

L. Jason Krutz

Director, Mississippi Water Resources Research Institute, Mississippi State University

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EDUCATION

- Ph.D. Agronomy, Texas A&M University, College Station, TX, 2004
- M.S. Agronomy, University of Arkansas, Fayetteville, AR, 2000
- B.S. Agronomy, University of Arkansas, Fayetteville, AR, 1996

PROFESSIONAL EXPERIENCE

- **Director**, Mississippi Water Resources Research Institute, Mississippi State University, Starkville, MS, 2017 – Present
- **Research and Extension Professor**, Dept. Plant and Soil Sciences, Mississippi State University, Starkville, MS, 2012-Present
- **Research Soil Scientist**, United States Department of Agriculture, Agricultural Research Service, Stoneville, MS, 2004 – 2012

INTERNATIONAL AND NATIONAL CONSULTING

- **Silver Analytical Solutions, LLC**, January of 2022 to Present, Co-proprietor and Vice President of Research and Project Development.
- **Silverleaf International, LLC**, August of 2018 and July of 2019, Responsible for evaluating the irrigation and drainage infrastructure in Uzbekistan and developing a Strength, Weakness, Opportunity, and Threat analysis for cotton production in the Jizzakh Region. Our analysis laid the framework for the initial \$350,000,000 investment made by Silverleaf International in an Uzbekistan Agro-Cluster venture.
- **Executive Director, H2O Initiative, Delta Plastics**, 2016-2018. Responsible for the identification and promotion of irrigation water management tools for furrow and flood irrigation through technical expertise and orchestrating projects throughout the agricultural community in Arkansas, Louisiana, and Missouri. Coordinate education and adoption of the best irrigation management and practices through training events, seminars, boot camps and field days.

HONORS and AWARDS

- Fellow, American Society of Agronomy, 2022
- Conservation Systems Irrigation Researcher of the Year, 22nd Annual National Conservation Systems Cotton and Rice Conference, Baton Rouge, LA, 2019
- Agricultural Achievement Award, Mid-South Farm and Gin Show, Memphis, TN, 2015
- Conservation Systems Soybean Researcher of the Year, 18th Annual National Conservation Systems Cotton & Rice Conference, Baton Rouge, LA, 2015
- United States Department of Agriculture, Agriculture Research Service, Mid-South Area, Early Career Research Scientist, Scientist of the Year Award, 2008
- Graduate Research Award, Department of Soil and Crop Sciences, Texas A&M University, 2003

FEDERAL, STATE AND PRIVATE SECTOR FUNDING – \$27.2 MILION TO DATE

- **Krutz, L.J.**, G.D. Spencer, Z. Reynolds, D.M. Gholson, B.E. Mills. 2023. How low can you go? Automating tailwater reuse to reduce freshwater demand and greenhouse gas emissions in rice. National Resources Conservation Service, On-Farm Grants, \$4,885,341
- Spencer, G.D, Z. Reynolds, Gina, **Krutz, L.J.** 2023. Precision Agriculture Accelerates Nutrient Reductions. United States Environmental Protection Service, \$1,500,000
- Gholson, D.M., **L.J. Krutz**, G.D. Spencer, B.E. Mills. 2021. Life after the flood: disrupting rice farming by integrating automated, IoT-Irrigation Technologies into a low-water-use production System. National Institute of Food and Agriculture \$749,993.
- **Krutz, L.J.** 2020. Sensible agronomics and shrewd conversations support the adoption of environmentally sustainable and economically sound production systems. United States Environmental Protection Agency, \$1,000,000
- **Krutz, L.J.** 2020. Combining cover crops with irrigation water management technologies to economically reduce pollutant loss from farm fields, transport of agrochemicals in streams, and aquifer decline. Natural Resource Conservation Service, Conservation Initiative Grant, \$1,488,319
- Gholson, D., A. Deason, and **L.J. Krutz**. 2020. Innovative Technologies for Water Conservation in Flood Irrigation Systems. United States Department of Agriculture, Natural Resource Conservation Service, Conservation Initiative Grant, \$860,978

PEER REVIEWED PUBLICATIONS, 148 TO DATE

- Sanders, T.L., J.A. Bond, T.W. Allen, D. Gholson, **L.J. Krutz**, and E.P. Webster 2024. Barnyardgrass (*Echinochloa crus-galli*) control and rice injury with labeled herbicides following exposure to sub-lethal concentrations of paraquat. Weed Science. DOI: 10.1017/wet.2024.8.
- Dhakal, M., M.A. Locke, K.N. Reddy, M.T. Moore, R.W. Steinriede, Jr., and **L.J. Krutz**. 2024. Improving soil water storage with no-till cover cropping in the Mississippi River Alluvial Basin. Soil Science Society of America Journal. <https://doi.org/10.1002/saj2.20638>.
- Denton, S., P. Gajula, D. Dodds, **L.J. Krutz**, J. Gore, J. Varco, T. Rapper and J. Dhillon. 2024. Cotton cultivar response to potassium fertilizer under irrigated and dryland conditions. Agronomy Journal DOI: 10.1002/agj2.21546.
- Vargas, A., Singh, G., Gurpreet, G., Lo, T.H. Spencer, G.D., **Krutz, L.J.** and Gholson, D.M. 2024. Urea ammonium nitrate placement, row patterns, and irrigation affect corn in humid subtropical region. Agrosystems, Geosciences and Environment. DOI:10.10002/agg2.20462.
- Hall, S., D. Dodds, B. Pieralis, T. Raper, W. Croy A. Catchot, T. Irby, D. Spencer, **L.J. Krutz**. 2024. Agroeconomic Differences Among Alternative Cotton Row Spacings and Row Patterns. Agronomy Journal. DOI:10.1002/agj2.21524.