33rd 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

UT AGRESEARCH AND UT EXTENSION
The University of Tennessee AgResearch and Education Center at Milan

**Welcomes You**

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

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**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.**

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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:

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

[Image of staff]
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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Time</th>
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<tbody>
<tr>
<td>Registration Begins</td>
<td>7:00 a.m.</td>
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<tr>
<td>Commercial and Educational</td>
<td>8:00 a.m. to 1:00 p.m.</td>
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<tr>
<td>Displays</td>
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<tr>
<td>Research Tours (Tour A-O)</td>
<td>8:00 a.m. to 1:00 p.m.</td>
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<tr>
<td></td>
<td>(last tour begins at Noon)</td>
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</table>

**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.

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

<table>
<thead>
<tr>
<th>Tour</th>
<th>C1</th>
<th>C10</th>
<th>C12</th>
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<tbody>
<tr>
<td>Tour A</td>
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<td>1</td>
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<tr>
<td>Tour B</td>
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<td>Tour C</td>
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<td>Tour D</td>
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<td>Tour E</td>
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<td>Tour F</td>
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<td>Tour O</td>
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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

<table>
<thead>
<tr>
<th>Event</th>
<th>Time/Location</th>
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<tbody>
<tr>
<td>Tour A</td>
<td>8 a.m., Tent 1</td>
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<tr>
<td></td>
<td>9 a.m., Ag Museum</td>
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</tbody>
</table>

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

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<th>Event</th>
<th>Time/Location</th>
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<tr>
<td>Tour B</td>
<td>9 a.m., Tent 1 12 p.m., Ag Museum</td>
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</table>

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

<table>
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<tr>
<th>Event</th>
<th>Time/Location</th>
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</thead>
</table>
| 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

<table>
<thead>
<tr>
<th>Event</th>
<th>Time/Location</th>
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</table>
| 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

<table>
<thead>
<tr>
<th>Event</th>
<th>Time/Location</th>
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<tbody>
<tr>
<td>Tour E</td>
<td>11 a.m., Tent 2</td>
</tr>
</tbody>
</table>

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

<table>
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<tr>
<th>Event</th>
<th>Time/Location</th>
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<tbody>
<tr>
<td>Tour F</td>
<td>10 a.m., Ag Museum</td>
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<tr>
<td></td>
<td>11 a.m., Tent 1</td>
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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

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<thead>
<tr>
<th>Event</th>
<th>Time/Location</th>
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<tr>
<td>Tour G</td>
<td>8 a.m., Tent 2</td>
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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

<table>
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<tr>
<th>Event</th>
<th>Time/Location</th>
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<tr>
<td>Tour H</td>
<td>9 a.m., Tent 2</td>
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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?

<table>
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<tr>
<th>Event</th>
<th>Time/Location</th>
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<tr>
<td>Tour I</td>
<td>10 a.m., Tent 2</td>
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</table>

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

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<thead>
<tr>
<th>Event</th>
<th>Time/Location</th>
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<tr>
<td>Tour J</td>
<td>11 a.m., Tent 3</td>
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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

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<tr>
<th>Event</th>
<th>Time/Location</th>
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<tr>
<td>Tour K</td>
<td>8 a.m., Tent 3</td>
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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

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<th>Event</th>
<th>Time/Location</th>
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<tr>
<td>Tour L</td>
<td>9 a.m., Tent 3</td>
</tr>
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</table>

*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

<table>
<thead>
<tr>
<th>Event</th>
<th>Time/Location</th>
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<tr>
<td>Tour M</td>
<td>10 a.m., Tent 3</td>
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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

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<th>Event</th>
<th>Time/Location</th>
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<tr>
<td>Tour N</td>
<td>12 p.m., Tent 2</td>
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</table>

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

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<th>Event</th>
<th>Time/Location</th>
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<tbody>
<tr>
<td>Tour O</td>
<td>12 p.m., Tent 3</td>
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</tbody>
</table>

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
Holganix Midsouth
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
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

To Huntingdon
General Field Day Parking
UT AgResearch & Education Center at Milan

Milan Country Club
Milan High School

425 - Middle Road

To Humboldt
U.S. Hwy. 70A and 70

To Martin

U.S. Hwy.

Hwy 104

To Jackson and I-40 Exit 80B and 82B

FIELD DAY SITE MAP
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.