

Jane Pierce

Publications, Proceedings and Presentations 2016-2021

INVITED BOOK CHAPTERS

Allen, C. T., **Pierce, J. B.**, et al. 2021. Cotton in the United States of America and Mexico. *In* G. Matthews (Ed.), Pest Management in Cotton: A Global Perspective. London: CABI.

SELECTED RESEARCH PUBLICATIONS

Pierce, J. B., Tellez, I., Monk, P. (2022). Influence of Plant Architecture of Okra Leaf Cotton on Crop Microclimate, Solar Radiation and *Helicoverpa zea* Egg Hatch. *In* Beltwide Cotton Conferences. National Cotton Council. Carey, NC. (In-Press)

Tellez, I., **Pierce, J. B.**, Monk, P. (2021). Effect of Okra-Leaf Cotton on Canopy Microclimate and *Helicoverpa zea* (Boddie) Survival. *In* National Cotton Council of America. Beltwide Cotton Conferences. Carey, NC. pp. 588-596.

Pierce, J.B., P. Monk, I. Tellez and S. Biles. (2020) Variation in Heliothine Injury and Yields in Selected Cotton Cultivars in New Mexico. *In* National Cotton Council of America. Beltwide Cotton Conferences. New Orleans, LA. pp. 404-407.

Zhang, J, D. Fang. **J. Pierce**. (2020). QTL Analysis of Agronomic, Fiber Quality, and Abiotic Stress Tolerance Traits in a Recombinant Inbred Population of Pima Cotton *Gossypium barbadense* L. *Crop Sci.* V60 1823-1843.

Pierce, J.B., P. Monk and S.Biles. (2019). Variation in Plant Injury and Yield by Lepidopterous Pests in Selected Cultivars of Bt Cottons in New Mexico. *In* National Cotton Council of America. Beltwide Cotton Conferences. New Orleans, LA. pp. 287-291.

Vyavhare. S., M. Parajulee, D. Kerns, B. Reed, J.D. Gonzales, M. Brewer, D. Sekula, T. Mays, T. Doederlein, A. Hakeem, **J.B. Pierce** and A. Kesheimer. (2019). Evaluating Efficacy and Economic Profitability of Preventive Insecticidal Seed Treatments in Cotton. *In* National Cotton Council of America. Beltwide Cotton Conferences. New Orleans, LA. Pp. 79-81

Rethwisch, Michael, **J.B. Pierce**. (2019) Insecticide Resistance in Alfalfa Weevil and Related Implications for Other Alfalfa Insect Pests. Western Alfalfa and Forage Symposium. Reno, NV Michael Rethwisch, University of California Cooperative Extension, Blythe, CA

Idowu, O. J., Zhang, J., **Pierce, J. B.**, Omer, M. and Wedegaertner, T. C. (2018). Impacts of Potassium Fertilization on New Glandless Cotton Cultivars Developed for New Mexico. *In* Proceedings 72nd Beltwide Cotton Conference, National Cotton Council of America, San Antonio, TX. pp. 153-156.

Indocochea, A., Gard, C., Hansen, I. A., **Pierce, J. B.**, Romero, A. (2017). Short-Range Responses of the Kissing Bug *Triatoma rubida* (Hemiptera: Reduviidae) to Carbon Dioxide, Moisture, and Artificial Light. *Insects.* 8, 90 12pp

Pierce, J.B., Monk, P. Idowu, O.J. (2017). Predation of Sentinel Eggs in Cotton and Sorghum in New Mexico. *In* Proceedings 71st Beltwide Cotton Conference, National Cotton Council of America,

Dallas, TX. pp. 536-541.

Pierce, J. B., Monk, P., Richman, D. B., Idowu, O. J. (2016). Control of Insect Pests in Glandless Cotton: The Role of Biological Control in New Mexico. *In Proceedings 70th Beltwide Cotton Conference*, National Cotton Council of America, New Orleans, LA. pp. 198-201.

Idowu, O. J., Zhang, J., Flynn, R. P., **Pierce, J. B.**, Wedegaertner, T. C. (2016). Performance of New Glandless Cotton Lines As a Function of Soil Type and Nitrogen Rates. *In Proceedings 70th Beltwide Cotton Conference*, National Cotton Council of America, New Orleans, LA. pp. 58-61.

EXTENSION PUBLICATIONS

Sutherland, C. A., Skidmore, A., Lauriault, L. M., Marsalis, M. A., **Pierce, J. B.** (2021) *Circular 659*, *Whitefringed Beetle in New Mexico Alfalfa*. Las Cruces, NM: Agricultural Experiment Station and Cooperative Extension Service, New Mexico State University. 13 pp.

Pierce, J. B., Lujan, P. (2020). *Pest Identification. Guide A-610: Extension Pesticide Applicator Training Series #1*: Las Cruces, NM: NMSU, University Communications, Cooperative Extension Service.

Pierce, J. B., Lujan, P. (2020).: *Treatment Area Measurements. Guide A-612: Extension Pesticide Applicator Training Series #3* Las Cruces, NM: NMSU, University Communications, Cooperative Extension Service.

Pierce, J. B., Lujan, P. (2020). *Pest Management Practices. Guide A-611: Extension Pesticide Applicator Training Series #2*: Las Cruces, NM: NMSU, University Communications, Cooperative Extension Service

Pierce, J. and P. Lujan. (2019) *Extension Pesticide Applicator Training Series #3: Treatment Area Measurements. Guide.A-612*. Las Cruces, NM. New Mexico State University Cooperative Extension Service.

Pierce, J. (2019) *Conchuela Stink Bug in New Mexico Cotton*. Guide A-238. Las Cruces, NM. New Mexico State University Cooperative Extension Service.

J. Pierce. (2018) *Beet Armyworm in New Mexico Hay*. Guide A-334. Las Cruces, NM. New Mexico State University Cooperative Extension Service

J. Pierce. (2018) *Harlequin Bug*. Guide H-259. New Mexico State University Cooperative Extension Service

Lauriault, L. M., Thompson, D, **Pierce, J. B.**, Bennett, A., Schutte, B. J., Beck, L. L., Sutherland, C. A., Jimenez, D. D., Hamilton, W. V. (2018) Circular 600: *Aceria malherbae gall mites for control of field bindweed*. Las Cruces, NM: NMSU Cooperative Extension Service.

J. Pierce. (2018) *Variiegated Cutworm in New Mexico Hay*. Guide A-335. Las Cruces, NM. New Mexico State University Cooperative Extension Service.

Sutherland, C. A., **Pierce, J. B.**, Lewis, B. E., Heerema, R. (2017). Ana Henke, Frank Sholdice (Ed.), *Pecan Weevil: Wanted Dead, Not Alive* (pp. 8 pp.). Las Cruces, NM.,

Pierce, J. B., and C. Sutherland. (2017). *Guide L-110: Honey Bees in New Mexico*. Las Cruces, NM: NMSU, University Communications, Cooperative Extension Service.
ces.nmsu.edu/pubs/_/L110.pdf

Pierce, J. B., French, J. (2016). *Extension Pesticide Applicator Training Series #4: Sprayer Calibration*. Las Cruces, NM: New Mexico State University Cooperative Extension Service.
http://aces.nmsu.edu/pubs/_a/A613/welcome.html.

Pierce, J. B., French, J. (2016). *Extension Pesticide Applicator Training Series #5: Calculating Pesticide Amounts for Broadcast Applications*. Las Cruces, NM: New Mexico State University Cooperative Extension Service. aces.nmsu.edu/pubs/_a/A614/

SELECTED PRESENTATIONS

Pierce, J. B., Tellez, I., Monk, P., (2022) 10th International IPM Symposium, University of Illinois, Denver, CO, "Integrated pest management of cotton in New Mexico: will okra leaf cotton reduce *Helicoverpa zea* populations in semi-arid environments with developing resistance to Bt cottons"

Tellez, I. (Presenter), **Pierce, J. B.**, Monk, P., (2021). International Arid Lands Consortium (IALC) conference: Addressing the Environmental Challenges of Arid Lands., IALC, Tucson, AZ, "Effect of Okra Leaf Cotton on Canopy Microclimate and *Helicoverpa zea* (Boddie) Survival"

Tellez, I. (Presenter), **Pierce, J. B.**, Monk, P., (2021). NMSU EPWS 590 Seminar Series, NMSU, Las Cruces, NM, "Evaluation of plant injury and egg hatch of *Helicoverpa zea* in select cotton cultivars".

Tellez, I. (Presenter), **Pierce, J. B.**, Monk, P., (2021). NMSU EPWS 590 Seminar Series, NMSU, Las Cruces, NM, "Evaluation of plant injury and yield by Lepidopteran pests in three cultivars of *Bacillus thuringiensis* cotton."

Tellez, I., **Pierce, J. B.**, Monk, P., (2021) Entomological Society of America Annual Meeting, Entomological Society of America, "Effect of Okra-Leaf Cotton on Canopy Microclimate and *Helicoverpa zea* (Boddie) Survival"

Pierce, J. B., (2021) NMSU Sustainable Agriculture Science Center at Alcalde Field Day, NMSU, Alcalde, NM, "Insect Diversity".

Pierce, J. B. (Presenter), Tellez, I., Monk, P., (2021) Artesia Field Day, ASC Artesia, "Effect of Okra-Leaf Cotton on Canopy Microclimate, Solar Radiation and *Helicoverpa zea*"

Pierce, J. B., (2021) New Mexico Pesticide Training CEU's, NMSU, ASC Artesia, "Integrated Pest Management in New Mexico"

Pierce, J. B. (Organizer/Presenter), Kircher, P. D. (Organizer), Tellez, I., Monk, P., (2021) ASC Artesia on the Move, NMSU, "Who's in Your Backyard?: Are there Invisible Heroes inside?", (Field Workshop).

Pierce, J. B., (2021) NMSU Pesticide Applicators Webinar Series, NMSU, "Insect Pest Management - CEU Recorded Presentation"

Pierce, J. B., Tellez, I., Monk, (2021) Ag Leadership Seminar, NMSU, ASC Artesia, "Insect Pest Management"

Pierce, J. B. (Discussant), (2021) SE New Mexico Agricultural Research Association, Artesia, NM, "IPM of Insects in New Mexico 2020"

Tellez, I., **Pierce, J. B.**, Monk, P., (2021) Beltwide Cotton Conference, National Cotton Council, Carey, NC, "Effect of Okra-Leaf Cotton on Canopy Microclimate and *Helicoverpa zea* (Boddie) Survival",

Tellez, I., **Pierce, J. B.**, Monk, P., (2020). Entomological Society of America Annual Meeting, Entomological Society of America, " Okra-Leaf Cotton Influence on Canopy Microclimate and *Helicoverpa zea* (Boddie) Survival".

- Pierce, J. B.** (2020). NMSU Pesticide Applicators Webinar Series, NMSU, "IPM for Urban and Small Farms: Insect Pest Management. Invited P. Lujan
- Pierce, J. B.** (2020). NMSU Pesticide Applicators Webinar Series, NMSU, "Irrigated Pastures: Insect Pest Management", Invited by Emily Burton
- Pierce, J. B.** (Discussant), (2020) SE New Mexico Agricultural Research Association, Artesia, NM, "IPM of Insects Developments in New Mexico"
- Pierce, J.B.** (2019) Cotton Pest Outlook and Status of Bt Cotton for Eastern NM. Portales, NM. Eastern NM Pesticide CEU Workshop.
- Pierce, J.B.** (2019) Insect Pest Update 2019. Portales, NM. Eastern NM Pesticide CEU Workshop
- Pierce, J.B.** (2019) Insect Pest Management for the Pecos Valley. Chaves Co. Pesticide CEU Workshop. Roswell, NM.
- Pierce, J.B** (2019) Sorghum Insect Pest Management. Ft. Sumner, NM. DeBaca/Guadalupe Co Pest Management Workshop
- Pierce, J. B.,** (2019) All about Science/ Ag in the Classroom, Park Jr High, Artesia, NM, "Introduction to Entomology"
- Pierce, J. B.** (2019) Pesticide Applicators Workshop, NMSU, "Insect Pest Problems 2019. Hobbs, NM
- Pierce, J. B.,** Monk, P., Idowu, O. J. (2018). Predation of Sentinel Eggs in Cotton and Sorghum in New Mexico. Albuquerque, NM. Entomological Society of America, Southwestern Branch Annual Meeting.
- Pierce, J. B.,** Monk, P., N. Guillermo and A. Pierce. (2018). Predation of Sentinel Lepidopteran Eggs in New Mexico Pecan Orchards. Albuquerque, NM. Entomological Society of America, Southwestern Branch Annual Meeting.
- Pierce, J.B. and P. Monk.** (2018). Optimizing Control of Insect Pests: Reducing Insecticide Use and Minimizing Economic Injury with JMP. JMP Summit. Carey, NC. (Received 2nd place award for professional presentations)
- Idowu, J. J. Zhang; **J Pierce**, M Omer, T Wedegaertner (2018). Impacts of Potassium fertilization on new glandless cotton cultivars developed for New Mexico. *In* National Cotton Council of America (Ed) Beltwide Cotton Conferences. San Antonio, TX
- Pierce, J. B.,** Monk, P. and O.J. Idowu, NMSU ACES Open House. Predation of Sentinel Eggs in Cotton and Sorghum in New Mexico, Poster Presentation. (April 2018)
- Monk, P. and **Pierce J.B.** 2018. Evaluating Efficacy of Selected Seed Treatments against Thrips in Seedling Cotton in Artesia, New Mexico. Cotton Incorporated State Support Board Meeting. Ruidoso, NM
- Pierce, J. B.,** Monk, P., Idowu, O. J. (2017). Predation of Sentinel Eggs in Cotton and Sorghum in New Mexico. Austin, TX: Entomological Society of America, Southwestern Branch Annual Meeting.
- Pierce, J. B.,** Monk, P. E., Idowu, O. J., (2017) Beltwide Cotton Conference, National Cotton Council, Dallas, TX, "Predation of Sentinel Eggs in Cotton and Sorghum in New Mexico"
- Pierce, J. B.,** Monk, P., Idowu, O. J., (2017) Entomological Society of America National Meeting, Entomological Society of America, Denver, CO, "Predation of Sentinel Eggs in Cotton and

Sorghum in New Mexico"

- Pierce, J. B.** (2017) Sorghum-Sugarcane Aphid Regional Program Research Exchange Workshop. Sugarcane Aphid in New Mexico. Dallas, TX.
- Pierce, J. B.**, (2017) 8th Annual Forage Growers Workshop, New Mexico State University, Los Lunas, NM, "Alfalfa Weevil and White Fringed Beetle Control in New Mexico
- Lopez, Bo and **J.B. Pierce.** (2017) Catron County Pesticide Applicator Workshop. Catron County Extension Service, Reserve, NM. Grasshopper Biology and Control in New Mexico. NM CEU available
- Pierce, J. B.** (2017), Roosevelt County Private Applicator Renewal Workshop, Roosevelt County Extension Service, Portales, NM, " Sugarcane Aphid Management in New Mexico Sorghum ", NM and TX CEU available
- Pierce, J. B.** (2017), Pesticide Applicators Workshop, NMSU, Hobbs, NM, "Emerging Insect Pests 2017", NM CEU available
- Pierce, J. B.** (2016), Pesticide Applicators Workshop, NMSU Cooperative Extension Service, Clovis, NM, "Emerging Agronomic Insect Pests 2016"
- Pierce, J. B.** (2016), Roosevelt County Private Applicator Renewal Workshop, Roosevelt County Extension Service, Portales, NM, "Biology and Control of Sugarcane Aphid in New Mexico",
- Pierce, J. B.** (2016), Quay County Private Applicators workshop, Quay County Extension Office, Tucumcari, NM, "Sugarcane Aphid Update",
- Pierce, J. B.** (2016), Chaves County Pesticide Applicator Workshop, Chaves County extension Office, Roswell, NM, "Insect Issues 2015"
- Pierce, J. B.**, Hanson, S. F., Bendixsen, D.(2016) Entomological Society of America National Meeting/XXV International Congress of Entomology, Entomological Society of America, Orlando , FL, "Changes in Incidence of Trypanosoma cruzi in New Mexico Triatomines."
- Pierce, J. B.** (2016), Artesia Field Day, ASC Artesia, "Economic Impact of Insect Pests in Southeastern NM"
- Pierce, J. B.** (2016), Alcalde Field Day, ASC Alcalde, "Alfalfa Weevil Biocontrol"
- Pierce, J. B.** (2016), Clovis Canola and Wheat Field Day, ASC Clovis, "Sugarcane Aphid Management",
- Pierce, J. B.** (2016), Earth Day/ Ag in the Classroom, Artesia, NM, "Ag in the Classroom"
- Pierce, J. B.** (2016), Ag Expo, Portales, NM, "Sugarcane Aphid Management in New Mexico"
- Pierce, J. B.** (2016), Guadalupe County Crop Rotation and Improvement Workshop, Santa Rosa, NM, "Insect Issues 2015"
- Pierce, J. B.**, Monk, P. E., Idowu, O. J. (2016), Southwestern Branch ESA Annual Meeting, Southwestern Branch Entomological Society of America, Tyler, TX, "Predation of sentinel bollworm (Helicoverpa zea) eggs in glanded and glandless cotton in New Mexico"
- Pierce, J. B.** (2016), New Mexico Crop Producers Association, New Mexico Crop Producers Assoc and NMSU Extension, Ruidoso, NM, "Forage Insects in New Mexico"

Pierce, J. B. (2016), New Mexico Hay Association, New Mexico Hay Assoc and NMSU Extension, Ruidoso, NM, "Forage Insects in New Mexico"

Pierce, J. B. (2016), New Mexico Cotton Growers, New Mexico Cotton Growers Assoc and NMSU Extension, Ruidoso, NM, "Insect Issues 2016"

Pierce, J. B., Monk, P. E., Richman, D. B., Idowu, O. J. (2016), Beltwide Cotton Conference, National Cotton Council, New Orleans, LA, "Control of Insect Pests in Glandless Cotton: The Role of Biological Control in New Mexico"

Zhang, J., **Pierce, J. B.** (2016), Beltwide Cotton Conference, National Cotton Council, New Orleans, LA, "Genetic analysis of yield, fiber quality and abiotic stress tolerance in Pima cotton"

Idowu, O. J., Zhang, J., Flynn, R. P., **Pierce, J. B.**, Wedegaertner, T., (2016) Beltwide Cotton Conference, National Cotton Council, New Orleans, LA, "Performance of New Glandless Cotton Lines As a Function of Soil Type and Nitrogen Rates".