing Georgia. March 28.
- Shepard, Bren. 2012. Staying one step ahead of sink bugs. Ag Scene. Volume 2, Number 3: 8-9.
- Dean, Kyle. 2011. Stink bugs in cotton. Radio interview on FM 107.5 WTIF. June 16.
- Begue, Bruce. 2011. Educating children about agriculture. TV interview at Tifton Campus Ag Awareness Day for Fox 31 WFXL.
- Haire, Brad. 2010. Sniffing out stink bugs. Magazine article in Southscapes. 6: 16-18.
- Southern Region IPM Center. 2009. New report sheds light on stink bug management. Article in the Southern Region IPM Center Annual Update, published for the National IPM Committee Meeting, October 2009. Pg. 5.
- Haire, Brad. 2009. UGA researcher sleuths stink bug's on-farm travels. Newspaper article in Georgia FACES, September 25.
- Bishop, Leah. 2009. Stink bugs major pests in Southeast. Newspaper article in The Red and Black, September 18.
- Hull, Peter. 2009. Clemson researchers awarded grant to study 'No. 1 threat' to Southeast agriculture. Newspaper article in Clemson University Newsroom, August 25.

Professional Affiliations (3)

- Entomological Society of America (ESA), 1995 to present.
- Sigma Xi, 2001 to present.
- Georgia Entomological Society, 2007 to present.

Professional Service (34 positions including 8 president/chairmanships)

- Search committee member for Interdisciplinary Research Leader, USDA-ARS Crop Protection and Management Research Unit, 2017.
- President. Georgia Entomological Society, 2017.
- Program Chair. Annual Meeting of the Georgia Entomological Society, 2016
- Resolutions committee (Chair). Georgia Entomological Society, 2015.
- Search committee member for USDA-ARS Interdisciplinary Research Ecologist/Soil Scientist/Physical Scientist, USDA-ARS Southeast Watershed Research Laboratory, 2014.
- Invited participant to Gulf Atlantic Coastal Plain Long-Term Agroecosystems Research Partners/Stakeholders Workshop (USDA ARS). June 17-18, 2014.
- CM Beckham Award (Ph.D. student paper competition) committee chair. Georgia Entomological Society, 2014
- *Ad Hoc* By-Laws Revisions Committee (chair 2012-2015). Southeastern Branch of the Entomological Society of America. 2009-2015.
- Nominations Committee (chair), Georgia Entomological Society. 2013.
- Session Moderator, Georgia Entomological Society. 2013.
- Judging panelist (Chair 2013). Shripat Kamble Urban Entomology Graduate Student Award for Innovative Research, Entomological Foundation, 2013.
- Judging panelist. USDA Southern IPM Center, Friends of IPM-Graduate Student Awards, 2013.
- President, Tifton Sigma Xi Chapter. 2012-2013.
- Local Arrangements Committee (chair 2011). Georgia Entomological Society. 2011.
- Judging panelist (chair 2010, 2012). ESA Shripat Kamble Urban Entomology Graduate Student Award. 2010-2012.
- Judging panelist. SEB ESA Kirby L. Hays Award. 2008-2010.
- Judging panelist. SEB ESA John Henry Comstock Award. 2008-2010.
- Judging panelist. Pioneer Hi-Bred International Graduate Student Fellowship. 2008-2012.
- Organizer and Moderator for PIE Program Symposium titled: Transcending Geography with Regional Cotton IPM Projects. ESA National Meeting, 2010.
- Session Moderator. Beltwide Cotton Conferences. 2009-2012.
- Student Poster/Paper Competition Judge. Beltwide Cotton Conferences. 2012.
- Student Poster/Paper Competition Judge. Annual Meetings of the Entomological Association of America. 2005-2013.
- Student Poster/Paper Competition Judge. Annual Meetings of the Southeastern Branch of the Entomological Society of America. 2008-2011.
- Program Committee. Annual Meeting of the Southeastern Branch of the Entomological Society of America. 2010.
- Student Awards Committee. Annual Meeting of the Southeastern Branch of the Entomological Society of America. 2009-2011.
- Audit Committee. Georgia Entomological Society. 2010-2012.
- Program Committee (chair 2009-2010, 2013-2014). Tifton Sigma Xi Chapter. 2008-2009, 2013-2014.
- Student Affairs Committee (chair 2011). Georgia Entomological Society. 2009-2011.
- Secretary. Tifton Sigma Xi Chapter. 2008-2009.

- Session Moderator. Student paper competition, Georgia Entomological Society. 2008, 2014.
- Student Poster/Paper Competition Judge. Annual Meetings of the North Central Branch of the Entomological Society of America. 2005-2006.
- Organizer and moderator of Stored Products Protection Symposium. Annual Meeting of the ESA. 2002.
- Student Affairs Committee. Annual Meeting of the Entomological Association of America. 1998-2000.
- Student Liaison to Program Committee and Local Arrangements Committee. Annual Meeting of the ESA. 2000.
- Student Affairs Committee (Chair, 2000). Southwestern Branch of the Entomological Society of America. 1998-2000.

University, College and Departmental Service (23 committees including 2 chairmanships)

- D.W. Brooks Speaker Section Committee. 2016.
- Department of Entomology Department Head Search Committee. 2015-2016.
- Faculty Affairs and Grievances Committee, 2016-2017.
- Microgin manager search Committee. 2015.
- CAES Assistant Dean for Extension Search Committee. 2015.
- Research Professional II Search Committee (Field Research Services-Tifton Campus Assistant Dean's Office). 2015.
- Elected to serve on CAES Faculty Council (president 2016-2017). 2015-2017.
- ANR Program and Staff Development Committee. 2015-2017.
- UGA Extension Coordinator's Group. 2014-2017.
- UGA Research Administration Assessment Team. 2014-2015.
- Elected to serve on University Council. 2014-2017.
- Tifton Campus Network Administrator Search Committee. 2014.
- Tifton Campus Statistician Search Committee. 2013-2015.
- Department Representative. 2013. UGA Southeast District Recruiting Event. September 24.
- Biological Control Faculty Search Committee. 2013-14.
- Peanut IPM Faculty Search Committee (committee chair). 2012.
- CAES Strategic Planning Action Team (team 6: funding). 2012.
- Tifton Campus Cotton Micro Gin Oversight Committee. 2011-2015.
- CAES Undergraduate Student Affairs Committee. 2009-2011.
- Tifton Campus Safety and Hazard Committee. 2008-2011.
- Tifton Campus Social Committee. 2007-2011.
- Tifton Campus Library Committee. 2007-2011.
- CAES Faculty Affairs and Grievances Committee. 2007-2010.