

Alana L. Jacobson
Auburn University
Department of Entomology and Plant Pathology
301 Funchess Hall, Auburn University, AL 36849-5413

EDUCATION

2012 Ph.D. in Entomology, North Carolina State University, Raleigh, NC
2008 MSc., Purdue University, West Lafayette, IN
2004 B.S. in Agricultural Biology, New Mexico State University, Las Cruces, NM
2004 B.A. in Spanish, New Mexico State University, Las Cruces, NM

PROFESSIONAL EMPLOYMENT

Oct 2020-present Associate Professor of Insect Ecology & Row Crops IPM, Auburn University
Aug 2014-2020 Assistant Professor of Insect Ecology & Row Crops IPM, Auburn University
Aug 2012-Jul 2014 USDA NIFA Postdoctoral Fellow, North Carolina State University

TEACHING EXPERIENCE

ENTM 6220 Insect Ecology, Instructor of Record, Auburn University, Fall 2020, 2022, 2024.
ENTM 4020 Economic Entomology, Instructor of Record, Auburn University, Spring 2015-18, Fall 2019, 2021-present.
ENTM 4980 Undergraduate Research, Spring 2017, Summer & Fall 2017.
ENTM 4960 Special Problems in Entomology, Fall 2016.
ENT 495 Special Topics in Entomology: Applications of Molecular Ecology, *Guest Lecture*, Molecular Ecology in Agriculture: Studying the Impacts of Transgenic Crops, NCSU, November 5, 2012.
ENT 801 Special Topics in Entomology: Teaching Entomology, *Guest Lecture* Insect Vectors of Plant Viruses, NCSU, October 26, 2011.

GRADUATE STUDENT COMMITTEE SERVICE

Completed: 26 MSc, 11 PhD (Committee: 27; *Chair: 5 MSc, 2 PhD; [†]Co-chair: 2 MSc, 1 PhD)

1. *Adrian Pekarcik, 2014-2016, MSc. Entomology, Auburn University
2. Mayrolin Garcia Morales, 2014-2016, MSc. Entomology, Auburn University
3. Jing Li, 2014-2016 MSc. Plant Breeding, Auburn University
4. Blessing Ademokoya, 2014-2016, MSc. Entomology, Auburn University
5. Xiaodi Wang, 2014-2016, MSc. Entomology, Auburn University
6. Nicholas Christodoulides, 2015-2017, MSc. Entomology, Auburn University
7. Meredith Hall, 2016-2017, MSc. Plant Pathology, Auburn University
8. Tolulope Morawo, 2015-2017, Ph.D. Entomology, Auburn University
9. Savannah Duke, 2015-2017, MSc. Entomology, Auburn University
10. *Shuang Gong, 2016-2018, MSc. Entomology, Auburn University
11. Cody Kerns, 2016-2018, MSc. Entomology, Clemson University
12. Yifan Wang, 2016-2018, MSc. Entomology, Auburn University

13. Jessica Brown, 2014-2018, Ph.D. Plant Pathology, North Carolina State University
14. Fredericka Hamilton, 2016-2019, Ph.D. Entomology, Auburn University
15. Chloe Kaczvinsky, 2017-2019, MSc. Entomology, Auburn University
16. Gamze Mertogulu, 2018-2019, MSc. Entomology, Auburn University
17. Selina Bruckner, 2017-2020, Ph.D., Entomology, Auburn University
18. *Autumn McLaughlin, 2018-2020, MSc. Entomology, Auburn University
19. *John Mahas, 2018-2020, MSc. Entomology, Auburn University
20. [†]Joey Akins, 2018-2020, MSc. Agronomy, Crop and Soil Sciences, Auburn University
21. [†]Bri Heilsnis, 2018-2020, MSc. Plant Breeding, Agronomy Crop and Soil Sciences, Auburn University
22. Daniel Oluwatomi Ibyemi, 2018-2020, MSc. Entomology, Auburn University
23. Gwendolyn Bird, 2017-2021, PhD Entomology, Auburn University
24. Michael Alec Mayfield, 2019-2021, MSc. Entomology, Auburn University
25. Noah Bevers, 2020-2022, MSc Entomology, Auburn University
26. Sam Frazier, 2020-2023, MSc. Agronomy, Crop and Soil Sciences, Auburn University
27. *Sanower Warsi, 2018-2023, PhD Entomology, Auburn University
28. *Kelly Schlarbaum, 2021-2023, MSc. Entomology, Auburn University
29. Wilson Clark, 2021-2023, MSc Entomology, Auburn University
30. Alan Jeon, 2021-2023, MSc. Entomology, Auburn University
31. Michael Catto, 2018-2024, PhD Entomology, University of Georgia
32. Dan Aurell, 2020-2024, MSc. Entomology, Auburn University
33. *John Mahas, 2020-2024, PhD. Entomology, Auburn University
34. Sudeep Pandey, 2020-2024, PhD Entomology, University of Georgia
35. Annu Kumari, 2021-2024, PhD Weed Science, Auburn University
36. [†]Thomas Douglas, 2021-2024, PhD Entomology, Auburn University
37. Elise Woodruff, 2022-2024, MSc Entomology, Auburn University
38. [†]Thiago Rutz da Silva, 2022-2024, PhD Horticulture, Auburn University
39. Rogan Tokach, 2023-2025, PhD Entomology, Auburn University
40. Theresa Wolff, 2022-2025 present, MSc Entomology, Auburn University
41. Aasma Sharma, 2023-2025, PhD Entomology, Auburn University

*Current: 1 MSc, 9 PhD candidates (Committee 9; *Chair 1 PhD; [†]Co-chair 1 PhD.)*

1. Xin Wang, 2020-present, PhD Entomology, Auburn University
2. Aerianna Littler, 2021-present, PhD Entomology, Auburn University
3. [†]Caitlyn Lawton, 2021-present, MSc Entomology, Auburn University
4. Megan Woodall, 2021-present, MSc Entomology, Auburn University
5. [†]Aodele Amodu, 2024-present, PhD, Crop Breeding, Agronomy, Crop, Soil and Environmental Sciences, Auburn University.
6. Dylan Taylor, 2024-present, MSc. Entomology, Auburn University.

POST-DOCTORAL ADVISING/MENTORING ([†]Co-advisor)

César Escalante Guardado, 2021-2024. Viral genetic diversity of U.S. cotton leafroll dwarf virus isolates, and virus-plant interactions.

Benard Mware, 2019-2021. Evolution of whitefly transmitted Begomoviruses: *East-African cassava mosaic virus* and *African cassava mosaic virus*.

[†]William Sharpee, 2016-2021. Evolution of whitefly transmitted Begomoviruses: *East-African cassava mosaic virus* and *African cassava mosaic virus*.

Gabriela Chavez-Calvillo, 2016-2018. Evolution of whitefly transmitted Begomoviruses: *East-African cassava mosaic virus* and *African cassava mosaic virus*.

Anitha Chitturi, 2016-2018. Thrips species composition in Alabama soybean fields in relation to Soybean vein necrosis disease and incidence.

UNDERGRADUATE RESEARCH

1. Dylan Bartlett, summer 2015.
2. Ian Ingram, 2015-2017.
3. Brittany Carter, 2015.
4. Wade Turner, 2015-2017.
5. Emily Sledge, 2015-2017.
6. Bruno Sousa Vieira, Brazilian Science Without Borders Program, summer 2015.
7. Rafael De Almeida Leite, Brazilian Science Without Borders Program, summer 2015.
8. Sara Rains, 2016.
9. Annette Bartel, 2016-2017.
10. Emily Sledge, 2015-2017.
11. Robin Lloyd, summer 2017.
12. Luke Meyers, summer 2017.
13. Nick Kellenberger, summer 2017.
14. Daniel Thomas, 2017-2018.
15. Rachael Williams, summer 2017.
16. Mayowa Adesokan, 2016-2017.
17. Julia Lawrence, 2017-2018.
18. Alexander House, 2016-2018.
19. Andrew Dendy, 2018-2019.
20. Jih Li, 2018.
21. William Van Deventer, summer 2018.
22. Harrison Fahy, 2018-2019.
23. Jacob Lee, 2018-2019.
24. Miles McCollum, 2018-2020.
25. Mac Sternberg, 2019-2020.
26. Jack Irwin, Summer 2019.
27. Ashley Turner, 2019.
28. Marc Henderson, summer 2019.
29. Tyler Fahy, 2019.
30. Elizabeth Farrar, summer 2019.
31. Sam Anderson, 2019-2021.
32. Johnathan Hollingsworth, 2020-2022.
33. Alec Vasha, summer 2020.
34. Ansley Wellham, 2020-2021.
35. Stewart Brown, summer 2020.
36. Matthew Paek, Summer 2020
37. David Hill, Summer 2020.

- 38. Victoria Washington, summer 2021.
- 39. Laura Lewis, summer 2021.
- 40. Alesondra Adams, summer 2021.
- 41. Taylor Wilson, 2021.
- 42. Allison Sharp, summer 2021.
- 43. Jana Garcia, summer 2021.
- 44. Carter Giles, 2021-2022.
- 45. Alle Anne Dubberly, 2021-2022.
- 46. Nick Mueller, 2021-2022.
- 47. Grace Yarborough, 2021-2022.
- 48. Jada King, 2021-2023.
- 49. Lucinda McEachin, 2022.
- 50. Foster McCurry, 2022-2023.
- 51. Che Echols, 2022.
- 52. Sara Christjohn, Summer 2022.
- 53. MD Mursalin Khan, Summer 2022.
- 54. Jose Noveron-Nunez, Summer 2022.
- 55. Sylvester Menanyih, 2022-2023.
- 56. Owen Sobalvarro, 2023.
- 57. Alicja Siek, 2023-2025.
- 58. Dawson Park, 2025-current.
- 59. Baylee McGuirt, 2025-current
- 60. Kendall Sheehan, Spring 2025

GRANTS AND CONTRACTS

Funded: Federal Grant Programs:

Rodrigues Duffeck, M., A. Ferris, I. Valmoribida, R.B. Onofre, J. LaForest. 2025. A New IPM Working Group for the Monitoring and Development of Management Tools for the Corn Leafhopper and Corn Stunt Disease Throughout the U.S. Great Plains and Corn Belt. Southern IPM Center.

One of 42 collaborators to participate in a national monitoring program for corn leafhoppers and diseases they transmit in corn.

Koebernick, J. (PI), **A.L Jacobson (co-PI)**, K. Conner, A. Hagan, K. Bowen. 2020-2024. Investigating Epidemiology and Management of Cotton leafroll dwarf virus. US Farm Bill Agricultural Appropriations. Plant Protection Act - Section 7721, Plant Pest and Disease Management and Disaster Prevention Program. \$2.1M/year to AU.

**ALJ conceptualized and conducted work on the insect vector, co-manage research priorities, and co-wrote the grant.*

Strayer-Scherer, A. (PI), S. Brown, K. Conner, K. Lawrence **A. Jacobson**, J. Koebernick. 2021. Cotton leafroll dwarf virus sentinel plot working group. Southern IPM Center – IPM Enhancement Grant Program. \$39,917 total, \$0 To ALJ.

ALJ assisted with writing the grant.

Brown, S. (PI), A. Hagan, K. Conner, K. Lawrence **A. Jacobson**, J. Koebernick, A. Strayer-Scherer. 2020. Cotton leafroll dwarf virus sentinel plot working group. Southern IPM Center – IPM Enhancement Grant Program. \$39,917 total, \$0 to ALJ.

ALJ assisted with writing the grant.

Jacobson, A.L. (PI), K.L. Bowen, K. Conner, A. Hagan, J. Koebernick, A. Barman, S. Bag, R. Kemerait, P. Roberts, M.D. Toews, J. Whitaker. 2019. Epidemiology and management of *Cotton leafroll dwarf virus*, an emerging insect-transmitted virus in the southern U.S. USDA-CPHM. \$323,662, plus matching funds from Cotton Inc. (listed separately, below)

*ALJ conceptualized work and wrote the grant. *AU & UGA collaborators designated as a USDA Center of Excellence for this award.*

Koebernick, J., **A.L. Jacobson**, A. Hagan, K. Conner, K. Bowen. 2019. Epidemiology and Management of Cotton Leaf Roll Dwarf Virus (CLRDV). Foundation for Food and Agricultural Research – Rapid Outcomes for Agricultural Research (FFAR-ROAR). \$150,000 total, \$32,298 to ALJ.

**ALJ conceptualized work on insect vector and co-wrote the grant.*

K. Conner, **A. Jacobson**. 2018-2019. First detection of Cotton leafroll dwarf virus (CLRDV) in the US. Southern IPM Center, Critical and Emerging Issues. \$10,000 total, \$0 to ALJ.

ALJ assisted with writing the grant.

Gamble, A., K. Balkcom, A. Majumdar, and **A. Jacobson**. 2018-2020. Cover Crops to Improve Soil Health. NRCS, \$200,000 total, \$50,875.00 to ALJ.

ALJ assisted with writing the grant.

Abney, M.R. (PI), G.C. Rains, W.S. Monfort, and **A.L. Jacobson** (co-PI), A. Majumdar. 2016-2020. Development of risk assessment and monitoring tools for burrower bug in Southeastern peanut production systems. USDA CPPM, \$327,652 total, \$60,000 to ALJ.

ALJ assisted with writing the grant.

Elliott N. (PI), X. Ni (co-PI), M. Brewer, D. Buntin, K. Giles, B. McCornack, T. Royer, K.R. Harris-Shultz, M. D. Toews, S. Armstrong, Y. Huang, J. Westbrook, J.P. Michaud, K. Giles, T. Royer, J. Lofton, J. Vitale, R. Bowling, A. Knutson, A. Szczepaniec, J. Knoll, S. Punnuri, G. Nuessly, **A.L. Jacobson**, F. Reay-Jones, and D. Reisig. 2016-2021. Areawide pest management of the invasive sugarcane aphid in grain sorghum. USDA-ARS-CRIS \$2,922,000 total, \$90,000 to ALJ.

ALJ assisted with defining annual research objectives and editing the grant.

Hanley-Bowdoin (PI), L.K., G.G. Kennedy (co-PI), S. Duffy (co-PI), J.T. Ascencio-Ibañez (senior scientist), I. Carbone (senior scientist), T. Goodale (senior scientist), L. Jackai, **A.L. Jacobson** (senior scientist), A. Djikeng, W. Ekaya, J. Harvey, J. Ndunguru, and P. Sseruwagi. 2015-2023. U.S.-East Africa Research and Education Partnership: Cassava mosaic disease – A paradigm for evolution of insect-transmitted plant virus pathosystem. NSF PIRE, \$5,000,000 total, \$506,435 to ALJ.

**ALJ conceptualized the serial transmission insect vector research objectives and co-wrote those sections of the grant.*

Kennedy, G.G. (PI), and **A.L. Jacobson** (co-PI). 2015-2017. Improving the thrips management toolbox for cotton: adding landscape-scale risk prediction to inform management decisions and reduce insecticide use. USDA NIFA CPPM, \$299,970 total, \$127,140 ALJ.

**ALJ assisted with conceptualization of project and editing the grant.*

Jacobson, A.L. (PI) 2012-2014. Seasonal stability of genetic structure of *Thrips tabaci* in relation to distance, reproductive biology, and insecticide resistance traits. USDA-NIFA Postdoctoral Fellowship. \$130,000 to ALJ.

ALJ conceptualized work and wrote the grant.

Funded: National & State Commodity Boards

Sikora, E., K. Conner, **A.L. Jacobson**, P.G. Creomonez, S. Graham, A. Hagan. 2025. Determine Distribution of Corn Stunt disease and its insect vector, the Corn leafhopper, in Alabama. Alabama Wheat and Feed Grain Board. \$11,500.

A.L. Jacobson (PI for AL), S. Graham, Greene, J.K., A. Huseth, F.P.F. Reay-Jones, S. Paula-Moraes, D. Reisig, P. Roberts, R. Smith, S. Taylor, M. Toews. 2019-2025. Collaborative efforts to manage insect pests of cotton in the Southeast. Cotton Incorporated, \$139,500 to ALJ.

These are annual projects conducted in collaboration with the Southeastern Entomology Row Crops Working Group (Va Tech, NCSU, Clemson, UGA, UFL and AU). ALJ assisted with defining annual research objectives and writing the grant.

Jacobson, A.L. (PI). 2019-22. Epidemiology and management of Cotton leafroll dwarf virus. Cotton Incorporated, \$139,332 to ALJ.

ALJ conceptualized work and wrote the grant. These are matching funds for the USDA-CPPM grant listed above.

Koebernick, J., A.K. Hagan, E. Sikora, **A. Jacobson** (co-PI), R. Smith, K. Conner and K.L. Bowen. 2019-2023. Onset and development of disease caused by a Cotton Leafroll Dwarf Virus (CLRDV)-related virus in Alabama Cotton. Alabama Cotton Commission. \$80,000 to AU, \$0 to ALJ.

ALJ assisted with objectives and editing of the grant.

Jacobson, A.L. (PI for AL), J.K. Greene, A. Huseth, F.P.F. Reay-Jones, S. Paula-Moraes, D. Reisig, P. Roberts, R. Smith, S. Taylor, M. Toews. 2015-19. Southeast Regional Cotton Thrips Working Group Proposal. Cotton Incorporated, \$91,500 to ALJ.

These are annual projects conducted in collaboration with the Southeastern Entomology Row Crops Working Group (Va Tech, NCSU, Clemson, UGA, UFL and AU). ALJ assisted with defining annual research objectives and writing the grant.

Jacobson, A.L. (PI). 2016-2018. Insect Management in Peanut. Alabama Peanut Producers Association. \$8,000 to ALJ.

ALJ conceptualized work and wrote the grant.

Jacobson, A.L. (PI). 2016. Sugarcane aphid research – best management practices. United Sorghum Checkoff Program. \$18,000 to ALJ.

This was part of a regional collaboration of entomologists in sorghum producing states to investigate management practices for the recently detected sorghum aphid. ALJ assisted with defining annual research objectives and writing the grant.

Abney, M.R., T.B. Brenneman, **A.L. Jacobson** (co-PI). 2015-2016. Biology, ecology and management of insect pests of peanut in the Southeast U.S. National Peanut Board Southeastern Peanut Research Initiative. \$110,000 total, \$23,100 to ALJ.

ALJ assisted with development of research objectives, scope of work, and assisted with writing the grant.

Jacobson, A.L. (PI) 2015. Evaluating insecticides and resistant varieties for management of the sugarcane aphid on sorghum. 2015. United Sorghum Checkoff Program. \$15,000 to ALJ.

This was part of a regional collaboration of entomologists in sorghum producing states to investigate management practices for the recently detected sorghum aphid. ALJ assisted with defining annual research objectives and writing the grant.

Jacobson A.L. (PI), E. Sikora, K. Conner, T. Reed. 2015-2017. Monitoring thrips vectors of *Soybean vein necrosis* virus in Alabama. AL Soybean Board, \$45,000 to ALJ.

ALJ assisted with conceptualization of work and wrote the grant.

Jacobson A.L. (PI), K. Conner, E. Sikora, M. Delaney, C. Ray. 2015-2017. *Beauveria bassiana* as a control agent for kudzu bug in soybean. AL Soybean Board, \$27,400 to ALJ.

Sikora, E., **A.L. Jacobson** (co-PI), K. Conner, J. Kemble, D. Delaney, J. Murphey. 2015-2017. Determining if Soybean vein necrosis virus causes yield loss in soybean. AL Soybean Board, \$31,500 to ALJ.

ALJ conceptualized work and wrote the grant.

Smith, R.H., T. Reed, **A.L. Jacobson** (co-PI). 2015. Managing seedling thrips in the era of resistance to at-plant seed treatments. Alabama Cotton Commission, \$12,000 total, \$0 to ALJ.

ALJ assisted with defining project objectives.

Jacobson, A.L. (PI), K. Flanders, K. Wilkins. 2015-2017. Management of sugarcane aphid on sorghum in Alabama. Alabama Wheat and Feed Grain Board, \$15,000 to ALJ.

ALJ assisted with conceptualization of work and wrote the grant.

PUBLICATIONS

Books and Book Chapters

National Academies of Sciences, Engineering, and Medicine. 2024. Advancing Vineyard Health: Insights and Innovations for Combating Grapevine Red Blotch and Leafroll Diseases. Washington, DC: The National Academies Press. <https://doi.org/10.17226/27472>

- *Co-wrote each chapter and led writing of one chapter.*

Description of contributions:

- *Student, postdoc, employee and/or authorship with Jacobson as PI and corresponding author.

- [†]Co-advised student/postdoc or [§]student committee; Jacobson provided intellectual input, laboratory resources, supervision of experiments and/or analyses and assistance with manuscript preparation.
- [']Indicates regional collaboration in which the Jacobson Lab conducted research in Alabama, and contributed analysis, data, intellectual input, and finalizing a manuscript draft; funded by national commodity boards.
- All others indicate collaborative extramurally funded projects not led by Jacobson; Jacobson provided data and/or intellectual input, and contributed to writing the final manuscript.
- Citation numbers from Google Scholar as of May 15, 2025

Completed with International Collaborators while at AU:

1. Dye, A.E., B. Muga, J. Mwangi, J.S. Hoyer, V. Ly, Y. Rosado, [†]W. Sharpee, ^{*}B. Mware, M. Wambugu, P. Labadie, S. Duffy, **A.L. Jacobson**, G. Kennedy, E. Ateka, L. Hanley-Bowdoin, I. Carbone, J.T. Ascencio-Ibáñez. 2023. Cassava begomovirus species diversity changes during plant vegetative cycles. *Frontiers in Microbiology*, 14:1163566. doi: 10.3389/fmicb.2023.1163566 Cited by 2.
2. Kennedy, G.G., [†]W. Sharpee, **A.L. Jacobson**, M. Wambugu, ^{*}B. Mware, Linda Hanley-Bowdoin. 2023 Genome Segment Ratio Changes During Whitefly Transmission of Two Bipartite Cassava Mosaic Begomoviruses. *Scientific Reports*, 13, 10059. <https://doi.org/10.1038/s41598-023-37278-8> Cited by 6
3. *Mahas, J.W., F.B. Hamilton, P.M. Roberts, C.H. Ray, G.L. Miller, M. Sharman, K. Conner, S. Bag, E.K. Blythe, M. D. Toews, **A.L. Jacobson**. 2022. Investigating the effects of planting date and *Aphis gossypii* management on reducing the final incidence of cotton leafroll dwarf virus. *Crop Protection*. 158: 106005. Cited by 22.
4. Aimone, C.D., E. Lavington, J.S. Hoyer, D. Deppong, L. Mickelson-Young, **A. Jacobson**, G.G. Kennedy, L. Hanley-Bowdoin, S. Duffy. 2021. Population diversity of cassava mosaic begomoviruses increases over the course of serial vegetative propagation. *Journal of General Virology*. doi: 10.1099/jgv.0.001622. Cited by 25.
5. Gawande, S.J., S. Anandhan, A.A. Ingle, P.B. Royalwar, K.S. Khandagale, T.B. Gawai, **A. Jacobson**, R. Asokan and Major Singh. 2019. Microbiome profiling of the onion thrips, *Thrips tabaci* Lindeman (Thysanoptera: Thripidae). *PLoS One*. 14(9): e0223281. Cited by 20
6. **Jacobson, A.L.**, S. Duffy, and P. Sseruwagi. 2018. Whitefly-transmitted viruses threatening cassava production in Africa. *Current Opinion in Virology*. 33: 167-176. Cited by 53
7. Nibouche, S., L. Costet, J.R. Holt, **A. Jacobson**, ^{*}A. Pekarcik, J. Sadeyen, J.S. Armstrong, G.C. Peterson, N. McLaren, and R.F. Medina. 2018. Invasion of sorghum in the Americas by a new sugarcane aphid (*Melanaphis sacchari*) superclone. *PLoS One*. doi.org/10.1371/journal.pone.0196124 Cited by 123
8. Gawande, S.J., S. Anandhan, A.A. Ingle, **A.L. Jacobson**, and R. Asokan. 2017. Heteroplasmy due to coexistence of mtCOI haplotypes from different lineages of the *Thrips tabaci* cryptic species group. *Bulletin of Entomological Research*. 107(4):534-542. Cited by 16

Completed while employed at AU:

9. *Mahas, J.W., P.M. Roberts, K. Conner, S. Graham, A.S. Huseth, T.D. Steury, J.B. Mahas, S. Bag, K. Bowen, **A.L. Jacobson**. 2026. Cotton-dominated landscapes, vector

abundance, and temperature influence cotton leafroll dwarf virus incidence in cotton. *Phytopathology. Accepted pending revisions.*

10. Bryant, T., J. Greene, F. Reay-Jones, P. Roberts, S. Taylor, S. Malone, S. Graham, A.L. Jacobson, D. Reisig. 2026. Simulated early season terminal injury from tarnished plant bugs in Southeastern cotton. *Journal of Economic Entomology. Accepted pending revisions.*

11. Shehata, A., H. McInnes, A. Jacobson, K. Conner, A. Whitfield, P. Cremonez, K. Martin. 2026. First Report of the Resistance Breaking (RB) Strains of Tomato Spotted Wilt Virus (TSWV) Infecting Tomatoes with the Sw-5b Resistance Gene in Alabama. *Plant Disease Accepted pending revisions.*

12. Mahas, J.B., A.P. Abbate, J.W. Mahas, C. Ray, A.L. Jacobson. 2026. Bee (Hymenoptera) Bycatch Assemblages Collected in Bowl Traps at Interfaces of Cotton Agroecosystems in Alabama. *Environmental Entomology. Accepted pending revisions.*

7. Ahmed, M.Z., N. Yadav, S. Rustgi, G. Saripalli, I.L. Esquivel, T.B. Bryant, S. Graham, **A.L. Jacobson**, T.R. Bilbo, J.K. Greene, F.F.P. Reay-Jones. 2026. Global phylogeography of *Amrasca biguttula* (Hemiptera: Cicadellidae) across eight countries reveals a single-haplotype incursion into the United States beyond its putative native range. *Journal of Applied Entomology. In press.*

8. Pandey, S., M. Catto, P. Roberts, S. Bag, **A.L. Jacobson**, R. Srinivasan. 2026. Gene expression patterns following aphid mediated polerovirus transmission highlight differences and similarities in vector-host and host-virus interactions. *Phytopathology.* <https://doi.org/10.1094/PHYTO-08-25-0283-R>

9. *Schlarbaum, K., K. Conner, P.M. Roberts, M.D. Toews, **A.L. Jacobson**. 2026. Investigating the interaction of plant age and timing of cotton leafroll dwarf virus infection on yield loss. *Journal of Cotton Science. In press.*

10. Shehata, A.H.A., C. Cooke, W. Clark, M.A. Mayfield, L. Kaur, A. Rios, K.B. Burch, H. Jordan, **A. Jacobson**, S.H. Graham, A. Strayer-Scherer, K.M. Martin. 2025. Unmasking Tomato Spotted Wilt Virus in Peanuts: From Nucleocapsid Protein Sequence and Localization to Practical Management in Alabama. *Phytopathology.* <https://doi.org/10.1094/PHYTO-06-25-0204-R>

11. *Schlarbaum, K., G. Rossi, K. N. Conner, C. Escalante, K.S. Balkcom, K.S. Lawrence, KM. Martin, **A.L. Jacobson**. 2025. Effects of cotton leafroll dwarf virus infection in cotton grown in high heat conditions. *Phytofrontiers.* <https://doi.org/10.1094/PHYTOFR-06-25-0060-R>

12. Esquivel, I.L., T. Bryant, S. Malone, A.L. Jacobson, S.H. Graham, P. Gimenez-Cremonez, S.V. Paula-Moreas, D. Reisig, J. Greene, A. Huseth, P. Roberts, F.P.F. Reay-Jones, S. Taylor. 2025. First Report of Two-Spot Cotton Leafhopper (*Amrasca biguttula* Ishida) (Hemiptera: Cicadellidae) on Commercial Cotton in the Southeastern United States. *Insects.* 16, 966. <https://doi.org/10.3390/insects16090966>

13. *Mahas, J. W., A. E. Wilson, T. D. Steury, **A.L. Jacobson**. 2025. Association of plant pathogen vectors and vector-borne plant pathogens with landscape composition: a meta-analysis. *Environmental Entomology.* <https://doi.org/10.1093/ee/nvaf120>

14. Douglas, T.J., K. Kesheimer, **A. Jacobson**, S. Brown, F.R. Musser, L.S. Catchot, S.H. Graham. 2025. Bioassay to Evaluate Resistance Levels in Tarnished Plant Bug (Hemiptera:

Miridae) Populations in Alabama to Common Cotton Insecticides. *Midsouth Entomologist*. 18: 36-46.

15. Clark, W.C., R.M. Livingston, A. Kumari, K. Hirsch, J. Koebernick, S.-H. Kang, A. Price, K.N. Conner, **A. Jacobson**, and K.M. Martin. 2025. Development and Analysis of Infectious and Fluorescent Clones of Cotton leafroll dwarf virus-AL. *Phytofrontiers*. <https://apsjournals.apsnet.org/doi/pdf/10.1094/PHYTOFR-11-24-0122-R>

16. *Mahas, J.B., C. Ray, F. Hamilton, G. Miller, **A.L. Jacobson**. 2025. Identification key for cotton-feeding aphids (Hemiptera: *Aphididae*) found in pan traps in the Southeast. *Florida Entomologist*. 108, 20240012. <https://doi.org/10.1515/flaent-2024-0012>

17. Zhao, C., N. Mueller, I. Owens, R. Bansal, **A. Jacobson**. 2025. Identification of Candidate Host-manipulating Effector Genes in *Aphis gossypii* (Hemiptera: Aphididae) Using a Combination of Transcriptome, Genome, and Differential Gene Expression Data. *Journal of Insect Science*. 25: 1-11. <https://doi.org/10.1093/jisesa/ieaf053>

18. *Mahas, J.B., *C. Ray, *F. Hamilton, G. Miller, **A.L. Jacobson**. 2025. Identification key for cotton-feeding aphids (Hemiptera: *Aphididae*) found in pan traps in the Southeast. *Florida Entomologist*. 108. doi:10.1515/flaent-2024-0012

19. *Mahas, J.B., *G. Rossi, *A. Chitturi, B. Chaves-Cordoba, S.H. Graham, **A.L. Jacobson**. 2025. The Effect of Neonicotinoids on Thrips Oviposition, Immatures and Cotton Injury. *Journal of Cotton Science*. 29:1-10.

20. ⁸Clark, W.C., R.M. Livingston, A. Kumari, K. Hirsch, J. Koebernick, S.-H. Kang, A. Price, K.N. Conner, **A. Jacobson**, and K.M. Martin. 2025. Construction and Analysis of Infectious and Fluorescent Clones of Cotton leafroll dwarf virus from Alabama. *Phytofrontiers*. <https://doi.org/10.1094/PHYTOFR-11-24-0122-R>

21. Zhao, C., *C. Escalante, **A.L. Jacobson**, K.S. Balkcom, K.N. Conner, K.M. Martin. 2025. Metatranscriptomic and metagenomic analyses of cotton aphids (*Aphis gossypii*) collected from a cotton field in Alabama, USA. *Frontiers in Insect Science*. 5:1461588. doi: 10.3389/finsc.2025.1461588

22. ⁸Pandey, S., P. Roberts, S. Bag, **A.L. Jacobson**, R. Srinivasan. 2025. A phloem-limited RNA phytovirus infection does not positively modulate vector preference and fitness in primary and alternate hosts. *Environmental Entomology*. 54:341-351. doi: 10.1093/ee/nvaf005. PMID: 39903452; PMCID: PMC12005951.

23. ⁸Kumari, A., A. Price, A. Gamble, S. Li, **A. Jacobson**. 2025. Effects of Cereal Rye Residue Biomass and Preemergence Herbicide on the Emergence of Troublesome Southeastern Weed Species. *Frontiers in Agronomy* 10.3389/fagro.2024.1502864 <https://www.frontiersin.org/articles/10.3389/fagro.2024.1502864>

24. ⁸Frazier, S., S.M. Brown, Q.D. Read, **A.L. Jacobson**, K. Conner, *C. Escalante, K.S. Balkcom. 2025. Cotton Stalk Management and Cover Crops Produce Minimal Effects on Cotton Leafroll Dwarf Virus. *Agronomy Journal*. 117: e70002. <https://doi.org/10.1002/agj2.70002>

25. *Rossi, G., *J.B. Mahas, *A. Chitturi, S.H. Graham, A.L. Jacobson. 2025. The Influence of Crop and Leaf Position on Thrips (Thysanoptera: Thripidae) Oviposition in Cotton, Soybean, and Peanut Seedlings. *Journal of Economic Entomology*, 2024; toae294, <https://doi.org/10.1093/jee/toae294>

26. †Douglas, T., **A.L. Jacobson**, S. Brown, K. Kesheimer, S.H. Graham. 2025. An Evaluation of Novaluron on Southern Green Stink Bug (Hemiptera: Pentatomidae) Nymphs and Sublethal Effects on Fecundity in Adults. *Environmental Entomology*, 2024; nvae122, <https://doi.org/10.1093/ee/nvae122>

27. †Rutz, T., J.S. Pizzo, **A.L. Jacobson**, A. Majumdar, E.J. Sikora, T. Coolong, A.M. Simmons, K. Y. Kartowikromo, A.M. Hamid, A.S. Ojeda, A.L. Biscaia da Silva. 2024. Physical and chemical characterization of wild tomato *Solanum habrochaites* accessions for resistance to the sweetpotato whitefly. *Scientia Horticulturae*. 338: doi:113687. <https://doi.org/10.1016/j.scienta.2024.113687> Cited once

28. ⁸Kumari, A., A. Price, A. Gamble, S. Li, **A. Jacobson**. 2024. Synergistic Effect of Cover Crop Residue and Herbicides for Effective Weed Management in Southern U.S. Cotton Production Systems. *Weed Technol.* 38(e73), 1–7. doi: 10.1017/wet.2024.49 Cited once

29. ⁸Kumari, A., A. Price, A. Gamble, S. Li, **A. Jacobson**. 2024. Integrating Cover Crops and Herbicides for Weed Control in Soybean. *Weed Technology*. 38:e38. doi:10.1017/wet.2024.24 Cited by 4

30. Koebernick, J.C., A.K. Hagan, M. Zaccaron, *C. Escalante, **A.L. Jacobson**, K.L. Bowen, A. Strayer-Scherer, †B. Heilsnis, S. Brown, E.J. Sikora, J.K. Greene, H. Wang, A. Huseth, M. Mulvaney, I. Small, B. Kemerait, H. Kelly, T.W. Allen, P.P. Price, D. Kerns, T. Faske, S. Taylor, K. Conner. 2024. Monitoring the distribution, incidence, and symptom expression associated with cotton leafroll dwarf virus in the southern United States using a sentinel plot system. *Phytofrontiers*. <https://doi.org/10.1094/PHYTOFR-02-24-0008-R> Cited once

31. *Escalante, C., A. Sanz-Saez, **A. Jacobson**, K. Otulak-Kozieł, E. Kozieł, K.S. Balkcom, C. Zhao, K. Conner. 2024. Plant virus transmission during seed development and implications to plant defense systems. *Frontiers in Plant Science*, 15: 1385456. <https://doi.org/10.3389/fpls.2024.1385456> Cited by 6

32. ⁸Pandey, S., M. Catto, P. Roberts, S. Bag, **A.L. Jacobson**, R. Srinivasan. 2024. Aphid gene expression following polerovirus acquisition is host species dependent. *Frontiers in Plant Science*, 15. <https://doi.org/10.3389/fpls.2024.1341781> Cited once

33. *Pekarcik, A.J., *S. Menanyih, and **A.L. Jacobson**. 2024. Foliar- and seed-applied insecticides for management of *Melanaphis sorghi* (Hemiptera: Aphididae) in Alabama. *Journal of Entomological Science*. 59, DOI: 10.18474/JES23-38

34. *Warsi, S, A.M. Chicas-Mosier, R.R. Balusu, **A.L. Jacobson**, H.Y. Fadamiro. 2023. Effects of Food Source Availability, Host Egg:Parasitoid Ratios, and Host Exposure Times on the Developmental Biology of *Megacoptera cribraria* Egg Parasitoids. *Insects*. 14:1-20 <https://doi.org/10.3390/insects14090755> Cited by 2

35. *Mahas, J.W., *J.B. Mahas, C. Ray, T.D. Steury, P. Roberts, M. Toews, G.G. Kennedy, S. Malone, S. Taylor, S.D. Stewart, J. Greene, J. Gore, W. Crow, D. Kerns, S. Paula-Moraes, and **A.L. Jacobson**. 2023. The spatiotemporal distribution, abundance, and seasonal dynamics of

cotton infesting aphids in the southern U.S. *Insects*, 14, 639. <https://doi.org/10.3390/insects14070639> Cited by 5

36. *Mahas, J.B., C. Ray, K. Conner, and **A.L. Jacobson**. 2023. Seasonal dynamics of aphid flights and cotton leafroll dwarf virus spread in Alabama. *Insects*, 14, 604. <https://doi.org/10.3390/insects14070604> Cited by 7

37. [§]Catto, M., P.E. Labadie, **A.L. Jacobson**, G.G. Kennedy, R. Srinivasan, and B.G. Hunt. 2023. Pest status, molecular evolution, and epigenetic factors derived from genome assembly of *Frankliniella fusca*, a Thysanoptera phytopvirus vector. *BMC Genomics* 24, 343. <https://doi.org/10.1186/s12864-023-09375-5> Cited by 9

38. ^{*†}Heilsnis, B., *J.B. Mahas, K. Conner, S. Pandey, W. Clark, J. Koebernick, R. Srinivasan, K. Martin, and **A.L. Jacobson**. 2023. Characterizing the vector competence of *Aphis gossypii*, *Myzus persicae*, and *Aphis craccivora* (Hemiptera: Aphididae) to transmit cotton leafroll dwarf virus to cotton in the United States. *Journal of Economic Entomology*. Toad080. <https://doi.org/10.1093/jee/toad080> Cited by 13

39. *Warsi, S., A. Chicas-Mosier, R.R. Balusu, A.L. Jacobson, and H.Y. Fadamiro. 2023. Direct and indirect competitive interactions between *Ooencyrtus nezare* and *Paratelenomus saccharalis* parasitizing *Megaxoptera cribraria* egg patches. *Insects*. 14: 35. Cited once

40. *Mahas, J., T. Steury, A.S. Huseth, S.R. Rogers, and **A.L. Jacobson**. 2023. Imidacloprid resistant *Aphis gossypii* populations are more common in cotton dominated landscapes. *Pest Management Science*. 79:1040-1047. doi.org/10.1002/ps.7274 Cited by 8

41. *McLaughlin A., L. Hanley-Bowdoin, G.G. Kennedy, and **A.L. Jacobson**. 2022. Vector acquisition and co-inoculation of two plant viruses influences transmission, infection, and replication in new hosts. *Scientific Reports*. 12:20355. Cited by 21

42. 'Uyi, O., X. Ni, D. Buntin, **A. Jacobson**, F.P.F. Reay-Jones, S. Punnuri, and M.D. Toews. 2023. Management of *Melanaphis sorghi* (Hemiptera: Aphididae) in grain sorghum with early planting and in-furrow flupyradifurone application. *Crop Protection*. 164: 106148. Cited by 10

43. 'Uyi, O., F.P.F. Reay-Jones, X. Ni, D. Buntin, **A. Jacobson**, S. Punnuri, and M.D. Toews. 2022. Impact of planting date and insecticide application methods on *Melanaphis sorghi* (Hemiptera: Aphididae) infestation and forage type sorghum yield. *Insects*. 13(11), 1038; <https://doi.org/10.3390/insects13111038> Cited by 8

44. [§]Pandey, S., S. Bag, P. Roberts, K. Conner, K.S. Balkcom, A.J. Price, **A.L. Jacobson**, and R. Srinivasan. 2022. Prospective alternate hosts of an emerging polerovirus in cotton landscapes in the southeastern United States. *Viruses*. 14, 2249. <https://doi.org/10.3390/v14102249> Cited by 10

45. 'Uyi O., S. Lahiri, X. Ni, D. Buntin, **A. Jacobson**, F.P.F. Reay-Jones, S. Punnuri, A.S. Huseth, and M.D. Toews. 2022. Host plant resistance, foliar insecticide application and natural enemies play a role in the management of *Melanaphis sorghi* (Hemiptera: Aphididae) in grain sorghum. *Frontiers in Plant Science*. 13:1006225. doi: 10.3389/fpls.2022.1006225 Cited by 17

46. ^{*†}Heilsnis, B., *A. McLaughlin, K. Conner, J. Koebernick, and **A.L. Jacobson**. 2022. Vector Competency of *Aphis gossypii* and *Bemisia tabaci* to Transmit Cotton Leafroll Dwarf Virus. *Journal of Cotton Science*. 26: 1-8. Cited by 8

47. *McLaughlin A., [†]B. Heilsnis, J. Koebernick, K. Conner, and **A.L. Jacobson**. 2022. First Report of *Tomato yellow leaf curl virus* infecting Upland Cotton (*Gossypium hirsutum*) in Alabama, USA. *Plant Disease*. doi: 10.1094/PDIS-09-20-2041-PDN Cited once

48. 'Brewer, M.J., N.C. Elliot, I.L. Esquivel, **A.L. Jacobson**, A.M. Ferris, A. Szczepaniec, B.H. Elkins, *A.J. Pekarcik, H. Wang, T.E. Koralewski, K.L. Giles, C.N. Jessie, and W.E. Grant. 2022. Natural enemies, mediated by landscape and weather conditions, shape response of the sorghum agroecosystem of North America to the invasive aphid *Melanaphis sorghi*. *Frontiers in Insect Science*. Doi:10.3389/finsc.2022.830997. Cited by 26

49. 'Dorman, S.J., S.V. Taylor, S. Malone, P.M. Roberts, J.K. Greene, D.D. Reisig, R.H. Smith, **A.L. Jacobson**, F.P.F. Reay-Jones, S. Paula-Moraes, and A.S. Huseth. 2022. Sampling Optimization and Crop Interface Effects on *Lygus lineolaris* Populations in Southeastern USA Cotton. *Insects*.13:88. doi:10.0090/insects13010088 Cited by 7

50. [†]Heilsnis, B.J., J.C. Koebernick, **A.L., Jacobson**, and K. Conner. 2021. A Guide to Grafting for Cotton (*Gossypium Hirsutum* L.) Virus Transmission and the Successful Transmission of Cotton Leaf Roll Dwarf Virus. *Journal of Cotton Science*. 25: 222-228. Cited once

51. [§]Thompson, S.J., **A. Jacobson**, L. Severino da Silva, S.L. Dillard. 2021. Agronomic responses and sugarcane aphid pressure in warm-season annual forage mixtures. *Crop, Forage and Turfgrass Management*. 7: e20106. Cited once

52. *Pekarcik, A.J., **A.L. Jacobson**. 2021. Evaluating sugarcane aphid, *Melanaphis sacchari* (Hemiptera: Aphididae), population dynamics, feeding injury, and grain yield among commercial sorghum varieties in Alabama. *Journal of Economic Entomology*. 114: 757-768. Cited by 26

53. [†]Linak, J.A., **A.L. Jacobson**, T.L. Sit, and G.G. Kennedy. 2020. Relationships of virus titers and transmission rates among sympatric and allopatric virus isolates and thrips vectors support local adaptation. *Scientific Reports*. 10, 7649. Cited by 13

54. Wang, H., J. Greene, J.D. Muller, K. Conner and **A. Jacobson** 2020. First report of Cotton leafroll dwarf virus in cotton fields of South Carolina. *Plant Disease*. 104: 2532. Cited by 19

55. Thiessen, L., T.L. Schappe, M. Zaccaron, K. Conner, J. Koebernick, **A. Jacobson**, and A. Huseth. 2020. First report of cotton leafroll dwarf disease caused by Cotton leafroll dwarf virus affecting cotton in North Carolina. *Plant Disease*. 104: 3275-3276. Cited by 20

56. 'Harris-Shultz, K., S. Armstrong, **A. Jacobson**. 2019. Invasive cereal aphids of North America: Biotypes, genetic variation, management and lessons learned. *Trends in Entomology*. 15: 99-122. Cited by 15

57. 'Lahiri, S., X. Ni, G.D. Buntin, S. Punnuri, **A. Jacobson**, F. P.F. Reay-Jones, and M.D. Toews. 2019. Combining host plant resistance and foliar insecticide application to manage *Melanaphis sacchari* (Hemiptera: Aphididae) in grain sorghum. *International Journal of Pest Management*. doi: 10.1080/09670874.2019.1660830 Cited by 27

58. 'Haar, P.J., G.D. Buntin, **A. Jacobson**, *A. Pekarcik, M.O. Way, and A. Zarrabi. 2019. Evaluation of tactics for management of sugarcane aphid (Hemiptera: Aphididae) in grain sorghum. *Journal of Economic Entomology*. 112: 2719-2730. Cited by 38

59. Graham, S.H., F.M. Musser, **A.L. Jacobson**, *A. Chitturi, B. Catchot, and S.D. Stewart. 2019. Behavioral Responses of Thrips (Thysanoptera: Thripidae) and Tarnished Plant Bug (Hemiptera: Miridae) to a New Bt Toxin, Cry51Aa.834_16 in Cotton. *Journal of Economic Entomology*. toz058. Cited by 27

60. *Chitturi, A., K. Conner, E.J. Sikora, and **A.L. Jacobson**. 2018. Monitoring Seasonal Distribution of Thrips Vectors of *Soybean Vein Necrosis Virus* in Alabama Soybeans. *Journal of Economic Entomology*. doi: 10.1093/jee/toy237 Cited by 16

61. Li, J., Y. Tang, **A.L. Jacobson**, P.M. Dang, X. Li, M.L. Wang, A. Hagan, C. Chen. 2018. Population structure and association mapping to detect QTL controlling tomato spotted wilt virus resistance in cultivated peanuts. *The Crop Journal*. 6: 516-526. Cited by 11

62. 'Reisig, D.D., A.S. Huseth, J.S. Bachelor, M.A. Aghaee, L. Braswell, H.J. Burrack, K. Flanders, J.K. Greene, D.A. Herbert Jr., **A. Jacobson**, S.V. Paula-Moraes, P. Roberts, and S.V. Taylor. 2018. Long term empirical and observational evidence of practical *Helicoverpa zea* resistance to cotton with pyramided Bt toxins. *Journal of Economic Entomology*. doi: 10.1093/jee/toy106 Cited by 120

63. Sikora, E.J., K.N. Conner, **A.L. Jacobson**. 2018. Incidence of Soybean Vein Necrosis Virus in Alabama Soybean Fields. *Plant Health Progress*. 19: 76-81. Cited by 8

64. 'Wang, H., G.G. Kennedy, F.P.F. Reay-Jones, D.D. Reisig, M.D. Toews, P.M. Roberts, D.A. Herbert Jr., S.V. Taylor, **A.L. Jacobson**, and J.K. Greene. 2018. Molecular identification of thrips species infesting cotton in the southeastern USA. *Journal of Economic Entomology*. doi:10.1093/jee/toy036 Cited by 25

65. Huseth, A.S., T. Chappell, *A. Chitturi, **A.L. Jacobson**, and G.G. Kennedy. 2018. Insecticide resistance signals negative consequences of widespread neonicotinoid use on multiple field crops in the US cotton belt. *Environmental Science and Technology*. 52: 2314-2322. doi: 10.1021/acs.est.7b06015 Cited by 51

66. 'Knight, I.A., P.M. Roberts, W.A. Gardner, K.M. Oliver, **A. Jacobson**, and M.D. Toews. 2017. Effect of *Beauveria bassiana* (Hypocreales: Clavicipitaceae) and fungicide applications on *Megacopta cribraria* (Hemiptera: Plastaspidae) in soybean. *Crop, Forage and Turfgrass Management*. 3: doi:10.2134/cftm2017.05.0034. Cited by 2

67. 'Reay-Jones, F.P.F., J.K. Greene, A. Herbert, **A.L. Jacobson**, G.G. Kennedy, D.D. Reisig, and P.M. Roberts. 2017. Within-plant distribution and dynamics of thrips species (Thysanoptera: Thripidae) in Cotton. *Environmental Entomology*. 110: 1563-1575. Cited by 37

68. **Jacobson, A.L.**, B.A. Nault, E.L. Vargo, and G.G. Kennedy. 2016. Restricted gene flow among lineages of *Thrips tabaci* supports genetic divergence among cryptic species groups. *PLoS One*. 11(9): e0163882. doi:10.1371/journal.pone.0163882 Cited by 32

69. Huseth, A.S., T.M. Chappell, K. Langdon, S.C. Morsello, S. Martin, J.K. Greene, A. Herbert, **A.L. Jacobson**, F.P. Reay-Jones, T. Reed, D.D. Reisig, P.M. Roberts, R. Smith, and G.G. Kennedy. 2016. *Frankliniella fusca* resistance to neonicotinoid insecticides: an emerging challenge for cotton pest management in the eastern United States. *Pest Management Science* doi: 10.1002/ps.4232 Cited by 106

70. Rotenberg, D., **A.L. Jacobson**, D.J. Schneweis, and A.E. Whitfield. 2015. Thrips transmission of tospoviruses. *Current Opinion in Virology*. 15: 80-89. doi:10.1016/j.coviro.2015.08.003
Cited by 331

Prior to employment at AU:

71. **Jacobson, A.L.**, and G.G. Kennedy. 2014. Electrical penetration graph studies to investigate the effects of cyantraniliprole treatments on feeding behavior of *Myzus persicae* (Hemiptera: Aphididae) on *Capsicum annuum*. *Pest Management Science*. doi:10.1002/ps.3626 Cited by 55

72. **Jacobson, A.L.**, and G.G. Kennedy. 2013. Effect of cyantraniliprole on feeding behavior and virus transmission of *Frankliniella fusca* and *Frankliniella occidentalis* (Thysanoptera: Thripidae) on *Capsicum annuum*. *Crop Protection* 54: 251-258. Cited by 52

73. **Jacobson, A.L.**, and G.G. Kennedy. 2013. Specific insect-virus interactions are responsible for the vector competence of different *Thrips tabaci* isolines to transmit different Tomato spotted wilt virus isolates. *PLoS One*. 8(1): doi:10.1371/journal.pone.0054567 Cited by 61

74. **Jacobson, A.L.**, W. Booth, E.L. Vargo, and G.G. Kennedy. 2013. *Thrips tabaci* population genetic structure and polyploidy in relation to competency as a vector of *Tomato spotted wilt virus*. *PLoS One*. 8(1): doi:10.1371/journal.pone.0054484 Cited by 50

75. **Jacobson, A.L.**, J.S. Johnston, D. Rotenberg, A.E. Whitfield, W. Booth, E.L. Vargo, and G.G. Kennedy. 2013. Genome size and ploidy inference in four species of Thysanoptera, Thripidae and Aeolothripidae. *Insect Molecular Biology*. 22: 12-17. doi:10.1111/j.13652583.2012.01165.x Cited by 40

76. **Jacobson, A.L.**, and G.G. Kennedy. 2011. The effect of three rates of cyantraniliprole on the transmission of Tomato Spotted Wilt Virus by *Frankliniella fusca* and *Frankliniella occidentalis* (Thysanoptera: Thripidae) to *Capsicum annuum*. *Crop Protection*. 30: 512515. Cited by 61

77. **Jacobson, A.L.**, R.E. Foster, C. Krupke, W.D. Hutchison, B. Pittendrigh, and R. Weinzierl. 2009. Resistance to pyrethroid insecticides in *Helicoverpa zea* (Lepidoptera: Noctuidae) in Indiana and Illinois. *Journal of Economic Entomology*. 102: 2289-2295. Cited by 76

78. **Jacobson, A.L.**, D.C. Thompson, L. Murray, and S.F. Hansen. 2006. Establishing guidelines to improve identification of fire ants *Solenopsis xyloni* and *Solenopsis invicta*. *J. Econ. Entomol.* 99: 313-322.

Non-refereed Journals & Technical Reports

1. Brown, J.K., S. Avelar, D.W. Schrimsher, K. Conner, **A.L. Jacobson**, K. Lawrence. January 2019. Discovery of Cotton Leaf Roll Dwarf Virus, Causal Agent of Atypical Cotton Blue Disease in the Southeastern US. *Proceedings of the Beltwide Cotton Conferences*. New Orleans, LA.
2. **Jacobson, A.L.** January 2019. Biology, Ecology and Management of the Cotton Aphid in the Southeastern US and Status as a Vector of Cotton Leaf Roll Dwarf Virus. *Proceedings of the Beltwide Cotton Conferences*. New Orleans, LA.

3. Sikora, E.J., A. Hagan, K. Lawrence, J. Koebernick, **A. Jacobson**, and K. Conner. May 2019. Emerging Diseases of Soybean and Cotton in the Southeastern United States. Proceedings of the 3rd International Seminar on Animal and Plant Health, Cuba.
4. **Jacobson, A.L.**, E.L. Vargo, G.G. Kennedy, and B.A. Nault. 2014. Onion thrips population genetics and implications for management. *Onion World Magazine*.
5. J.L. Houle, **A.L. Jacobson**, K.L. Oten, D.E. Silcox, D. Bednar, and S. Lahiri. 2012. Pro position: Traditional breeding programs for host plant resistance to insects are more productive and effective than transgenic programs. *In: ESA Student Debates 2011: Identify, Clarify, Speak Out about the Land-Grant mission, organic agriculture, and host plant resistance programs.* American Entomologist. 59: 214-225.
6. **Jacobson, A.L.**, and G.G. Kennedy. 2012. Efficacy of early season CyazypyrTM foliar application programs for the reduction of thrips and *Tomato spotted wilt virus* transmission in fresh market tomato. *Arthropod Management Tests*. E70.
7. **Jacobson, A.L.**, and G.G. Kennedy. 2012. Efficacy of drench applications of Scorpion and Venom to control aphids in late season cabbage. *Arthropod Management Tests*. E13.
8. **Jacobson, A.L.**, and G.G. Kennedy. 2012. Residual suppression of tomato fruitworm damage to fresh market tomato by early season applications of CyazypyrTM. *Arthropod Management Tests*. E71.
9. C. Mecey-Smith, **A.L Jacobson**, T. Miller. 1998. A micropropagation technique for *Prosopis chilensis*. *Southwest Horticulture*. 15: 22-23, 24-28.

PROFESSIONAL PRESENTATIONS

Professional Meetings: (*my research program, †co-advised student)

†Amodou, A., **A.L. Jacobson**, J. Koebernick. 2026. Assessing and characterizing resistance to cotton leafroll dwarf virus (CLRDV) and *Aphis gossypii* in cotton genotypes. Beltwide Cotton Conferences. San Antonio, TX. *Oral Presentation*.

*Park, D., G. Rossi, S.H. Graham, **A.L. Jacobson**. 2026. Emergence and Spread of the Two-Spot Cotton Leafhopper in Alabama in 2025. The Beltwide Cotton Conferences. San Antonio, TX. *Poster Presentation*.

Kennedy, G.G., A. Dye, A. Jacobson, L. Hanley-Bowdoin. 2025. A systemic coinfection involving a monopartite begomovirus and a bipartite begomovirus DNA-A segment is maintained over multiple cycles of whitefly transmission. International Symposium of Plant Virus Epidemiology. Sao Paulo, Brazil. *Oral presentation*.

Clark, W.C., R.M. Livingston, A. Kumari, K. Hirsch, J. Koebernick, S.-H. Kang, A. Price, K.N. Conner, **A. Jacobson**, and K.M. Martin. 2025. Construction and Analysis of Infectious and Fluorescent Clones of Cotton leafroll dwarf virus from Alabama. Annual Meeting of the American Society of Virology. Cincinnati, Ohio. *10-minute oral presentation*.

Jacobson, A.L. 2025. The current status of cotton leafroll dwarf virus in the United States. International Symposium of Plant Virus Epidemiology. Sao Paulo, Brazil. *Poster presentation*.

*Rossi, G., K.N. Conner, A. Huseth, J. Greene, T. Allen, S. Sabanadzovic, D. Kerns, G. Wilson, S.M. Vyavhare, S. Malone, T. Bryant, T. Price, H. Kelly, J. Hu, P. Roberts, P. Lujan, J. Pierce, T. Faske, and **A.L. Jacobson**. 2025. Survey for cotton leafroll dwarf virus across the Cotton Belt. The Beltwide Cotton Conferences, New Orleans, LA. *Poster presentation*.

Invited Presentation: Jacobson, A., *A. McLaughlin, L. Hanley-Bowdoin, G. Kennedy. 2024. Making a mixed infection: effect of acquisition sequence on propagation of TYLCV and ToMoV by *Bemisia tabaci*. International Congress of Entomology, Kyoto, Japan. *15-minute oral presentation*.

*Escalante, C., A.M. Reyes, C. Zhao, **A. Jacobson**, K.S. Balkcom, and K. Conner. 2024. Cotton contains multitudes: A metatranscriptomics sequencing approach reveals the cotton virome in the southern United States. Annual meeting of the American Phytopathological Society. Memphis, TN.

Invited Presentation: Jacobson, A.L. Jul. 2024. Seasonal Spread of Cotton Leafroll Dwarf Virus, By the Cotton Aphid in the United States. The International Plant Protection Conference, Athens, Greece. *20-minute Oral Presentation*.

*Mahas, J.B., G. Rossi, A. Chitturi, **A. Jacobson**. 2024. Thrips oviposition across planting dates on cotton, soybean and peanut in Alabama. Southeastern Branch Meeting of the Entomological Society of America, Savannah, GA. *Poster presentation*.

*Mahas, J.W., K. Conner, T. Steury, K. Bowen, P. Roberts, S. Bag, **A.L. Jacobson**. 2024. Investigating the causal relationships of cotton leafroll dwarf virus incidence in cotton. Southeastern Branch Meeting of the Entomological Society of America, Savannah, GA. *Oral presentation*.

Shehata, A., A. Strayer-Scherer, **A. Jacobson**, K. Martin. 2024. Nucleocapsid protein comparison between tomato spotted wilt virus and soybean vein necrosis virus: two important orthotospoviruses. American Phytopathological Society, 101st Southern Division Meeting. Columbia, SC. *Oral Presentation*.

Invited Presentation: Jacobson, A.L. Feb. 2024. Epidemiology And Management Of Cotton Leafroll Dwarf Virus, An Emerging Insect-Transmitted Virus In The Southern U.S. Webinar: The Southern IPM Hour, hosted by the Southern Integrated Pest Management Center, [IPM Hour - Southern IPM Center](#) *Oral Presentation*.

*Mahas, J.W., K. Conner, T. Steury, K. Bowen, P. Roberts, S. Bag, **A.L. Jacobson**. 2024. Understanding factors that influence cotton leafroll dwarf virus incidence in cotton. Beltwide Cotton Conferences, Fort Worth, TX. *Oral presentation*.

Graham, S., **A. Jacobson**, J. Greene, P. Roberts, D. Reisig, I. Esquivel. 2024. A Two Year Evaluation of ThryvOn and Thrips Management Across the Southeast. Beltwide Cotton Conferences, Fort Worth, TX. *Oral presentation*.

Greene, J., F. Reay-Jones, P. Roberts, D. Reisig, S. Graham, **A. Jacobson**, S. Taylor, S. Malone. 2024. Effects of Simulated Injury by Tarnished Plant Bug, *Lygus lineolaris*, to Terminals and Pre-Floral Buds on Cotton Growth and Yield. Beltwide Cotton Conferences, Fort Worth, TX. *Oral presentation*.

*Schlarbaum, K., K. Conner, **A. Jacobson**. 2024. Effects of Temperature and Cotton Leafroll Dwarf Virus Infection in Cotton. Beltwide Cotton Conferences, Fort Worth, TX. *Poster presentation*.

*Mahas, J.B., G. Rossi, *A. Chitturi, **A. Jacobson**. 2024. The Effect of Planting Date on Thrips in Cotton, Soybean and Peanut in Alabama. Beltwide Cotton Conferences, Fort Worth, TX. *Poster presentation*.

Invited Presentation: **Jacobson, A.L.**, B. Heilsnis, J.B. Mahas, J.W. Mahas, S. Pandey, J. Koebernick, C. Ray, K. Conner, R. Srinivasan, K. Martin. 2023. Addressing knowledge gaps in aphid ecology to begin characterizing the epidemiology of cotton leafroll dwarf virus. National Meeting of the Entomological Society of America, National Harbor, MD, *oral presentation*.

Catto, M.A., P. Labadie, **A.L. Jacobson**, G. Kennedy, R. Srinivasan, B. Hunt. 2023. Pest status, molecular evolution, and epigenetic factors derived from the genome assembly of *Frankliniella fusca*, a thysanopteran phytoparvovirus vector. National Meeting of the Entomological Society of America, National Harbor, MD, *oral presentation*.

*Mahas, J.W., K. Conner, T. Steury, K. Bowen, P. Roberts, S. Bag, **A.L. Jacobson**. 2023. Identifying factors that influence cotton leafroll dwarf virus incidence in cotton agroecosystems National Meeting of the Entomological Society of America, National Harbor, MD, *oral presentation*.

Pandey, S., S. Bag, P. Roberts, **A.L. Jacobson**, R. Srinivasan. 2023. Cotton leafroll dwarf virus infection and host range manipulates its vector (*Aphis gossypii*) behavior and gene expression. National Meeting of the Entomological Society of America, National Harbor, MD, *oral presentation*.

[†]Rutz, T., J. Pizzo, C. Rodrigues, **A.L. Jacobson**, A.M. Simmons, A.L.B.R. da Silva, 2023. Role of volatile compounds on tomato resistance against whitefly. The Annual Meeting of the Entomological Society of America, National Harbor, MD. *Oral presentation*

Invited Seminar: **Jacobson, A.L.** 2023. Characterizing the epidemiology of cotton leafroll dwarf virus, a new aphid-transmitted cotton virus in the U.S. New Mexico State University, Seminar for the Department of Entomology, Plant Pathology, and Weed Science, *50-minute oral presentation*.

*Mahas, J.W., J. B. Mahas, C. Ray, A. Kesheimer, T. D. Steury, S. R. Conzemius, W. Crow, J. Gore, J. K. Greene, G. G Kennedy, D. Kerns, S. Malone, S. Paula-Moraes, P. Roberts, S. D. Stewart, S. Taylor, M. Toews, **A. L Jacobson**. October 2023. "The spatiotemporal distribution, abundance, and seasonal dynamics of cotton-infesting aphids in the southern U.S." 2023 College of Agriculture Graduate Research Poster Showcase. Auburn, AL.

Mayfield, M.A., **A.L. Jacobson**, K. Martin 2023. Sequencing the Nucleocapsid of Tomato Spotted Wilt Virus is a Step Towards Understanding the Peanut Breaking Resistance in Alabama. American Society for Virology Annual Meeting. Athens, Georgia

Shehata, A.H.A., A. Strayer-Scherer, M. Mayfield, W. Clark, **A. Jacobson**, K. Martin. 2023. Sequencing the nucleocapsid of tomato spotted wilt virus is a step towards understanding the peanut breaking resistance in Alabama. American Society for

Virology Annual Meeting. Athens, Georgia

*Warsi, S., A.M. Chicas-Mosier, R.R. Balusu, H.Y. Fadamiro, **A.L. Jacobson**. 2023. Factors Affecting the Developmental Biology of Kudzu Bug (*Megacopta cribraria*) Egg Parasitoids. Southeastern Branch Meeting of the Entomological Society of America. *Oral presentation*.

Pandey, S., S., M. Catto, P. Roberts, S. Bag, **A. Jacobson**, R. Srinivasan. 2023. Host plants influence differential gene expression in *Aphis gossypii* upon virus acquisition from cotton leafroll dwarf virus (CLRDV) infected plants. Southeastern Branch Meeting of the Entomological Society of America. *Oral presentation*.

Martin, K., W. Clark, **A. Jacobson**, A. Strayer-Scherer, K.S. Lawrence. 2023. Cotton leafroll dwarf virus is an emerging virus in the cotton belt transmitted by *Aphis gossypii*. The American Phytopathological Society, Caribbean Division Meeting, *Phytopathology*, 113:9s: Division Meeting Abstract Supplement, S2.1-S2.88.

*Mahas, J.W., J. B. Mahas, C. Ray, A. Kesheimer, T. D. Steury, S. R. Conzemius, W. Crow, J. Gore, J. K. Greene, G. G Kennedy, D. Kerns, S. Malone, S. Paula-Moraes, P. Roberts, S. D. Stewart, S. Taylor, M. Toews, **A.L Jacobson**. 2023. The spatiotemporal distribution, abundance, and seasonal dynamics of cotton-infesting aphids in the southern U.S. Auburn University College of Agriculture Graduate Student Showcase. *First place PhD Student Poster Presentation*.

*Escalante, C., **A. Jacobson**, K. Balkcom, & K. Conner. 2023. Metatranscriptomics approach to study the virome of economically important crops. In Ravnikar, M., Kutnjak D., Giovani, B., Fox, A., Botermans, M., Oplaat, C., & Mollov, D. (Eds.), *Book of abstracts of the ICPP Satellite Event: High-throughput sequencing in plant virology: from discovery to diagnostics (Version v2)*. Zenodo. <https://doi.org/10.5281/zenodo.8298516>

*Mahas, J.B., J.W. Mahas, C. Ray, J.B. Mahas, A. Kesheimer, K. Conner, **A.L. Jacobson**. 2023. Observing Seasonal Dynamics of Aphids Infesting Cotton and the Spread of Cotton Leafroll Dwarf Virus Spread in Alabama. Beltwide Cotton Conferences, New Orleans, LA. *Poster presentation*.

*Mahas, J.W., J.B. Mahas, **A.L. Jacobson**, C. Ray, P. Roberts, M. Toews, J. Greene, G.G. Kennedy, S. Taylor, S. Paula-Moraes, J. Gore, W. Crow, S.D. Stewart, D.L. Kerns and S. Vyavhare. 2023. Characterizing Variation in the Spatiotemporal Abundance and Distribution of Cotton Infesting Aphids. Beltwide Cotton Conferences, New Orleans, LA. *Oral presentation*

*Schlarbaum, K., K. Conner, A. Kesheimer, **A.L. Jacobson**. 2023. Investigating the Interaction between Nutrient Stress and Cotton Leafroll Dwarf Virus Infection and the Effects on Yield Loss and Symptoms. Beltwide Cotton Conferences, New Orleans, LA. *Oral presentation*.

Frazier, S., S. Brown, K.S. Balkcom, and **A. Jacobson**. 2023. Second Year Results on the Effects of Cotton Stalk Management and Cover Crop Use on Soil Properties and CLRDV Incidence. Beltwide Cotton Conferences, New Orleans, LA. *Oral presentation*.

*Escalante, C., K.S. Balkcom, **A. Jacobson**, and K. Conner. 2023. Physiological and Molecular Interactions of Cotton Leafroll Dwarf Virus with the Host. Beltwide Cotton Conferences, New Orleans, LA. *Oral presentation*.

*Mahas, J.B., J.W. Mahas, C. Ray, J.B. Mahas, A. Kesheimer, K. Conner, **A.L. Jacobson**. 2022. Monitoring seasonal dynamics of cotton infesting aphids and cotton leafroll dwarf virus spread in Alabama. Joint Meeting of the Entomological Society of America, Entomological Society of Canada, and Entomological Society of British Columbia. Vancouver, Canada. *Oral presentation*.

*Mahas, J.W., J.B. Mahas, A. Kesheimer, C. Ray, Southeastern Row Crop Entomology Working Group, Midsouth Entomology Working Group, **A.L. Jacobson**. 2022. Assessing spatiotemporal variation in cotton infesting aphid species in the southern U.S. Joint Meeting of the Entomological Society of America, Entomological Society of Canada, and Entomological Society of British Columbia. Vancouver, Canada. *Oral presentation*.

*Schlarbaum, K., K. Conner, A. Kesheimer, **A.L. Jacobson**. 2022. Investigating the interaction of plant age and timing of cotton leafroll dwarf virus infection on yield loss. Joint Meeting of the Entomological Society of America, Entomological Society of Canada, and Entomological Society of British Columbia. Vancouver, Canada. *Oral presentation*.

†Rutz, T., **A.L. Jacobson**, R. Srinivasan, A.M. Simmons, A. da Silva. 2022. Characterization of wild tomato accessions for resistance to whitefly-transmitted viruses. Joint Meeting of the Entomological Society of America, Entomological Society of Canada, and Entomological Society of British Columbia. Vancouver, Canada. *Oral presentation*.

Pandey, S., M.A. Catto, P. Roberts, S. Bag, R. Srinivasan, **A.L. Jacobson**. 2022. Differential gene expression in *Aphis gossypii* after virus acquisition from cotton leafroll dwarf virus (CLRDV)-infected plants. Joint Meeting of the Entomological Society of America, Entomological Society of Canada, and Entomological Society of British Columbia. Vancouver, Canada. *Oral presentation*.

Catto, M.A., P. Labadie, **A.L. Jacobson**, G. Kennedy, R. Srinivasan, B.G. Hunt. 2022. Molecular evolution and epigenetics of *Thysanoptera* derived from the *Frankliniella fusca* genome assembly. Joint Meeting of the Entomological Society of America, Entomological Society of Canada, and Entomological Society of British Columbia. Vancouver, Canada. *Oral presentation*.

Frazier, S., S. Brown, K.S. Balkcom, and **A. Jacobson**. 2022. Second Year Results on the Effects of Cotton Stalk Management and Cover Crop Use on Soil Properties and Clrdv Incidence. American Society of Agronomy, Crop Science Society of America and Soil Science Society of America Annual Meeting. Baltimore, MD. *Poster presentation*.

*Escalante, C., M. Zaccaron, **A. Jacobson**, K. Bowen, A. Strayer-Scherer, A. Hagan, S. Brown, J.K. Greene, H. Wang, K. Conner, K.S. Balkcom, A. Huseth, M. Mulvaney, I. Small, B. Kemerait, H. Kelly, T. Allen, T. Price, D. Kerns, T. Faske, and J. Koebernick.. 2022. Molecular epidemiology of cotton leafroll dwarf virus in southeastern United States. Annual Meeting of the American Phytopathological Society Annual Meeting. Pittsburgh, PA. *Oral presentation*. *Phytopathology* 112:S3.19. <https://doi.org/10.1094/PHYTO-112-11-S3.1>

Jacobson, A.L., *A.A. McLaughlin, L. Hanley-Bowdoin, G.G. Kennedy. 2022. How do you make a mixed infection: effect of acquisition sequence on propagation of TYLCV and ToMoV by *Bemisia tabaci*. International Symposium of Plant Virus Epidemiology. Madrid, Spain. *Oral presentation*.

Kennedy, G.G., W. Sharpee, M. Wambugu, B. Mware, L. Hanley-Bowdoin, **A.L. Jacobson**. 2022. Relating acquisition of Cassava mosaic begomovirus components A and B to transmission of single and co-infections by *Bemisia tabaci* SSA1-SG1. International Symposium of Plant Virus Epidemiology. Madrid, Spain. *Oral presentation*.

*Warsi, S., **A. Jacobson**, H. Fadamiro, R. Balusu, A. Chicas-Mosier. 2022. Intrinsic and extrinsic competitive interactions between *Ooencyrtus nezarae* and *Paratenomus saccharalis* in the central Alabama. Joint Meeting of the Southeastern Branch of the Entomological Society of America & the American Phytopathological Society-Central Division, San Juan, Puerto Rico. *Poster Presentation*.

Pandey, S., P. Roberts, S. Bag, **A.L. Jacobson**, R. Srinivasan. 2022. Effect of cotton leafroll dwarf virus (CLRDV) infection on biology and preference of its vector *Aphis gossypii* (Hemiptera: Aphididae). Joint Meeting of the Southeastern Branch of the Entomological Society of America & the American Phytopathological Society-Central Division, San Juan, Puerto Rico. *Oral Presentation*.

Clark, W., M. Mayfield, **A. Jacobson**, K. Martin. 2022. Sequencing and analysis of the nucleocapsid in newly identified resistance-breaking Tomato spotted wilt virus. Peanut Trade Show. *Poster presentation*

Greene, J., F. Reay-Jones, P. Roberts, D. Reisig, A.S. Huseth, S. Taylor, **A.L. Jacobson**, S. Graham, R.H. Smith, Silvana Paula-Moraes. 2022. Effects of Insecticides at Planting on Early Developing Populations of Cotton Aphid. Beltwide Cotton Conferences, San Antonio TX. *Oral presentation*.

*Mahas, J.B., **A.L. Jacobson**, C. Ray, J.B. Mahas, M. Toews, P. Roberts, J. Greene, G.G. Kennedy, S. Taylor, S. Paula-Moraes, J. Gore, W. Crow, S.D. Stewart, D. Kerns and S. Vyavhare. 2022. Monitoring Seasonal Dynamics and Community Composition of Cotton Infesting Aphid Species in the Southern U.S. Beltwide Cotton Conferences, San Antonio TX. *Oral presentation*.

[†]Roark, D., J. Koebernick and **A.L. Jacobson**. 2022. Protocol for Screening for Aphid Resistance in Cotton. Beltwide Cotton Conferences, San Antonio TX. *Poster presentation*.

*Mahas, J.B., J.W. Mahas, C. Ray, A. Kesheimer, K. Conner and **A.L. Jacobson**. 2022. Monitoring the Seasonal Occurrence of Cotton Leafroll Dwarf Virus Spread in Relation to Aphid Vector Flights in Alabama. Beltwide Cotton Conferences, San Antonio TX. *Oral presentation*.

*Schlarbaum, K., K. Conner, A. Kesheimer, **A.L. Jacobson**. 2022. Investigating the Interaction of Plant Age and Timing of Cotton Leafroll Dwarf Virus Infection on Yield Loss. Beltwide Cotton Conferences, San Antonio TX. *Oral presentation*.

Huseth, A.S., S. Dorman, S. Taylor, S. Malone, P. Roberts, J. Greene, D. Reisig, R.H. Smith, **A.L. Jacobson**, F. Reay-Jones, S. Paula-Moraes. 2022. Crop Interface and Sampling Effects on *Lygus lineolaris* Populations in Southeastern Cotton. Beltwide Cotton Conferences, San Antonio TX. *Oral presentation*.

Frazier, S.A., S.M. Brown, K. Balkcom, **A.L. Jacobson**, and D.E. Barber. 2022. Effects of Cotton Stalk Management and Cover Crop Use on Soil Properties and Cotton Leafroll Dwarf Virus Incidence. Beltwide Cotton Conferences, San Antonio TX. *Oral presentation*.

Catto, M.A., **A.L. Jacobson**, G. Kennedy, P. Labadie, B. G. Hunt, and R. Srinivasan. 2021. Novel insights on Thysanoptera genetics through PacBio sequencing. National Meeting of the Entomological Society of America, on-demand presentation. November 2021.

Brewer, M.J., N.C. Elliott, I.L. Esquivel, **A.L. Jacobson**, A. Szczpaniec, A.M. Faris, K.L. Giles, B.H. Elkins, and J.W. Gordy. 2021. Natural enemy response to the invasive sugarcane aphid across the sorghum agroecosystem of North America: A Four Region Comparison. National Meeting of the Entomological Society of America, 30 minute *oral presentation*. November 2021.

Invited Presentation: **Jacobson, A.L.**, A.S. Huseth, T. Chappell, and G.G. Kennedy. 2021. Host use in cotton agroecosystems and the evolution of insecticide resistance in *Frankliniella fusca*. National Meeting of the Entomological Society of America. *20 minute oral presentation*. November 2021.

*Mahas, J.W., J. Ahl, C. Ray, Southeastern Row Crop Entomology Working Group, Midsouth Row Crop Entomology Working Group, **A.L. Jacobson**. 2021. Monitoring cotton infesting aphid species in the southern U.S. National Meeting of the Entomological Society of America. *10 minute oral presentation*. November 2021.

Pandey, S., S. Bag, P. Roberts, **A.L. Jacobson**, R. Srinivasan. 2021. Aphid-mediated transmission of cotton leafroll dwarf virus to and from alternate hosts. National Meeting of the Entomological Society of America. *10 minute oral presentation*. November 2021.

*Mahas, J.W., A. S. Huseth, **A.L. Jacobson**. 2021. Landscape drivers of imidacloprid resistance in *Aphis gossypii* populations. Southeastern Branch Meeting of the Entomological Society of America. *10-minute oral presentation*. March 2021.

Frazier, S., S. Brown, K.S. Balkcom, and **A.L. Jacobson**. 2021. Effects of Cotton Stalk Management and Cover Crop Use on CLRDV Incidence. American Society of Agronomy, Crop Science Society of America and Soil Science Society of America Annual Meeting. *Poster presentation*.

Brewer, M.J., I.L. Esquivel, A.M. Faris, B.H. Elkins, J.W. Gordy, A. Szczpaniec, **A.L. Jacobson**, K.L. Giles, N.C. Elliott. 2021. Distribution, Abundance, and Diversity of Natural Enemies of Sugarcane Aphid Following its Invasion onto Sorghum, with Notes on Agro-landscape and Weather Correlates. Southeastern Branch Meeting of ESA, invited oral presentation, March 2021.

Aimone, C.D., E. Lavington, J.S. Hoyer, D. Deppong, L. Mickelson-Young, **A. Jacobson**, G.G. Kennedy, L. Hanely-Bowdoin, S. Duffy. 2021. Population diversity of cassava mosaic begomoviruses increases over the course of serial vegetative propagation. American Society for Virology Annual Meeting.

Invited Presentation: **Jacobson, A.L.**, and P. Roberts. February 2021. Update on Aphid Vectors, Virus Spread and Management of Cotton Leafroll Dwarf Virus. National Conservation Systems Cotton & Rice Conference. Online. *50 minute oral presentation*.

Jacobson, A.L., C. Ray, P. Roberts, M. Toews, J. Greene, A.S. Huseth, G.G. Kennedy, S. Taylor, S. Paula-Moraes, S. Brown, J. Gore, W. Crow, S.D. Stewart, D. Kerns, S. Vyavhare, S.H. Graham, R. Smith and K. Kesheimer. January 2021. Monitoring Population Dynamics of

Aphids across the Cotton Belt. Proceedings of the Beltwide Cotton Conferences. Virtual Conference. *15 minute oral presentation.*

Zaccaron, M., J. Greene, A.K. Hagan, A. Strayer-Scherer, T.W. Allen, J. Koebernick, **A.L. Jacobson**, K.L. Bowen, T.R. Faske, P. Price, I. Small, M.J. Mulvaney, R. Kemerait, A.S. Huseth, H.M. Kelly, D. Kerns, S. Taylor and H. Wang. January 2021. Incidence and Impact of Cotton Leaf Roll Dwarf Virus (CLRDV) in the USA Cotton Belt. Proceedings of the Beltwide Cotton Conferences. Virtual Conference. *15 minute oral presentation.*

[†]Heilsnis, B., J. Koebernick, K. Conner, **A.L. Jacobson**. January 2021. Rapid Screening for Resistance to CLRDV: Development of an Aphid Assay. Proceedings of the Beltwide Cotton Conferences. Virtual Conference. *15 minute oral presentation.*

*Mahas, J.W., A. S. Huseth, **A.L. Jacobson**. January 2021. Quantifying Imidacloprid Susceptibility in Alabama Populations of *Aphis gossypii*. Proceedings of the Beltwide Cotton Conferences. Virtual Conference. *15 minute oral student presentation.*

Roberts, P., M. Toews, S. Taylor, D. Reisig, A.S. Huseth, F. Reay-Jones, J. Greene, S. Paula-Moraes, **A.L. Jacobson**, S. Graham and R. Smith. January 2021. Cotton Aphid Insecticide Efficacy in the Southeast: A Two Year Summary. Proceedings of the Beltwide Cotton Conferences. Virtual Conference. *15 minute oral student presentation.*

Invited presentation: *Autumn McLaughlin, **A.L. Jacobson**. November 2020. Investigating Vector-Virus-Host Plant Interactions That Influence the Acquisition and Transmission of Mixed Infections by *Bemisia tabaci*. The Annual Meeting of the Entomological Society of America. Online. *15 minute oral presentation.*

*Mahas, J.W., P.M. Roberts, K. Conner, S. Bag, M.D. Toews, E.K. Blythe, F.B. Hamilton, C.H. Ray, **A.L. Jacobson**. November 2020. Managing the Primary vector of Cotton leafroll dwarf virus does not Reduce Final Virus Incidence in Cotton. The Annual Meeting of the Entomological Society of America Virtual Annual Meeting. *Poster Presentation. Second place graduate student research poster for PIE section.*

*Mahas, J.W., **A.L. Jacobson**. October 2020. Quantifying Imidacloprid Susceptibility in Populations of *Aphis gossypii*. Auburn University's Graduate Student Poster Showcase. Auburn, AL. Virtual Conference. *Poster presentation. First place graduate student research poster.*

*Mahas, J.W. and **A.L. Jacobson**. October 2020. Quantifying Imidacloprid Susceptibility in Populations of *Aphis gossypii*. Southeastern Population Ecology & Evolutionary Genetics 2020 Virtual Conference. *Poster presentation.*

*Mahas, J.W. and **A.L. Jacobson**. October 2020. Understanding Drivers of Insecticide Resistance in Insect Pest Populations. Auburn University's Three Minute Thesis. Auburn, AL. *3 minute oral presentation.*

*Mahas, J.W. and **A.L. Jacobson**. March 2020. Susceptibility of *Aphis gossypii* to Imidacloprid in Alabama. Bayer CropScience Site Visit. Chesterfield, MO.

[†]Akins, J., **A.L. Jacobson**, A.V. Gamble. May 2020. Evaluation of insect dynamics in southeastern cover cropping systems AU Virtual Student Symposium. *Poster presentation.*

[†]Akins, J, **A.L. Jacobson**, A.V. Gamble. February 2020. Evaluation Of Insect Dynamics In Southeastern Cover Cropping Systems. Southern Association of Agricultural Scientists, Louisville, KY. *Poster presentation*.

Jacobson, A.L., P. Roberts, M. Toews, K. Conner, S. Bag, J. Mahas, A. Kesheimer. January 2020. Investigating the Impact of Planting Date and Cotton Aphid Management on the Final Incidence of Cotton Leafroll Dwarf Virus. Proceedings of the Beltwide Cotton Conferences, Austin, TX. *15 minute oral presentation*.

[†]Heilsnis, B., K. Conner, J. Koebernick, **A.L. Jacobson**. January 2020. Transmission of Cotton Leafroll Dwarf Virus By *Aphis Gossypii*. Proceedings of the Beltwide Cotton Conferences, Austin, TX. *15 minute oral presentation*.

Roberts, P., M. Toews, **A.L. Jacobson**, R. Smith, S. Paula-Moraes, J. Greene, D. Reisig, S. Taylor. January 2020. Cotton Aphid Insecticide Efficacy in the Southeast. Proceedings of the Beltwide Cotton Conferences, Austin, TX. *15 minute oral presentation*.

*McLaughlin, A., K. Conner, K.L. Bowen, A.K. Hagan, W. Groover, K. Lawrence, **A.L. Jacobson**. January 2020. Investigating the Interaction between Crop Age and Timing of Cotton Leafroll Dwarf Virus Inoculation on Disease Severity and Yield Loss. Proceedings of the Beltwide Cotton Conferences, Austin, TX. *15 minute oral presentation*.

Thompson S., **A. Jacobson**, and S.L. Dillard. 2020. Evaluation of Summer Annual Mixtures. Proceedings of the American forage and Grazinglands Conference. Greenville, SC.

Thompson, S.J., S.L. Dillard, **A. Jacobson**, J. Koebernick, G. Parks, and M.K. Mullenix. 2020. Yield and nutritive quality of summer annual forage mixtures. Southern Section American Society of Animal Scientist Meeting. Chattanooga, TN.

[†]Akins, J, **A.L. Jacobson**, A.V. Gamble. November 2019. Cover Crop Effects on Insect Dynamics in Cropping Systems of the Southeastern U.S. ASA-CSSA-SSA International Annual Meeting, San Antonio, TX. *Poster presentation*.

*Mahas, J. and **A. Jacobson**. November 2019. Susceptibility of *Aphis gossypii* to imidacloprid in Alabama, USA. The Annual Meeting of the Entomological Society of America. St. Louis, MO. *Poster presentation*.

*Mahas, J. and **A. Jacobson**. November 2019. Landscape Genetic Structure of *Frankliniella fusca* in the southern U.S. The Annual Meeting of the Entomological Society of America. St. Louis, MO. *3 minute presentation*.

Catto, M., B. Hunt, **A.L. Jacobson**, G.G. Kennedy, and R. Srinivassan. November 2019. Development of the *Frankliniella fusca* (Hinds) draft genome. The Annual Meeting of the Entomological Society of America. St. Louis, MO. *Poster presentation*.

Dye, A., **A. Jacobson**, L. Hanley-Bowdoin, G. Kennedy. November 2019. A synergistic interaction between *Tomato yellow leaf curl virus* and *Tomato mottle virus* and its effect on the host plant and vector transmission. The 9th International Geminivirus Symposium and 7th International ssDNA Comparative Virology Workshop. Davis, CA. *Oral presentation*.

*McLaughlin, A.M. **A.L. Jacobson**. May 2019. Investigating Virus Acquisition and Transmission Characteristics Resulting in Mixed Infections of Tomato Infecting Begomoviruses

(Geminiviridae). Auburn University Graduate Student Research Symposium. Auburn, AL, *Poster presentation*.

[†]Heilsnis, B., K. Conner, J. Koebernick, **A.L. Jacobson**. October 2019. Transmission of Cotton leafroll dwarf virus by *Aphis gossypii*. Auburn University College of Agriculture Poster Showcase. Auburn, AL. *Poster presentation*.

Invited Presentation: **Jacobson, A.L.**, J. Brown, T. Sit, and G. Kennedy. September 2019. Genetic differentiation of Tomato spotted wilt virus isolates sequenced from source plants and *Thrips tabaci*. The International Symposium on Thrips and Tospoviruses. Kunming, China. *Oral presentation*.

Invited Presentation: **A.L. Jacobson**. September 2019. Closing remarks of ISTT 2019. The International Symposium on Thrips and Tospoviruses. Kunming, China. *Oral presentation*.

*McLaughlin, A. and **A. Jacobson**. August 2019. Investigating virus acquisition and transmission characteristics resulting in mixed infections of tomato infecting begomoviruses. The American Phytopathological Society Annual Meeting. Cleveland, OH, *Poster presentation*.

Thompson, S.J., **A. Jacobson**, and S.L. Dillard. 2019. Sugarcane aphid pressure and forage production and quality of summer annual mixtures. Proceedings of the American Forage and Grazinglands Conference. St. Louis, MO.

Thompson, S.J., **A. Jacobson**, and S.L. Dillard. 2019. Evaluation of summer annual forages mixtures for nutritive quality and sugarcane aphid infestations in Alabama. Auburn University Research Student Symposium. Auburn, AL, *Poster Presentation*.

Jacobson, A.L., J. Brown, T. Sit, and G. Kennedy. May 2019. Genetic differentiation of Tomato spotted wilt virus isolates sequenced from source plants and *Thrips tabaci*. The International Plant Virus Epidemiology Symposium. Seoul, South Korea. *Oral presentation*.

Dye, A., *A. McLaughlin, D. Depong, S. Hoyer, C. Doyle, **A. Jacobson**, L. Hanley-Bowdoin and G. Kennedy. May 2019. Mixed infections of tomato yellow leaf curl virus and tomato mottle virus: Effects on virus titers, transmission rates and viral genetic diversity. The International Plant Virus Epidemiology Symposium. Seoul, South Korea. *Poster presentation*.

Brown, J.K., S. Avelar, D.W. Schrimsher, K. Conner, **A.L. Jacobson**, K. Lawrence. January 2019. Discovery of Cotton Leaf Roll Dwarf Virus, Causal Agent of Atypical Cotton Blue Disease in the Southeastern US. Proceedings of the Beltwide Cotton Conferences. New Orleans, LA.

Jacobson, A.L. January 2019. Biology, Ecology and Management of the Cotton Aphid in the Southeastern US and Status as a Vector of Cotton Leaf Roll Dwarf Virus. Proceedings of the Beltwide Cotton Conferences. New Orleans, LA. *Oral presentation*.

Sikora, E.J., A. Hagan, K. Lawrence, J. Koebernick, **A. Jacobson**, and K. Conner. May 2019. Emerging Diseases of Soybean and Cotton in the Southeastern United States. Proceedings of the 3rd International Seminar on Animal and Plant Health, Cuba. *Oral presentation*.

Invited Presentation: Harris, K. and **Jacobson, A.L.** 2018. The aphid: genetic diversity and biotypes. The National Meeting of the Entomological Society of America. Vancouver, B.C. *15-minute oral presentation*.

Jacobson, A.L. 2018. Ecological considerations for designing research questions and sampling plans to investigate the *Bemisia tabaci* species complex. The 3rd International Whitefly Symposium. Perth, Australia. *15-minute oral presentation*.

W. Sharpee, M. Wambugu, G. Chávez-Calvillo, J.T. Ascencio-Ibáñez, L. Hanley-Bowdoin, **A. Jacobson** and G. Kennedy 2018. Evaluating the Transmission and Impact on Evolutionary Potential of Cassava Mosaic Begomoviruses (CMB) by the Whitefly Vector *Bemisia tabaci*. IVth International Cassava Conference – GCP21-IV. Cotonou, Benin. *Poster Presentation*.

Invited Seminar: A.L. Jacobson. 2018. Agroecosystem-wide host use and evolution of insecticide resistance in *Frankliniella fusca*. University of Georgia, Athens, GA. *50-minute guest lecture*.

Sikora, E.J., D. Delaney, **A. Jacobson**, K. Conner, and J. Kemble. 2018. Studies on *Soybean vein necrosis virus* in Alabama. Southern Soybean Conference Proceedings. Pensacola, FL. *Poster presentation*.

*Bowler, A., S. Gong, G. Chavez-Calvillo, and **A. Jacobson**. 2018. Investigating effects of *Tomato yellow leaf curl virus* and *Tomato mottle virus* infection on the fitness of *Bemisia tabaci*. Annual Meeting of the Southeastern Branch of the Entomological Society of America. Orlando, FL. *Poster presentation*.

Kerns, C. G. Greene, F. Reay-Jones, P. Roberts, **A. Jacobson**, S. Taylor, M. Toews, and T. Reed. 2018. Effects of variety of upland cotton on population density of thrips in the Southeastern United States. Proceedings of the Beltwide Cotton Conferences, San Antonio, TX. *15-minute oral presentation*.

Invited Seminar: Jacobson, A.L. Dec. 2017. The importance of ecology, species, and population interactions in thrips-orthotospovirus coevolution highlighted by studies on *Thrips tabaci*. Colorado State University, Fort Collins, CO. *50-minute guest lecture*.

*Chitturi, A., **A. Jacobson**, E. Sikora, and K. Conner. 2017. Monitoring thrips vectors of *Soybean vein necrosis virus* in Alabama soybean. Annual Meeting of the Entomological Society of America. Denver, CO. *15-minute oral presentation*.

*Gong, S., A. Bowler, G. Chavez-Calvillo, and **A. Jacobson**. 2017. Investigating vector-virus-plant interactions influencing transmission efficiency of *Tomato yellow leaf curl virus* and *Tomato mottle virus* by *Bemisia tabaci*. Annual Meeting of the Entomological Society of America. Denver, CO. *Poster presentation*.

Knight, I., **A. Jacobson**, and M. Toews. 2017. Effect of fungicide applications on *Beauveria bassiana* infecting *Megacopta cribraria* in soybean. Annual Meeting of the Entomological Society of America. Denver, CO. *15-minute oral presentation*.

Kerns, C., J. Greene, F. Reay-Jones, **A. Jacobson**, P. Roberts, A. Herbert, M. Toews, T. Reed, A. Greene, J. Smoak and D. Robinson. 2017. Effects of Planting Date and Variety on Thrips Populations and their Injury to Cotton in the Southeastern United States. Annual Meeting of the Entomological Society of America. Denver, CO. *15-minute oral presentation*.

Jacobson, A.L., A. Chitturi, E. Sikora, and K. Conner. Apr 2017. Monitoring thrips vectors of *Soybean vein necrosis virus* in Alabama. The VIII Seminario Científico Internacional de Sanidad Vegetal. Havana, Cuba. *15-minute oral presentation*.

Duke, S., R. Smith, K. Flanders, X.P. Hu, and **A.L. Jacobson**. Mar 2017. Brown Marmorated Stink Bug in Alabama Field Crops. The Southeastern Branch Meeting of the Entomological Society of America. Memphis, TN, *10-minute oral presentation*.

Jacobson, A.L., and A. Chitturi. Jan 2017. Efficacy of seed treatments in relation to early-season thrips dynamics and cotton growing conditions during a 6-week planting window. The Beltwide Cotton Conferences. Dallas, TX. *15-minute oral presentation*.

Kerns, C., J. Greene, H. Wang, J. Smoak, D. Robinson, A. Greene, F. Reay-Jones, P. Roberts, **A. Jacobson**, D. Reisig, and A. Herbert. Jan 2017. Effects of planting date and variety on thrips populations and injury to cotton in the southeastern United States. Proceedings of the Beltwide Cotton Conferences. Dallas, TX. *15-minute oral presentation*.

Jacobson, A.L., and A.J. Pekarcik. Jan 2017. Clonal genetic diversity of the sugarcane aphid in the U.S. The Sorghum SCA Research Exchange Meeting. Dallas, TX. *5-minute oral presentation*.

Jacobson, A.L., P. Labadie, G.G. Kennedy, and A.S. Huseth. Sept 2016. Population genetic structure of *Frankliniella fusca*. Poster Presentation. Joint Meeting of the International Congress of Entomology and the Entomological Society of America. Orlando, FL. *Poster presentation*.

Invited Presentation: *Pekarcik, A.J., and **A.L. Jacobson**. Sept 2016. Endosymbionts of the sugarcane aphid, *Melanaphis sacchari*. Joint meeting of the International Congress of Entomology and the Entomological Society of America. Orlando, FL, *15-minute oral presentation*.

Huseth, A.S., T.M. Chappell, A. Chitturi, **A.L. Jacobson**, and G.G. Kennedy. Sept 2016. Characterizing spatial distribution and host crop association of neonicotinoid resistant *Frankliniella fusca* (Thysanoptera: Thripidae) in the Southeastern United States. Joint meeting of the International Congress of Entomology and the Entomological Society of America. Orlando, FL. *15-minute oral presentation*.

Brown, J., **A.L. Jacobson**, G.G. Kennedy, S. Lommel, and T. Sit. Aug 2016. Variation in transmission of *Tomato spotted wilt virus* (TSWV) from *Thrips tabaci* is not solely influenced by virus titer within individual thrips. American Phytopathological Society Annual Meeting, Tampa, FL. *Poster presentation*.

Jing, L. C.Y. Chen, M.L. Wang, P. Dang, A. Hagan, and **A.L. Jacobson**. Jul 2016. Population structure and association analyses of the U.S. peanut mini-core collection by SSR markers. American Peanut Research and Education Society Annual Meeting. Clearwater, FL. *Poster presentation*.

Invited Presentation: **Jacobson A.L.**, B.A. Nault, and G.G. Kennedy. Mar 2016. Spatiotemporal host utilization of *T. tabaci* in New York onion agroecosystems. Southeastern Branch Meeting of the Entomological Society of America, Raleigh, NC. *15-minute oral presentation*.

*Pekarcik A.J., **A.L. Jacobson**, and K.L. Flanders. Nov 2015. The sugarcane aphid, *Melanaphis sacchari*, a new pest on sorghum (*Sorghum bicolor*) (L.) in Alabama. Annual Meeting of the Entomological Society of America, Minneapolis, MN. *Poster presentation*

Invited Presentation: **Jacobson A.L.**, B.A. Nault, E.L. Vargo, and G.G. Kennedy. Nov 2014. Effects of distance, reproductive mode, and host plant associations on the genetic structure of

Thrips tabaci in New York onion agroecosystems. Annual Meeting of the Entomological Society of America, Portland, OR. *25-minute oral presentation.*

D.A. D'Ambrosio, **A.L. Jacobson**, and G.G. Kennedy. Nov 2014. Electrical penetration analysis of feeding by western flower thrips (*Frankliniella occidentalis*) on tomatoes systemically treated with cyantraniliprole. Annual Meeting of the Entomological Society of America, Portland, OR. *Poster presentation.*

Invited Seminar: Jacobson A.L. B.A. Nault, E.L. Vargo, and G.G. Kennedy. Mar 2014. Investigating factors underlying thrips-tospovirus interactions: the importance of thrips genetic variation in the transmission of *Tomato spotted wilt virus* by *Thrips tabaci* and its relevance to other tospovirus vectors. Auburn University, Auburn, AL. *50-minute guest lecture.*

Invited Seminar: Jacobson A.L., B.A. Nault, E.L. Vargo, and G.G. Kennedy. Mar 2014. Investigating factors underlying thrips-tospovirus interactions: the importance of thrips genetic variation in the transmission of *Tomato spotted wilt virus* by *Thrips tabaci* and its relevance to other tospovirus vectors. University of Hawaii, Honolulu, HI. *50-minute guest lecture.*

Invited Seminar: A.L. Jacobson. B.A. Nault, E.L. Vargo, and G.G. Kennedy. Mar 2014. Genetic structure of *Thrips tabaci*: implications for management. Monsanto, Chesterfield, MO. *50-minute guest lecture.*

Invited Seminar: A.L. Jacobson. B.A. Nault, E.L. Vargo, and G.G. Kennedy. Feb 2014. Investigating factors underlying thrips-tospovirus interactions: the importance of thrips genetic variation in the transmission of *Tomato spotted wilt virus* by *Thrips tabaci* and its relevance to other tospovirus vectors. U.C. Davis, Davis, CA. *50-minute guest lecture.*

Invited Seminar: A.L. Jacobson. B.A. Nault, E.L. Vargo, and G.G. Kennedy. Jan 2014. Genetic structuring of *Thrips tabaci*: implications for pest management. Cornell University, Geneva, NY. *50-minute guest lecture.*

Invited Lecture: A.L. Jacobson. B.A. Nault, E.L. Vargo, and G.G. Kennedy. Jan 2014. Onion thrips population genetics and implications for management. Empire Expo, Syracuse, NY. *30-minute presentation.*

A.L. Jacobson and G.G. Kennedy. Nov 2013. Selection of *Tomato spotted wilt virus* for vector specificity among thrips vectors *Frankliniella occidentalis*, *F. fusca*, and *Thrips tabaci*. National Meeting of the Entomological Society of America, Austin, TX. *Poster presentation.*

Invited Seminar: A.L. Jacobson. 2013. Specific vector virus interactions and thrips population genetic structure help explain variation in the role of *Thrips tabaci* in the epidemiology of *Tomato spotted wilt virus*. University of Thessaloniki, Thessaloniki, Greece. *50-minute guest lecture.*

A.L. Jacobson. 2012. Specific vector virus interactions and thrips population genetic structure help explain variation in the role of *Thrips tabaci* in the epidemiology of *Tomato spotted wilt virus*. Webinar with 2013 USDA CAP Grant Thrips Team. *20-minute oral presentation.*

A.L. Jacobson, W. Booth, E.L. Vargo, and G.G. Kennedy. 2013. The population genetic structure of North Carolina populations of *Thrips tabaci* and its implications for competency of *T.*

tabaci to transmit *Tomato spotted wilt virus*. International Plant Virus Epidemiology Symposium, Arusha, Tanzania. *Poster presentation*.

Invited Seminar: A.L. Jacobson. 2012. Specific vector virus interactions and thrips population genetic structure help explain variation in the role of *Thrips tabaci* in the epidemiology of *Tomato spotted wilt virus*. University of Georgia, Tifton, GA and Athens, GA. *50-minute guest lecture*.

A.L. Jacobson, W. Booth, E.L. Vargo, and G.G. Kennedy. Nov 2012. The population genetic structure of North Carolina populations of *Thrips tabaci* and its implications for competency of *T. tabaci* to transmit *Tomato spotted wilt virus*. National Meeting of the Entomological Society of America, Knoxville, TN. *Poster presentation*.

Invited Presentation: A.L. Jacobson. Nov 2011. Variation in competency of *Thrips tabaci* as a vector of *Tomato spotted wilt virus*: patterns and implications. National Meeting of the Entomological Society of America, Reno, NV. *20-minute oral presentation*.

Invited Presentation: A.L. Jacobson. Mar 2011. Transmission of *Tomato Spotted Wilt Virus* by North Carolina populations of *Thrips tabaci*. Southeastern Branch Meeting of the Entomological Society of America, San Juan, Puerto Rico. *20-minute oral presentation*.

A.L. Jacobson, and G.G. Kennedy. 2010. Variation in transmission of *Tomato Spotted Wilt Tospovirus* among isolates and populations of a vector, *Thrips tabaci*. 11th International Symposium of Plant Virus Epidemiology Symposium, Cornell University, Ithaca, NY. *Poster presentation*.

A.L. Jacobson, and R.E. Foster. Mar 2008. The status of pyrethroid resistance in Indiana and Illinois Populations of *Helicoverpa zea* (Lepidoptera: Noctuidae). Annual Meeting of the North Central Branch of the Entomological Society of America, Columbus, OH. *Poster presentation*.

A.L. Jacobson, and R.E. Foster. 2008. Are corn earworms resistant to pyrethroid insecticides? Indiana Horticultural Congress, Indianapolis, IN. *20-minute oral presentation*.

A.L. Jacobson, and R.E. Foster. Nov 2007. Pyrethroid resistance in *Helicoverpa zea* (Lepidoptera: Noctuidae). National Meeting of the Entomological Society of America, San Diego, CA. *10-minute oral presentation*.

A.L. Jacobson, and R.E. Foster. Mar 2007. Pyrethroid resistance in *Helicoverpa zea* (Lepidoptera: Noctuidae). Annual Meeting of the North-Central Branch of the Entomological Society of America, Manitoba, B.C., Canada. *10-minute oral presentation*.

A.L. Jacobson, and R.E. Foster. Nov 2006. Pyrethroid resistance in *Helicoverpa zea* (Lepidoptera: Noctuidae). National Meeting of the Entomological Society of America, Indianapolis, IN. *10-minute oral presentation*.

D.C. Thompson, and **A.L. Jacobson**. Nov 2006. How important is it to confirm morphological identifications of fire ants with molecular techniques prior to implementing quarantine actions? National Meeting of the Entomological Society of America, Indianapolis, IN. *10-minute oral presentation*.

A.L. Jacobson, D.C. Thompson, R.A. Ramirez, and L. Murray. Mar 2005. Using PCR based techniques to accurately identify and distinguish the fire ants, *Solenopsis invicta* and

Solenopsis xyloni. The Entomological Society of America, Southwestern Branch Annual Meeting, Albuquerque, NM. *Poster presentation*.

A.L. Jacobson, D.C. Thompson, R.A. Ramirez, and L. Murray. Mar 2004. Morphological variation complicates identification of the fire ants, *Solenopsis invicta* and *Solenopsis xyloni*. Annual Meeting of the Southwestern Branch of the Entomological Society of America, Lubbock, TX. *Poster presentation*.

A.L. Jacobson, D.C. Thompson, and R.A. Ramirez. Nov 2003. Determining morphological variability of *Solenopsis invicta* and *Solenopsis xyloni*. The National Meeting of the Entomological Society of America, Salt Lake City, UT. *Poster presentation*.

A.L. Jacobson. 2003. A morphological and genetic comparison of *Solenopsis invicta* and *Solenopsis xyloni* to determine morphological and genetic variation that exists among these species. The Ronald E. McNair Summer Undergraduate Research Conference. *15-minute oral presentation*.

S.H. Thomas, J.M. Fuchs, and **A.L. Jacobson**. 2001. *Meloidogyne partityla*: an emerging nematode pest of pecan in New Mexico. Society of Nematology Annual Meeting. *Poster presentation*.

EXTENSION ACTIVITIES

Extension Publications

Conner, K.N., A. Strayer-Scherer, A. Hagan, J. Koebernick, A.L. Jacobson, K. L. Bowen, E. Sikora, S. Graham, and S. Brown. 2021. Cotton Leafroll Dwarf Virus. ANR-2539
<https://www.aces.edu/blog/topics/crop-production/cotton-leafroll-dwarf-virus/>

Graham, S., R. Smith, A. Jacobson. 2020. Using the Thrips Infestation Predictor for Cotton.
<https://www.aces.edu/blog/topics/crop-production/using-the-thrips-infestation-predictor-for-cotton/>

Hagan, A.K., K.N. Conner, K. Lawrence, J. Koebernick, **A. Jacobson**, K. L. Bowen, and R. Smith. 2019. A new virus disease in Alabama Cotton. ANR-2539,
<https://www.aces.edu/blog/topics/crop-production/a-new-virus-disease-in-alabama-cotton/>

Reed, T., R. Smith, **A. Jacobson**, and B. Freeman. 2017. Alabama cotton, soybeans: moth numbers still on the rise, scouting fields important before spraying. *AgFax Blog Post*
<http://agfax.com/2017/08/11/alabama-cotton-soybeans-moth-numbers-still-on-the-rise-scouting-fields-important-before-spraying/>

Brewer, M., R. Bowling, J.P. Michaud, and **A.L. Jacobson** 2016. Sugarcane Aphid: A new sorghum pest in North America. ACES Communication Publication: Reference No.: ANR-2356- Title: Sugarcane Aphids, <https://store.aces.edu/ItemDetail.aspx?ProductID=19149>

Majumdar, A., K. Balkcom, A.L. Jacobson, A. Chamiss, L. Knight. 2016. Peanut Insect Pest Management *Slide Chart/Manual*.

Herbert A., D. Reisig, A. Huseth, G.G. Kennedy, J. Greene, F. Reay-Jones, P. Roberts, **A.L.**

Jacobson, R. Smith, and T. Reed. 2016. Managing thrips in cotton: Research in the Southeast Region. *Compendia*. https://calscommproj.stl.vt.edu/Attachments/ENTO-182NP/ENTO-182NP_Ldscpev5.pdf

IPM0415, Cotton Insect, Disease, Nematode and Weed Control Recommendations for 2016. <http://www.aces.edu/pubs/docs/I/IPM-0415/IPM-0415.pdf>, *Manual*.

Additional Extension Educational Products

Reed, T., R. Smith, **A. Jacobson**, and B. Freeman. 2017. Alabama cotton, soybeans: moth numbers still on the rise, scouting fields important before spraying. *AgFax Blog Post* <http://agfax.com/2017/08/11/alabama-cotton-soybeans-moth-numbers-still-on-the-rise-scouting-fields-important-before-spraying/>

Jacobson A.L., C. Hicks, and K. Flanders. 2016. Should You Use an Insecticide Seed Treatment on Grain Sorghum? *AL Extension Agronomic Crops Blog* <https://sites.aces.edu/group/crops/blog/Lists/Posts/Post.aspx?ID=108>

Jacobson A.L., C. Hicks, and K. Flanders. 2016. Which Grain Sorghum Hybrids Are Resistant to Sugarcane Aphid? *AL Extension Agronomic Crops Blog* <https://sites.aces.edu/group/crops/blog/Lists/Posts/Post.aspx?ID=109>

Presentations at Extension Meetings, Workshops and Field Days

Roberts, P., M. Toews, S. Taylor, D. Reisig, A. Huseth, F. Reay-Jones, J. Greene, S. Paula-Mores, **A. Jacobson**, S. Graham, and R. Smith. 2021. Grow Plant Health Exchange Webinar found at: <https://www.planthealthexchange.org/cotton/Pages/GROW-COT-06-21-309.aspx>

Invited Presentation: **Jacobson, A.L.**, and P. Roberts. February 2021. Update on Aphid Vectors, Virus Spread and Management of Cotton Leafroll Dwarf Virus. National Conservation Systems Cotton & Rice Conference. Online. *50 minute oral presentation*.

Invited Presentation: **Jacobson, A.L.** December 2020. Update on Aphid Vectors and Management of Cotton Leafroll Dwarf Virus. 32th Annual Texas Plant Protection Conference. Online. *15 minute oral presentation*.

Invited Presentation: **Jacobson, A.L.**, K. Conner, P. Roberts. December 2019. CLRDV – What We've Learned from an Entomological Perspective. Mississippi Row Crops Short Course. Starkville, MS. *30 minute oral presentation*.

Invited Presentation: Roberts, P., **A.L. Jacobson**. December 2019. Aphid Management and Implications for CLRDV. Mississippi Row Crops Short Course. Starkville, MS. *30 minute oral presentation*.

Jacobson, A.L., P. Roberts, M. Toews. October 2019. The Aphid Vector. Cotton Leaf Roll Dwarf – like Virus (CLRDV) Research Review and Planning Meeting. Gulf Shores, AL. *15 minute oral presentation*.

Roberts, P., **A.L. Jacobson**, M. Toews. October 2019. Aphid Management. Cotton Leaf Roll Dwarf – like Virus (CLRDV) Research Review and Planning Meeting. Gulf Shores, AL. *15 minute oral presentation*.

Jacobson, A.L. September 2019. Update on *Cotton leafroll dwarf virus* & thrips prediction model. Cherokee County Insect Update. Nick McMichen's farm. Centre, AL. *10 minute oral presentation.*

Jacobson, A.L. September 2019. Update on *Cotton leafroll dwarf virus* & thrips prediction model. Blount County Cotton and Peanut Extension Field Day. Jimmy and Lance Miller's farm. Boaz, AL. *10 minute oral presentation.*

Roberts, P., M. Toews, **A. Jacobson**. June 2019. Aphid Management: Update for Southeastern Growers and Giners on the Recent Finding of Cotton Leaf Roll Dwarf – like virus (CLRDV) in Southeast US. Annual Meeting of the Southeastern Grower and Giners Conference. Fernandina Beach, FL. 15 minute oral presentation.

Invited Presentation: **Jacobson, A.L.** February 2019. Cotton Blue Disease: A New Aphid Transmitted Virus in the Southeastern U.S. The Georgia Association of Professional Agricultural Consultants/Agricultural Consultants Association of Alabama Annual Meeting, Tifton, GA. *30 minute oral presentation.*

Jacobson, A.L. August 2018. Biology, ecology and management of the cotton aphid in the Southeastern U.S. and status as a vector of cotton blue disease. Update on Cotton blue disease in Alabama and Georgia. Wiregrass Research and Extension Center, Headland, AL. *20 minute oral presentation.*

Jacobson, A.L. June 2018. Silverleaf Whitefly Management. Alabama Crop Management Association Summer Meeting. Gulf Shores, AL. *30 minute oral presentation.*

Jacobson, A.L. May 2017. Sugarcane Aphid Update. 2017 ACES Crops Webinar Series. *20 minute oral presentation.*

Jacobson, A.L. April 2017. The thrips infestation predictor for cotton. Alabama Extension Agent and Crop Consultant Meeting, Prattville, AL. *30 minute oral presentation.*

Jacobson, A.L. March 2017. Thrips research & management in cotton. Alabama Aerial Applicators Association Regulatory Meeting, Montgomery, AL. *30 minute oral presentation.*

Toews, M.D., D. Reisig, A. Huseth, G. Kennedy, J. Greene, F. Reay-Jones, P. Roberts, R. Smith, T. Reed, **A. Jacobson**, and A. Herbert. 2016. Managing thrips in cotton: Research in the southeast region. Module developed for the Focus on Cotton Webcast sponsored by the Plant Management Network. *Video Presentation.*
<http://www.plantmanagementnetwork.org/infocenter/topic/focusoncotton/>.

Jacobson, A.L. August 2015. Management of sugarcane aphid in sorghum, variety trial plot demonstrations. Wiregrass research and extension center field day, Headland, AL. *15 minute oral presentation.*

Jacobson, A.L. September 2015. Management of sugarcane aphid in sorghum, variety and insecticide trial research plot demonstrations. Brewton Agricultural Research Unit Extension Agent In-service Training, Brewton, AL. *15 minute oral presentation.*

Jacobson, A.L. September 2015. Management of sugarcane aphid in sorghum, variety trial plot demonstrations. Gulf Coast Research and Extension Center Field Day. Fairhope, AL. *15 minute oral presentation.*

Jacobson, A.L. December 2015. Management of sugarcane aphid on sorghum in Alabama. CCA Crops Seminar, Auburn, AL. *20 minute oral presentation.*

Flanders K.L., and **A.L Jacobson.** December 2015. Management of sugarcane aphid on sorghum in Alabama. AL Corn and Wheat Short Course, Auburn, AL. *30 minute oral presentation.*

PROFESSIONAL MEMBERSHIPS AND AFFILIATIONS

- Entomological Society of America, member, 2000-present.
- American Phytopathological Society, member, 2013-present.
- Peanut Rx Working Group, 2015-present
- Southeastern Row Crops Entomology Working Group, 2015-present, Chair 2016-2018.
- National Cotton States Arthropod Working Group, 2015-present
- Adjunct Professor, Department of Plant and Environmental Sciences, Clemson University, 2016-2020.
- North Carolina Entomological Society, member, 2009-2014.
- North American Colleges and Teachers of Agriculture Association, member, 2024-present.

SERVICE

Auburn University

- Auburn University Research Symposium, Student Competition Judge, 2025.
- The Crop, Soils and Environmental Science Academic Advisor, Search Committee, Fall 2024 – Spring 2025.
- The Department of Crop, Soils and Environmental Science at Auburn University, Associate Research Professor of Cotton Molecular Breeder, Faculty Search Committee, Fall 2024-Spring 2025.
- The College of Agriculture, Website usability/navigation focus group participation, 2023.
- The Department of Entomology and Plant Pathology, Executive Committee, 2023-present.
- The Department of Entomology and Plant Pathology, Awards Committee, 2020-2023, Chair 2020-2023.
- Auburn University, Biosafety Committee, 2016-2022.
- The Department of Crop, Soils and Environmental Science at Auburn University, Cropping Systems Agronomist Faculty Search Committee, Fall 2018-Spring 2019.
- The Department of Entomology and Plant Pathology, Cotton, Soybean and Peanut Entomologist Faculty Search Committee, 2019.
- The Department of Entomology and Plant Pathology, Insect Vector of Plant Pathogens Faculty Search Committee, Fall 2018-Spring 2019.
- The Department of Entomology and Plant Pathology, Insect Vector of Plant Pathogens Faculty Search Committee, Fall 2017-Spring 2018.
- The Department of Entomology and Plant Pathology, Medical Entomology Faculty Search Committee, Spring 2017.

- The Department of Entomology and Plant Pathology, Executive Committee, 2017.
- The College of Agriculture, Ag Discovery Day, Volunteer, insect scouting activity, 2014.
- The College of Agriculture, Cultivar and Germplasm Committee, 2016-present.

Scientific Societies

- Student Paper/Poster Competition Judge
 - Beltwide Cotton Conferences: New Orleans, LA 2025; Dallas, TX 2024; New Orleans, LA 2023; San Antonio, TX 2022, Fort Worth, TX 2023; New Orleans, LA 2024.
 - National Meeting of the Entomological Society of America, Minneapolis, MN 2015; Denver, CO 2017; St. Louis, MO 2019; Denver, CO 2021.
 - Joint Meeting of the International Congress of Entomology and the Entomological Society of America, Orlando, FL 2016.
 - International Plant Virus Epidemiology Symposium, Seoul, South Korea 2019.
- Moderator at Scientific Meetings
 - International Plant Protection Congress, Vector Symposium, Athens, Greece, 2024.
 - National Meeting of the Entomological Society of America, Student oral presentation competition, Vancouver, B.C., 2018.
 - International Whitefly Symposium, Management Section, Perth, Australia, September 2018.
- Symposia Organizer
 - Member Symposium: Applications of Molecular Ecology and Ecological Genomics to Agriculture and Pest Management, National Meeting of the Entomological Society of America, St. Louis, MO, November 2019.

Peer-Review for Journals

- Ad-hoc reviewer for: *Acta Zoologica Academiae Scientiarum Hungaricae*, *Central European Journal of Biology*, *Bulletin of Entomological Research*, *Journal of Agricultural and Urban Entomology*, *Journal of Economic Entomology*, *Entomologia Experimentalis et Applicata*, *Journal of Virology*, *PLoS One*, *Scientific Reports*, *Journal of Neotropical Entomology*, *Journal of Cotton Science*, *Plant Disease*, *Phytofrontiers*, *Environmental Entomology*, *Virology*, *Insects*.

Service to National Agencies, Federal Government, and Industry

- Grant Review Panel
 - USDA NIFA Panel Review, 12 proposals, Spring 2024
 - NSF, Ad hoc reviewer, 14 proposals, summer 2022
 - USDA Panel Review, 12 proposals, Spring 2022
 - USDA Panel Review, 12 proposals, Fall 2020.
 - USDA-NIFA, 28 proposals, Nov-Dec 2018.
- National Academies of Science, Engineering and Medicine ad hoc committee to provide guidance to the California Department of Food and Agriculture CDFA Pierce's Disease/Glassy-Wing Sharp Shooter (PD/GWSS) Board. Committee Member 2023-2025.

National and International Service to Other Universities

- Tenure Review, Mississippi State University, 2024
- Adjunct Professor, Department of Plant and Environmental Sciences, Clemson University, 2016-2020. Service on graduate student committee.
- External Thesis Review, The University of Western Australia, 2019.

HONORS & AWARDS

- 2023 New Mexico State University, Department of Entomology, Plant Pathology and Weed Science Outstanding Alumni Award. November.
- Best presentation in Vector-Virus Interactions Symposium, International Symposium of Thrips and Tospoviruses, Kunming, China, 2019.
- 2016, 2017, 2018, 2019 Auburn University College of Agriculture, Dean's Grantsmanship Award.

STUDENT HONORS & AWARDS

- John Mahas, 2024, Auburn University, Outstanding Doctoral Student.
- John Mahas, 2024, Auburn University, Graduate Student Council and the FYE Committee, awarded 'FYE Excellent Mentor'.
- John Mahas *1st place, Graduate student poster competition. October 2023. Auburn University's Graduate Student Poster Showcase. Auburn, AL. "The spatiotemporal distribution, abundance, and seasonal dynamics of cotton-infesting aphids in the southern U.S."
- John Mahas, PhD Student, Selected to participate in the 2023 Preparing Future Faculty Program offered through Auburn University's Biggio Center for the Enhancement of Teaching and Learning.
- Sanower Warsi, PhD Student, First Place PhD student poster competition. 2022 Annual Meeting of the Southeastern Branch Entomological Society of America Meeting. San Juan, Puerto Rico. "Intrinsic and extrinsic competitive interactions between *Ooencyrtus nezarae* and *Paratenomus saccharalis* in the central Alabama"
- John Mahas, PhD Student, *First place, PhD Student Oral Presentation competition. January 2022. Beltwide Cotton Conferences, San Antonio, TX. "Monitoring Seasonal Dynamics and Community Composition of Cotton Infesting Aphid Species in the Southern U.S."
- Nicholas Mueller, APBT, undergraduate research assistant, intern for APBT in my lab. Accepted into the competitive 2022 Cornell AgriTech Summer Scholars Program to work with Dr. Marc Fuchs on three-cornered alfalfa hopper and grapevine red blotch virus.
- Allison Sharp, undergraduate research assistant May-Dec 2022 assisting with CLR DV research. Accepted into the competitive 2022 Research Experience for Undergraduates at the University of Washington's Friday Harbor Lab, summer research on sexual selection and behavior in maritime earwigs.
- Lucinda McEachin, AU Undergraduate Research Fellowship, Summer 2022, Fall 2022, and Spring 2023 semesters, and consists of a \$4,400.00 stipend jointly funded by the College of Agriculture and the Office of Undergraduate Research.
- Victoria Washington, undergraduate research assistant, Center for Great Apes 2021 Intern Program.
- Autumn McLaughlin, MSc. Student, Entomological Society of America's, Southeastern Branch, Kirby L. Hayes Memorial Award for Outstanding MS Student. 2021.

- John Mahas *1st place, Graduate student poster competition. October 2020. Auburn University's Graduate Student Poster Showcase. Auburn, AL. "Quantifying Imidacloprid Susceptibility in Populations of *Aphis gossypii*."
- John Mahas, MSc. Student, *2nd place, Graduate student poster competition. November 2020. Entomological Society of America Virtual Annual Meeting. "Managing the Primary vector of Cotton leafroll dwarf virus does not Reduce Final Virus Incidence in Cotton."
- John Mahas, MSc. Student, Outstanding Masters Student, 2020. Department of Entomology and Plant Pathology, Auburn University.

PROFESSIONAL DEVELOPMENT TRAININGS

- Auburn University, Aspire Auburn: Leading People! 18-hr training, Spring of 2025.
- Auburn University, Biggio Center, Active Learning in Action: Lessons from a University-wide Active Learning Initiative. 1.5 hours, July 12, 2024.
- YALE School of Management Executive Education: Women's Leadership Program: Leading With Power and Influence, 6 week online course November 2023-January 2024.
- AU Safe Zone: LGBTQ+ Ally Training, 4 hours, March 23, 2023
- AU Employee Emergency Response and Active Shooter Response Training, 2 hrs, March 16, 2023.
- LeanIn 50 ways to Fight Bias Moderator Training, 1 hour long online training, April 27, 2022
- University of South Florida Muma College of Business, USF: DV1001, Online, 7-week Diversity, Equity and Inclusion in the Workplace Certificate. Summer 2021
- Auburn University, Supervisor Training: Team and Personal Resilience, March 8, 2021