

THROCKMORTON PURDUE AGRICULTURAL CENTER RESEARCH AND DEMONSTRATION PROJECTS 2021

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<https://ag.purdue.edu/arge/pac/Pages/tpac-home.aspx>

21S TPAC Soy Dicamba Tunnel

Dicamba tunnel trial

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 2,4-D Tunnel

2,4-D tunnel trial

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 14

No-till Burndown Demo

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 01

Cover Crop Termination

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 15

A23372A Crop Tolerance and Efficacy in No-Till Soybean

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy Cover Crop

Cover Crop Termination

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

20F MGS Fallow 01

Nurfarm Herbicide Programs

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Fallow 02

Reviton Burndown program in cover crops

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 13

Enlist Endorsement Study with University

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Fallow CHS Adjuvant

CHS adjuvants with Xtendimax + Powermax

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy Dicamba Formulations

Dicamba formulations comparison in a low tunnel
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 10

Single rep strip trial, similar to 2020, requires yield
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Fallow Wilbur Adjuvant

Adjuvants with Roundup Powermax + Xtendimax
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 09

Valent Herbicide Programs in Xtend Soybean Demo
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 08

Evaluation of Preview Herbicide Tank mixes
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 07

A23372A: Crop Tolerance and Efficacy in Conventional Till Soybean
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 14

Biostimulant in soybeans
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 11

Adjuvant effects on Enlist One with Liberty in soybean
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 06

Adjuvant effects on Engenia with glyphosate in soybean
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Fallow 03

Adjuvant effects on weed species w/ Enlist Duo – multi species screen
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Fallow 02

Adjuvant effects on weed species w/ Engenia – multi species screen
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy Xtend

Xtend Volunteer Corn Trial
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy Enlist

Enlist Volunteer Corn Trial
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy Zapper

Comparison of Weed Electrocutation to At-Harvest Weed Seed Destruction
Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy Cover Crop

Cover Crops

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 18

Evaluation of Soybean Crop Tolerance to TOUGH 5EC

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Fallow 01

Powermax 3 efficacy, new dicamba/glyphosate premix

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 05

Engenia Prime vs. Competitors Very Early Post

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 04

Engenia Prime vs. Competitors Pre

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 12

Assure + Enlist One: Vol corn control

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 03

AMVAC Herbicides in tank mixtures in soybean

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

Efficacy of AMVAC soybean herbicides

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Soy 01

Assure + Dicamba: Vol corn control

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MSG Soy 12

Evaluate the impact of reduced boom movement on crop health and yield

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 11

Evaluate the impact of reduced boom movement on crop health and yield

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 02

Reviton burndown programs in soybean

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Corn 01

Reviton burndown programs in corn

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 09

Evaluating Authority Supremen/Edge and Anthem Maxx for Residual Weed Control in Soybeans

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Corn 03

Tough + Impact Tank-mix

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Corn 02

New 3-way premix compared w/ Acuron, Resicore

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 10

Herbicide tank mix optimization with dicamba

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 05

Herbicide tank mix optimization with Enlist One

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 08

Anthem Maxx General Comparison Trial – Demo

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 02

Evaluation of new corn herbicide premix

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 01

Corn Herbicide Portfolio Showcase

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 08

Evaluation of interline and Enlist One Performance with Various Adjuvants

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 03

Evaluation of Preview for Burndown in No-Till Soybean

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy 04

Comparison of soybean herbicides s. competitors

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Corn 05

Restraint (acetochlor/toppyralate) programs in corn

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Corn 04

Shieldex programs in corn

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Soy Jesse PPO

PPO herbicide resistance study.

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S MGS Fallow Jesse PPO

PPO herbicide resistance study

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 09

V10494 Demo

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 07

Evaluation of V10494b Pre

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 06

Evaluation of V10494 Pre and Post

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 08 and 21S TPAC Corn 09

1 and 2 pass rate range comparisons of corn herbicides

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 05

Acuron GT: Evaluation of weed control, crop tolerance and yield in a two-pass system

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 04

Post giant ragweed clean up solutions in corn

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 03

Resicore followed by Liberty in corn

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 08

Helmet Maxx herbicide in corn

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

21S TPAC Corn 08

Katagon (toppyralate + nicosulfuron) herbicide in corn

Bill Johnson/Bryan Young/Brent Mansfield, Botany and Plant Pathology

Fungicide Trials on Ornamentals

Fungicide trials on ornamentals: Peonies, plant lilacs, dogwoods, and hollyhock

Janna Beckerman, BTNY

SDHI Fungicides and timing for bitter rot management

North central (NC) Region apple growers are in critical need of new ways to control bitter rot. These experiments seek to evaluate the role surfactants may play in reducing the rate and extending the interval of fungicide application and are funded by IR4 to assess differences in SDHI fungicides and timing.

Janna Beckerman, BTNY

Garlic planted into cover crop demonstration plots

Garlic will be planted into different late summer-early fall planted cover crops

Stephen Meyers, Horticulture and Landscape Architecture

Potted Mum Response to Reduced Rates of Dicamba, 2,4-D, and Glyphosate

Potted mums will be treated at three different times with five rates of three herbicides.

Stephen Meyers, Horticulture and Landscape Architecture

13-way mix cover crop trial

Interested in investigating the performance of a new cover crop seed mix that is a 13-way mix forage garden containing vegetables and flowers. Half of the plot was inoculated with rhizobia.

Laura Ingwell, Entomology

Melon-strip till-cover crop trial

In an effort to reduce tillage and provide extra floral resources for pollinator communities in melons, we are interested in cover cropping and inter-seeding in melons grown on plastic. This trial will utilize the new spader to cut beds into an established cover crop. The demonstration/trial will contain three treatments. 1. Established oats with melon beds placed after establishment 2. Bed establishment and then oat seeding 3. Bed establishment and then oat and buckwheat seeding

Laura Ingwell, Entomology

Windbreak cover crop trial for watermelon production

Field trial examining the impact of different windbreak cover crops on watermelon production to support plant establishment and ecosystem services.

Ashley Leach, Entomology

Annual plant population and community dynamics

To understand the consequences of species diversity we have planted 25 species of annual plants native or naturalized to Indiana in 10 treatments: 1, 2, 4, 6, 16, or 25 species combinations. These were planted in 2018. The project seeks to understand how populations grow, how plant traits respond through plasticity, and how all of this shapes species interactions and coexistence.

Gordon McNickle, BTNY

Reducing Yield loss in high tunnel tomatoes

Monoculture systems in high tunnel tomatoes cause yield decline over time due to a buildup of species-specific pathogens and pests. With altered management techniques, we hope to reduce negative effects of monoculture intensive farming while maintaining yield and quality by manipulation of the microbial communities.

Wadih Ghanem, Entomology

HORT 317 and 318

Measurement of plant Nitrogen Status in Floriculture and Nursery Production Using Smartphones

Kyle Daniel, Horticulture and Landscape Architecture

Organic Sweet potato Cultivation Trial

The purpose of this study is to investigate the role of cultivar shoot architecture and between-row cultivation frequency on weed control. There are 3 cultivars and 6 cultivation treatments.

Stephen Meyers, Horticulture and Landscape Architecture

Organic Sweet potato Plant Spacing Trial

The purpose of this study is to investigate the role of cultivar shoot architecture and in-row plant spacing on weed control. There are 2 cultivars, 3 plant spacings, and two weeding methods (no weeding, hand weeding).

Stephen Meyers, Horticulture and Landscape Architecture

Morning Glory Interference in Processing Tomato (Bare ground)

The purpose of this study is to determine the influence of 6 season-long morning glory densities on processing tomato yield and quality.

Stephen Meyers and Jeanine Arana, Horticulture and Landscape Architecture

Morning Glory Interference in Watermelon

The purpose of this study is to determine the influence of 6 season-long morning glory densities on plasticulture-grown triploid watermelon yield and quality.

Stephen Meyers and Jeanine Arana, Horticulture and Landscape Architecture

Dual Magnum Post Over the Top Herbicide Screen of Pumpkin (Bare ground)

Purpose of study is to determine the influence of Dual Magnum herbicide applied as a delayed PRE over the top of pumpkin. Data will be used to support registration in IN or a nation-wide Sec. 3 label.

Stephen Meyers and Jeanine Arana Horticulture and Landscape Architecture

Reflex Herbicide Screen of Summer Squash

Purpose of study is to determine the influence of 5 Reflex herbicide rates on crop response yield, and quality on two cultivars Data will be used to support registration in IN. The herbicide would be applied to prepared beds after laying plastic, but before transplanting.

Stephen Meyers and Jeanine Arana, Horticulture and Landscape Architecture

Reflex Herbicide Screen of Bell Pepper

Purpose of study is to determine the influence of 5 Reflex herbicide rates on crop response, yield, and quality on two cultivars. Data will be used to support registration in IN. The herbicide would be applied to prepared beds after laying plastic, but before transplanting.

Stephen Meyers and Jeanine Arana, Horticulture and Landscape Architecture

Reflex Herbicide Screen of Watermelon

The purpose of study is to determine the influence of 5 Reflex herbicide rates on crop response, yield, and quality on two cultivars. Data will be used to support registration in IN. The herbicide would be applied to prepared beds prior to laying plastic.

Stephen Meyers and Jeanine Arana, Horticulture and Landscape Architecture

Reflex Herbicide Screen of Winter Squash (Bare ground)

Purpose of study is to determine the influence of 5 Reflex herbicide rates on crop response, yield, and quality of two cultivars. Data will be used to support registration in IN. The herbicide would be applied to prepared beds immediately after planting seeds.

Stephen Meyers and Jeanine Arana, Horticulture and Landscape Architecture

Variety trial for grain and fiber hemp. 16 cultivars. four replicates

Experimental design in the field will be alpha-lattice design with 4 replications. Seed will be provided for up to 16 hemp varieties suitable for grain and/or fiber production. Trials will be fertilized with urea prior to planting at 100 lbs. of nitrogen per acre in grain and fiber plots. Weeds may be controlled using herbicide (Bromoxynil + Quizalofop-p-ethyl) and/or cultivation with a tine harrow.

Marguerite Bolt, Ron Turco, AGRY

OREI-Gibson Grant

OREI Hemp Management Grant

Janna Beckerman, Kevin Gibson, BTNY

Optimal Planting Methods for Grain and Fiber Hemp

Four planting methods will be used to determine optimal stand establishment and yield across two hemp cultivars (one gran, one fiber).

Marguerite Bolt, Ron Turco, AGRY

Conventional field to compare to organic field

Duplicate hybrids planted in organic field plus some standard GMO hybrids grown in conventional practice. Rotate soybeans and corn 50/50. Conventional field as close as possible to our organic field.

Torbert Rocheford/ Marsha Kern, Agronomy

Industrial Hemp

The project assesses the effect of fiber hemp on subsequent organic crops under different tillage conditions

Kevin Gibson, Andres Fonnegra, Josh Kraft, BTNY

Entomology carrot variety trial 2021

We have NCR-SARE grant fund to evaluate differences in insect community abundance, diversity, and damage on different varieties of carrot. We anticipate having 7 varieties to evaluate in a 4 yd x 25 yd maximum-size block. We would like to direct seed into raised beds. Elizabeth Long, Emily Justus, Entomology

Striped cucumber beetle attractants and repellents for potential in push-pull trapping

We request 12 mini-plots of zucchini, preferably 100 ft apart, to study striped cucumber beetle attractants in combination with kaolin clay (50 -plants per plot, 30 ft x 30 ft plots, 5 rows per plot @ 6 ft spacing, 10 plants per row @ 3 ft spacing)

Christie Shee, Ian Kaplan, Entomology

Entomology CBD Hemp Insect Pest Monitoring 2021

We would like to monitor and characterize the seasonal activity and abundance of insect communities on Petrus Langenhoven's outdoor transplanted CBD hemp at Meigs. I've been in touch with Petrus and received his permission to scout his hemp variety planting once it is established.

Elizabeth Long, Zach Serber (Grad student in Long lab), Steve Meyers, Entomology

Entomology Apple Insect Pest Monitoring 2021

We would like to monitor the seasonal activity and abundance of Codling moth and Oriental fruit moth in two blocks of apples at Meigs using commercial pheromone traps.

Elizabeth Long, Zihan (Lilac) Hong, Entomology

Entomology Spotted-wing drosophila (SWD) monitoring 2021

We would like to monitor the seasonal activity and abundance of SWD in the brambles and grapevines at Meigs using commercial monitoring traps.

Elizabeth Long, Zihan (Lilac) Hong (Grad student in Long Lab), Entomology

Black Soldier Fly compost generation for vegetable production

We will deploy a BSF compost bin on the farm to evaluate the production of compost using organic waste from crop production

Laura Ingwell, Entomology

Demonstration plot

We will be planting mixed vegetables as a demonstration, and utilizing row covers as a tool for pest management targeting flea beetles. Crops will include: cabbage, collard greens, arugula, and dill.

Laura Ingwell, Entomology

Strawberry variety trial in high tunnels

In collaboration with Wenjing Guan, I am evaluating 8 different strawberry varieties in high tunnel 1. We are looking at plant performance and insect pest dynamics in the crop. In HT 3 we are evaluating plant performance and pest dynamics, examining the efficacy of biopesticides for pest management.

Laura Ingwell, Entomology

Corn Earworm Trapping Network

Monitoring CEW populations in Harstack traps to report online for informed grower decision making. Additional traps will be added to hemp plots to monitor movement in this crop as well.

Laura Ingwell, Entomology

Miticide Efficacy trial in watermelon

At the Southwest Indiana Melon Meeting Winter 2019, the grower's requested information on the efficacy of miticides so that they can make the least amount of applications to get this pest under control.

Laura Ingwell, Entomology

Sweet corn insecticide efficacy trial

I will be examining five different planting dates, all with the same cultivar (Nirvana) to evaluate the efficacy of 4 different insecticide spray schedules: 1. Helicovex + Warrior, 2. Coragen + Radiant, 3. Helicovex + Coragen, 4. Coragen + Helicoex 5. Untreated control for CEW suppression 3 planting dates will be examined: Early, Mid, Late

Laura Ingwell, Entomology

Squash Vine Borer Trapping Network

Monitoring the activity of Squash Vine Borer in bucket traps and reporting the trap catches online for informed grower decision making.

Laura Ingwell, Entomology

Interaction of beetle damage and pollination visitation on watermelon yield

Field examining a factorial with differing levels of cucumber beetle damage and bee visitation on watermelon yield. Field will have a total of 9 treatments replicated 12 times.

Ashley Leach, Ian Kaplan, Entomology

ISDA Specialty crop Block Grant – Diversification of the Indiana Fresh Market Cantaloupe Industry

The long-term goal of this initiative is to increase the planted acreage, farm productivity, and profit margins for Indiana melon growers. In the short term this project will address the demand for smaller high-quality fruit by evaluating a selection of melon types and test new production technology that would increase yield.

Petrus Langenhoven, Horticulture and Landscape Architecture

HORT 31800 – Field Production of Horticultural Crops

Teaching – Field planting of kale and cabbage with water wheel transplanter. Demonstrate raised bed making, laying of plastic mulch and drip. Demonstration of tillage practices, spading machines vs roto tiller.

Petrus Langenhoven, Horticulture and Landscape Architecture

AgSEED Grant – Getting it right inside: Developing a propagation standard for Indiana hemp growers

We lack clear standards for CBD hemp production, particularly when it comes to propagation and suitable cultivars for Indiana. This project aims to address the lack of propagation and production standards while identifying cultivars that may be optimal for production in Indiana.

Petrus Langenhoven, Marguerite Bolt, Horticulture and Landscape Architecture

USDA AFRI Grant – Taking the next step as a small and medium-sized farm: Understanding the integration of production, food safety, and profitability

Our goal is to improve the profitability of small and medium-sized vegetable farms by developing a research-based extension program that increases strategic soil to market decision making by farmers titled Soil to Market Decision Making. The project has three objectives: 1) improve farm planning practices of small and medium-sized vegetable farmers; 2) increase farm production capacity and produce quality by enhancing farmers' ability to manage soil health while using appropriate genetic materials; and 3) increase farmer profitability by enhancing their understanding of consumer food safety expectations and use of food safety practices.

Petrus Langenhoven, Nathan Shoaf, Horticulture and Landscape Architecture

ISDA Specialty Crop Block Grant – Diversification of the Indiana Fresh Market Cantaloupe Industry

The long-term goal of this initiative is to increase the planted acreage, farm productivity and profit margins for Indiana melon growers. In the short term this project will address the demand for smaller high-quality fruit by evaluating a selection of melon types and test new production technology that would increase yield.

Petrus Langenhoven, Horticulture and Landscape Architecture

Using Stump Samples as Indicators of Deer Browsing Intensity

Richard Sample, Forestry and Natural Resources

Corn Rootworm Trap Crop

A late-planted trap crop in 2021 to provide an enhanced test area in 2022

Christian Krupke, Larry Bledsoe, Entomology

Efficacy of Commercial and Experimental Insecticides Used to Control Corn products

There will be a sweetcorn corn sentinel trial as a part of a regional insect monitoring network to evaluate new products and generate data for extension recommendations.

Christian Krupke, Larry Bledsoe, Entomology

Sweet corn sentinel monitoring network

Evaluate commercial Bt sweet corn hybrids for resistance to corn earworm.

Christian Krupke, Larry Bledsoe, Entomology

Provide planted soy rotation (30-inch row) in field 6E-3

Provide planted soy rotation (30-inch row) in Field 6E-3

Christian Krupke, Larry Bledsoe, Entomology

Cooperative Ag Pest Survey (CAPS) for exotic insect pests of soy, corn, and oak

A site is needed to install a trap array for exotic insect pests of soybean, corn, and oak. This site supports a statewide survey network.

Christian Krupke, Larry Bledsoe, Entomology

Block Progeny test (and figured-wood) of elite black walnut/range-wide northern red oak progeny/seed orchard/BC3 chestnut conservation

These are long-term plots for forest tree breeding. The two most visible are the black walnut block progeny test and the BC3 chestnut along Rd 100. We plan to manage these for long-term timber. The 2007 N. red oak progeny test has been 50% thinned, is scheduled for another 25% now, and may be converted into a long-term seed orchard; progeny from far south and north may make this a good source of widely adapted red oak. Our 2011 figured walnut test has been damaged by deer – replanting is OK.

James McKenna, Brian Beheler, Matt Ginzel FNR - HTIRC

Legacy phosphorus study

The purpose of the project is to evaluate soil phosphorous levels under different applications rates.

Javier Gonzalez, Brenda Hofmann, USDA-ARS

Long-Term Phosphorus Stratification Study

The purpose of the project is to quantify effects of phosphorus products and crop rotation on yield and soil quality.

Chad Penn, Brenda Hofmann, USDA-ARS

Long-Term Erosion Study

The purpose of the project is to quantify effects of tillage and crop rotation on yield and soil quality.

Javier Gonzalez, Brenda Hofmann, USDA-ARS

Corn Yield Response to Applied Sulfur Fertilizer

This trial continues our recent history of conducting sulfur trials with corn around the state.

Bob Nielsen, Jim Camberato, Dan Quinn, Agronomy

Weed Science Field Research

Multiple herbicide efficacy projects targeting glyphosate-resistant (R) giant ragweed and glyphosate-and PPO-R waterhemp will be implemented. Multiple dicamba low tunnel research will be implemented at TPAC. Cover crop research will be implemented at Meigs. Total protocol number, crops, and project details are TBD. Area requested for Meigs includes fields South 3, South 4, and South 5. Area requested for TPAC includes fields 4A, 4B, 2H, 2L, and 2B-E (same as 2020).

Brent Mansfield, Bryan Young, Bill Johnson, Botany and Plant Pathology