



# 33<sup>RD</sup> MILAN NO-TILL CROP PRODUCTION FIELD DAY

Thursday, July 25, 2024  
8 a.m. – 1 p.m.

North Tract of the AgResearch  
and Education Center  
at Milan, Tennessee

731-686-7362  
[MILAN.TENNESSEE.EDU](http://MILAN.TENNESSEE.EDU)

**UTIA** INSTITUTE OF  
AGRICULTURE  
THE UNIVERSITY OF TENNESSEE

UT AGRESEARCH AND UT EXTENSION



**CORTEVA**<sup>™</sup>  
agriscience



***PhytoGen***  
COTTONSEED



**PIONEER**<sup>®</sup>

**syngenta**

The University of Tennessee AgResearch  
and Education Center at Milan

# *Welcomes You*

to the 33rd Milan No-Till  
Crop Production Field Day.

---

*Since 1981, the Milan No-Till Field Day has hosted visitors from across the country and around the world to the largest field day in the nation dedicated to conservation tillage. In the beginning, we demonstrated how to “no-till,” and basic tours on planter setup and weed control were available.*

*Since those early years, the field day has progressed to include not only no-till basics but also to show producers how to incorporate the latest technologies into a no-till system.*

---

One constant through the years has been the staff, both present and past, of the AgResearch and Education Center at Milan, and none of the thirty-three No-Till Field Days would have been possible without them. We have the privilege of working daily with some of the finest agricultural scientists in the world, but the behind-the-scenes efforts of our staff make the research program possible. They are a dedicated group of individuals who have a passion for agricultural research, doing the job right, and producing the very best data possible for our producers who utilize this information.

Please allow me to introduce our staff to you and publicly thank them for the great job they do!  
The current staff of the AgResearch and Education Center at Milan includes:

Name	Title	Service Yrs.
Jason Williams	Research Associate	28
Ben Jakubowski	Museum Guide	5
Jordan Lasater	Sr. Plot Caretaker	5
LesLee Smelser	Administrative Assistant	8
Joey Duncan	Sr. Plot Caretaker	4
Blake Smith	Sr. Plot Caretaker	6
Bryan Garren	Research Assistant	3
Allie Wagster	Administrative Assistant	39
Chad Hicks	Sr. Farm Crew Leader	23
Blake Brown	Director	26





We appreciate your attendance and interest today at the nation's largest field day devoted to no-tillage crop production. We hope that you will learn techniques for increasing production, reducing expenses, and improving marketing skills or increasing the efficiency of your crop production operation.

We sincerely appreciate the support of the Milan community and all of its assistance with making this event a success since 1981.

The final pages of the program describe the amenities available during the activities and include a map of the field day site. Please let us know if we can assist you. It is our desire that you have an educational and enjoyable visit to the AgResearch and Education Center at Milan. Thank you for being one of the thousands to visit the nation's largest No-Till Field Day!



Blake A. Brown  
Center Director



Hongwei Xin, Dean

Timothy Rials, Associate Dean

Barry Sims, Executive Director

Blake A. Brown, Research Center Director



## *Thank You!*

Special thanks to UT Martin students Zaria Creighton and Moriah Freeman for their designs of the field day logos for this program and the field day caps, respectively.



---

# FIELD DAY ACTIVITIES

Registration Begins	7:00 a.m.
Commercial and Educational Displays	8:00 a.m. to 1:00 p.m.
Research Tours (Tour A-O)	8:00 a.m. to 1:00 p.m. (last tour begins at Noon)

## AgResearch and Education Center at Milan Research Tours

This year, 15 research tours will be featured. Tours will start at 8:00 a.m. CDT, Thursday, July 25. The final tours of the day will start no later than 12:00 p.m. Tours are 1 hour in length.

NOTE: Those desiring to take several tours should plan to arrive early. Complete descriptions of tours and tour stops begin on page 7.

## AgResearch and Education Center at Milan Overview Tour

Visitors to the Milan No-Till Field Day are invited to participate in the AgResearch and Education Center at Milan Overview Tour for a brief introduction to UT AgResearch. Participants will be given a tour of the AgResearch and Education Center at Milan. Various research projects along the tour route will be described. Participants will board the Overview Tour Trailers on the east side of the exhibit area and south of the West Tennessee Museum. This tour will last approximately 20 minutes and will be provided continuously throughout the day. Tours will be available from 8:00 a.m. through 1:00 p.m.

## West Tennessee Agricultural Museum

The West Tennessee Agricultural Museum will be open throughout the No-Till Field Day events between the hours of 7:00 a.m. and 2:00 p.m. Large displays of antique farm equipment and tools used by early West Tennessee settlers are featured. The museum is located on the field day site. Admission is free.

**Point Signup and Recertification Requirements for Commercial Applicators:**

Individuals who currently have a valid commercial applicator certification card must accumulate credit (points) during the three-year certification cycle to retain their certification into the next certification cycle. For more information concerning point requirements, please visit [psep.utk.edu](http://psep.utk.edu).

Tennessee’s Pesticide Coordinator has requested **recertification points** for categories listed in the following table.

	C1	C10	C12
Tour A	1	1	1
Tour B	1	1	1
Tour C	1	1	1
Tour D	1	1	1
Tour E	1	1	1
Tour F	1	1	1
Tour O	1	1	1

Commercial Pesticide applicators **MUST COMPLETE REGISTRATION WITH YOUR CERTIFICATION NUMBER** at the tent where the tour is held to obtain credit.

Rosters containing attendee information will be forwarded to the Tennessee Department of Agriculture so attendees may receive recertification credit.

## **Certified Crop Adviser Program Continuing Education Units**

The Tennessee Certified Crop Advisor Board has requested the following Continuing Education Units (CEUs): 1.5 nutrient management, 1.5 soil and water management, 8.5 crop management, 2.5 integrated pest management, and 1.0 Professional Development. According to information available on the International CCA Program website, Tennessee approved CEUs are recognized by local boards in all states.

Nutrient management CEUs are available on Tours A and N; soil and water management CEUs are available on Tours G and L; crop management CEUs are available on Tours B, C, F, H, I, J, K, L, and O; integrated pest management CEUs are available on Tours A, D, and E; and Professional Development CEUs are available on Tour M.

**Certified Crop Advisors MUST SIGN the sign-up sheets located at the tent where the tour is held to obtain credit.**

---

## TOUR A: NO-TILL CORN PRODUCTION

Event	Time/Location
Tour A	8 a.m., Tent 1 9 a.m., Ag Museum

*This tour will require 1 hour.*

### Corn Production Using Broiler Litter

**Shawn Hawkins**

Professor

UT Department of Biosystems Engineering &  
Soil Science

### Utility of Biologicals in Corn

**Justin Calhoun**

Assistant Professor

Extension Soil & Cropping Systems Specialist  
University of Missouri  
Division of Plant Science & Technology

### Foliar Diseases and Management in Corn

**Heather Kelly**

Professor

UT Department of Entomology & Plant Pathology

### Nitrogen Application Timings in No-Till Dryland Corn Production Systems

**Nutifafa Adotey**

Assistant Professor

UT Department of Biosystems Engineering &  
Soil Science



---

# TOUR B: NO-TILL COTTON PRODUCTION

Event	Time/Location
Tour B	9 a.m., Tent 1 12 p.m., Ag Museum

*This tour will require 1 hour.*

## Cotton Agronomic Update

Bradley Wilson  
Cotton Specialist  
University of Missouri

## Cotton Foliar Disease Update and Management

Amanda Strayer-Scherer  
Extension Plant Pathologist  
Auburn University

## Addressing Compaction in Cotton

Tyson Raper  
Associate Professor  
UT Department of Plant Sciences

## Managing Nematodes in Cotton

Travis Faske  
Professor  
Extension Plant Pathologist  
The University of Arkansas  
Division of Agriculture

---

# TOUR C: NO-TILL SOYBEAN PRODUCTION

Event	Time/Location
Tour C	10 a.m., Tent 1 11 a.m., Ag Museum

*This tour will require 1 hour.*

## Soybean Response to Planting Date

Jake McNeal  
Assistant Professor  
UT Department of Plant Sciences

## Desiccating Soybean

Jake McNeal  
Assistant Professor  
UT Department of Plant Sciences

## Foliar Diseases & Management in Soybean

Elias Zucheli  
Graduate Research Assistant  
UT Department of Entomology & Plant Pathology

Heather Kelly  
Professor  
UT Department of Entomology & Plant Pathology

## Using A.I. to Detect Flower Abortion in Soybean

Avat Shekoofa  
Associate Professor  
UT Department of Plant Sciences

---

# TOUR D: UPDATE ON PESTICIDE LABELS AND HISTORY OF THE ENDANGERED SPECIES ACT (ESA)

## Georgia’s Work on Pesticide Use Limitation Areas for Endangered Species

Event	Time/Location
Tour D	8 a.m., Ag Museum 12 p.m., Tent 1

*This tour will require 1 hour.*

**Kim Brown**  
Extension Specialist  
University of Tennessee

**Taylor Singleton**  
Assistant Professor  
Extension Sustainability Specialist  
University of Georgia

---

# TOUR E: HERBICIDE-RESISTANT WEED MANAGEMENT

Event	Time/Location
Tour E	11 a.m., Tent 2

*This tour will require 1 hour.*

**Larry Steckel**  
Professor  
UT Department of Plant Sciences

**Taylor Singleton**  
Assistant Professor  
Extension Sustainability Specialist  
University of Georgia

---

# TOUR F: IMPACTS OF THRYVON TECHNOLOGY ON ECONOMICALLY IMPORTANT INSECTS IN COTTON

Event	Time/Location
Tour F	10 a.m., Ag Museum 11 a.m., Tent 1

*This tour will require 1 hour.*

## Influence of ThryvOn on Spider Mites

Chase Floyd

Assistant Research Professor &  
State Extension Crop Protection Specialist  
University of Missouri

## Damage Potential of Stink Bugs in ThryvOn Cotton

Nathan Arey

Graduate Research Assistant  
UT Department of Entomology & Plant Pathology

## Tobacco Thrips Resistance Update and ThryvOn Performance

Sebe Brown

Assistant Professor  
UT Department of Entomology & Plant Pathology

---

## TOUR G: CROP WATER MANAGEMENT

Event	Time/Location
Tour G	8 a.m., Tent 2

*This tour will require 1 hour.*

### **Outside of Disease Protection, What Other Benefits Can Xyway LFR Fungicide Help Growers With?**

**Isha Poudel**

Postdoctoral Fellow

UT Department of Plant Sciences

**Avat Shekoofa**

Associate Professor

UT Department of Plant Sciences

### **The Costs and Benefits of Cover Crops and No-Till in Irrigated Cotton**

**Carson Roberts**

Assistant Professor & State Extension Specialist for Forage Agronomy

Northern Missouri Research, Extension & Education Center

University of Missouri

**Drew Gholson**

Assistant Professor & Extension Irrigation Specialist  
Coordinator, National Center for Alluvial Aquifer Research

Delta Research & Extension Center  
Stoneville, MS

### **Irrigation Strategies for Corn and Soybean**

**Jake McNeal**

Assistant Professor

UT Department of Plant Sciences

### **Applying Irrigation Recommendations On-Farm**

**Brian Leib**

Professor

UT Department of Biosystems Engineering & Soil Science

---

# TOUR H: COVER CROPS

Event	Time/Location
Tour H	9 a.m., Tent 2

*This tour will require 1 hour.*

## Results from TN 2023 and 2024 Cover Crop Survey

Chris Boyer  
Professor  
UT Department of Agricultural & Resource Economics

## The Southern Cover Crop Variety Trial: Identifying Top-Performing Species/Varieties Across a 10-State Region

Virginia Sykes  
Associate Professor  
UT Department of Plant Sciences

## Cover Crops and Soil Communities

Shelly Pate Kerns  
Assistant Professor  
Corn, Cotton, & Grain Sorghum Specialist  
Louisiana State University

## Cotton Water Dynamics and Cover Crop

Avat Shekoofa  
Associate Professor  
UT Department of Plant Sciences



---

## TOUR I: COVER CROPS: CURRENT AND FUTURE TRENDS?

Event	Time/Location
Tour I	10 a.m., Tent 2

*This tour will require 1 hour.*

### **Trends in Cover Crops in TN and Future Directions?**

**Forbes Walker**

Professor

UT Department of Biosystems Engineering & Soil Science

### **Policy, Economics, and Logistics of Winter Oil Seeds in Tennessee for Sustainable Aviation Fuel**

**Aaron Smith**

Professor

UT Department of Agricultural & Resource Economics

### **Agronomic Potential of Winter Oilseed Species/Varieties for Sustainable Aviation Fuel Production in the South**

**Lexie Worley**

Graduate Research Assistant

UT Department of Plant Sciences

**Virginia Sykes**

Associate Professor

UT Department of Plant Sciences

---

## TOUR J: CLIMATE SMART AGRICULTURE AND SOIL HEALTH

Event	Time/Location
Tour J	11 a.m., Tent 3

*This tour will require 1 hour.*

### **Revitalizing Soil Health**

**Henry Sintim**

Assistant Professor

Department of Crop & Soil Sciences

University of Georgia – Tifton Campus

### **Cover Crops, Soil Health and Crop Yields**

**Rachel Wooliver**

Research Scientist

UT Department of Biosystems Engineering &

Soil Science

**Sindhu Jagadamma**

Associate Professor

UT Department of Biosystems Engineering &

Soil Science

### **42 Years of No-Tillage and Cover Cropping: Improved Soil Aeration and Resilience to Extreme Weather Events**

**Facundo Lussich Rachetti**

Graduate Research Assistant

UT Department of Biosystems Engineering &

Soil Science

### **Cover Crop Nitrogen Calculator**

**Resham Thapa**

Assistant Professor

Department of Agricultural & Environmental Sciences

Tennessee State University

---

## TOUR K: HEMP PRODUCTION

Event	Time/Location
Tour K	8 a.m., Tent 3

*This tour will require 1 hour.*

### **Production Considerations to Consider Before Adventuring into Fiber Hemp**

**Mitchell Richmond**

Assistant Professor

UT Department of Plant Sciences

### **Navigating Risk Management Strategies for Hemp Production**

**Aaron Smith**

Associate Professor

UT Department of Agricultural & Resource Economics

### **Exploring the Potential of Industrial Hemp in Climate-Smart Tennessee Agriculture**

**Jashanjeet Dhaliwal**

Post-Doc Research Associate

UT Department of Biosystems Engineering & Soil Science

---

# TOUR L: AG WATER TREATMENT: NAVIGATING THE PRODUCE SAFETY RULE

Event	Time/Location
Tour L	9 a.m., Tent 3

*This tour will require 1 hour.*

## Produce Safety Rule Update

Brooke Emery  
Extension Assistant  
Produce Safety  
UT Department of Plant Sciences

## Irrigation Water Disinfection

John R. Buchanan  
Professor  
UT Department of Biosystems Engineering &  
Soil Science

---

# TOUR M: THE ONGOING TRANSFORMATION OF UT AGRESEARCH CENTERS THROUGH AMERICAN RESCUE PLAN FUNDING

Event	Time/Location
Tour M	10 a.m., Tent 3

*This tour will require 1 hour.*

## Introduction and Impacts at UT AgResearch and Education Center at Milan

Blake Brown  
Research Center Director  
UT AgResearch and Education Center at Milan

## Financial Challenges of Maintaining Relevance at UT AgResearch and Educational Centers

Keith Carver  
Senior Vice Chancellor and Senior Vice President  
UT Institute of Agriculture

## Breaking the Code – How to Access ARP Funds for UT AgResearch and Who Were the Players?

Hongwei Xin  
Dean  
UT AgResearch

## Cooperative Partners are Imperative!

Charlie Hatcher  
Commissioner  
Tennessee Department of Agriculture

## Impacts on UT AgResearch Facilities

Hongwei Xin  
Dean  
UT AgResearch

## Impacts on UT AgResearch Equipment

Barry Sims  
Executive Director  
UT AgResearch

---

## TOUR N: SOIL FERTILITY MANAGEMENT

Event	Time/Location
Tour N	12 p.m., Tent 2

*This tour will require 1 hour.*

### **Liming Tennessee Soils and Lime Products**

**Robert Florence**

Director

UT Soil, Plant & Pest Testing Center

### **Validation of Phosphorus and Potassium Fertilizer Recommendations for Soybean**

**Sydney Logwood**

Graduate Research Assistant

UT Department of Biosystems Engineering &  
Soil Science

**Nutifafa Adotey**

Assistant Professor

UT Department of Biosystems Engineering &  
Soil Science

### **Enhanced Efficiency Nitrogen Fertilizers as Tool to Control Nitrogen Loss in Row Crop Production**

**Samuel Okai**

Graduate Research Assistant

UT Department of Biosystems Engineering &  
Soil Science

**Nutifafa Adotey**

Assistant Professor

UT Department of Biosystems Engineering &  
Soil Science

### **Using Poultry Litter in Row Crops: Yield and Carbon Storage**

**Rahul Chandra**

Graduate Research Assistant

UT Department of Biosystems Engineering &  
Soil Science

**Shawn Hawkins**

Professor

UT Department of Biosystems Engineering &  
Soil Science



---

## TOUR O: SOIL BORNE SOYBEAN DISEASES

Event	Time/Location
Tour O	12 p.m., Tent 3

*This tour will require 1 hour.*

### Taproot Decline

#### Trey Price

Associate Professor

Louisiana State University AgCenter

Winsboro, LA

### Red Crown Rot

#### Carl Bradley

Professor

University of Kentucky

Plant Pathology Department

Princeton, KY

### Charcoal Rot Infested Field Could Affect Planting Date and Yield

#### Alemu Mengistu

Research Plant Pathologist

USDA-ARS Soybean Research Unit

Jackson, TN

---

## COMMERCIAL DISPLAYS

AgLaunch  
Alliance Ag Equipment  
Americot Cotton Seed  
BASF  
Bayer  
Beck's  
Chandler Spreaders  
Corteva Agriscience, Pioneer & PhytoGen  
Farm Credit Mid-America  
GreenPoint Ag  
Holtanix Midsouth  
H&R Agri-Power  
Inco Ag Irrigation & Drainage  
Martin Industries LLC  
Mid-South Ag Equipment  
Primrose Oil Company, Inc  
Purple Wave Auction  
Rea Agri Service  
Short Line Sales  
Simmons Bank  
Sustain Seed + Soil  
Syngenta  
Tennessee Farmers Cooperative  
Tennessee Tractor, LLC  
The KBH Corporation  
Titan Ag, LLC  
Tri County Equipment  
Tyson Foods Local Grain Services  
UniSouth Genetics  
Vantage Mid South  
Wintersteiger

---

## EDUCATIONAL DISPLAYS

Center for Profitable Agriculture  
Farmers for Soil Health  
Gibson County Farm Service Agency  
Kentucky Department of Ag  
Tennessee AgrAbility  
TARS - Tennessee Association of Rescue Squads  
Tennessee Corn  
Tennessee Soybean Promotion Council  
TDA Consumer & Industry Services  
TDA Invasive Pests  
Tennessee Forestry Association  
Tennessee Foundation for Agriculture in the Classroom  
Union University  
USDA, National Agricultural Statistics Service  
USDA-NRCS  
USDA Rainfall Simulator & Soil Health Trailer  
UT AgResearch on CBS & Sustainable Aviation Fuels UT  
Construction Science & Management Program (Dept  
of Biosystems Engineering & Soil Science)  
UT Herbert College of Agriculture  
UTIA AgResearch  
UTIA Marketing & Communications  
UT School of Natural Resources  
UTM Alpha Gamma Rho  
UTM College of Agriculture and Applied Sciences West  
Tennessee Healthcare Milan Hospital

---

# AMENITIES

## Field Day Parking

General parking area will be at the No-Till Field Day site near the West Tennessee Agricultural Museum.

Handicapped parking area will be near the Registration Tent to facilitate needs.

Signs will be posted with parking directions.

## Food and Refreshments

Food and drink will be available throughout the No-Till Crop Production Field Day. The food tent will be located near the exhibit area. Lunch items may include hamburgers, hot dogs, barbecue bologna, and soft drinks. Local restaurants are also in the vicinity of Milan.

Water coolers and restrooms will be available at many locations over the Field Day site.

## Medical Assistance

Emergency medical care and treatment by trained staff will be available near the registration tent.

## Aviation Information

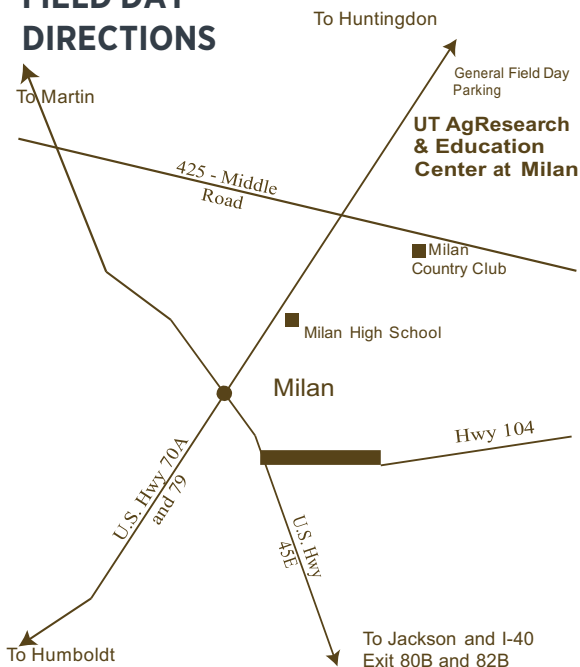
The Gibson County Airport is located six miles west of Milan. Asphalt runway 1/19 is 4,800 ft. x 75 ft. Call 731-686-1524 for information.

The McKellar-Sipes Regional Airport is located 30 miles south of Milan in Jackson, Tennessee, on Airways Blvd./ Highway 70. For information call, U.S. Aviation Services - FBO at 731-427-0191, Jackson Control Tower - FAA at 731-425-9430, or Airport Authority at 731-423-0995.

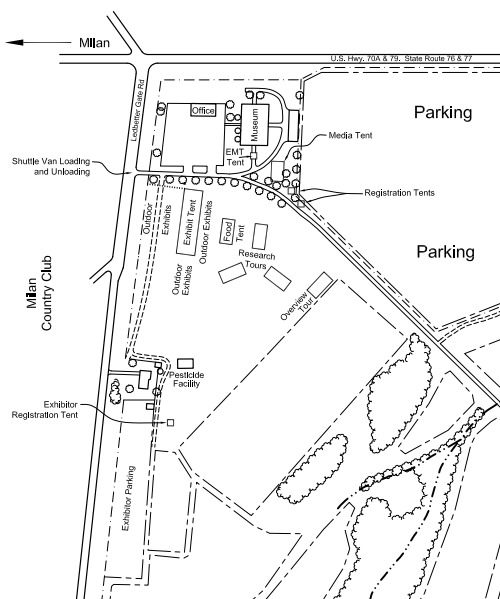
Memphis International Airport is approximately 100 miles southwest of Milan, in Memphis, Tennessee. For more information, call 901-398-3900.

Nashville International Airport is located approximately 145 miles east of Milan, in Nashville, Tennessee. For more information, call 615-275-1675.

# FIELD DAY DIRECTIONS



# FIELD DAY SITE MAP





[UTIA.TENNESSEE.EDU](http://UTIA.TENNESSEE.EDU)

Real. Life. Solutions.<sup>™</sup>

*24-0163 06/24 The University of Tennessee is an EEO/AA/Title VI/Title IX/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services. All qualified applicants will receive equal consideration for employment and admission without regard to race, color, national origin, religion, sex, pregnancy, marital status, sexual orientation, gender identity, age, physical or mental disability, genetic information, veteran status, and parental status.*