

**THROCKMORTON-PURDUE AGRICULTURAL CENTER
(INCLUDING THE MEIGS FARM)
RESEARCH AND DEMONSTRATION PROJECTS
2018**

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Department of Agricultural and Biological Engineering

TPAC/ABE/M Gitau/Subsurface Phosphorous Transport/2018

Purpose: Utilizing lysimeters and sensors to assess the fate and movement of phosphorous through subsurface pathways.

Contact: Margaret Gitau

Department of Agronomy

TPAC/ARGY/Y Jiang/Evaluation Switchgrass Population/2018

Purpose: Assessment of flowering time and biomass yield of switchgrass and identify mechanisms controlling flowering time.

Contacts: Yiwei Jiang

TPAC/AGRY/S Brouder/Biomass Study/2018

Purpose: To evaluate perennial biomass crops such as switch grass, native prairie and miscanthus on marginal land.

Contact: Sylvie Brouder, Jeff Volenec, Niki De Armond

TPAC/AGRY/J Camberato/Biological Effects on Corn/2018

Purpose:

Contact: James Camberato

TPAC/AGRY/J Camberato/Starter Fertilizer Effects on no-till Continuous Corn/2018

Purpose:

Contact: James Camberato

TPAC/AGRY/J Camberato/Soybean Rotation for Corn Experiments/2018

Purpose:

Contact: James Camberato

Department of Agronomy (cont'd)

TPAC/AGRY/S Casteel/K Plots/2018

Purpose: Camberato and Casteel will continue to monitor yield levels of corn and soybean in the K plots. Soil samples will be taken and potash will be applied to reestablish a soil K gradient.

Contact: Shaun Casteel, James Camberato

TPAC/AGRY/S Casteel/UnderCover - Manganese/2018

Purpose: UnderCover (4 nozzles) technology was released in 2015 and we had initial evaluations in 2016 (the only university to have it) to deliver plant nutrient and leaf production. Can UnderCover applications correct deficiencies of non-mobile to nearly non-mobile plant nutrients like S and Mn?

Contact: Shaun Casteel

TPAC/AGRY/S Casteel/UnderCover - Sulfur/2018

Purpose: UnderCover (4 nozzles) technology was released in 2015 and we had initial evaluations in 2016 (the only university to have it) to deliver plant nutrient and leaf production. Can UnderCover applications correct deficiencies of non-mobile to nearly non-mobile plant nutrients like S and Mn?

Contact: Shaun Casteel

TPAC/AGRY/S Casteel/Sulfur PAC/2018

Purpose: In 2015, our rescue study's 6 bushel gain with ammonium sulfate (23 lb. S/ac dry or 11.5 lb S/ac foliar) has sparked many interests. In 2016 and 2017, we observed 12-bushel response with 20 lb. S/ac from AMS prior to emergence. We would like to investigate ATS similar to burndown timing, as well as AMS pre-plant, and foliar sprays. SWPAC 2016 study was 6 bu. response from 20 lb S/ac when applied at V4

Contact: Shaun Casteel, Curtis Brackett

TPAC/AGRY/S Casteel/UAV Stand Assessments of Soybean Seeding Rate x Plant Type/2018

Purpose: Use UAV imagery to assess stand establishment as well as standard protocol for scouting of soybean early to late season. We will use soybean variety/plant type x seed rate as the agronomic component. Then, we will use various altitudes, overlaps, etc. in determining the optimal arrangement for the UAV.

Contact: Shaun Casteel, Curtis Brackett

Department of Botany & Plant Pathology

TPAC/BTNY/J Beckerman/Fungicide Trails on Ornamentals: Peonies, Roses, Crabapples/2018

Purpose: This is both industry and IR4 trials

Contact: Janna Beckerman, Megan Haas

TPAC/BTNY/J Beckerman/Better Bitter Rot Management/2018

Purpose:

Contact: Janna Beckerman, Megan Haas

TPAC/BTNY/J Beckerman/Industrial Hemp Research and Demonstration Plot – Organic + Conventional/2018

Purpose: This research will examine the performance of oil and feed hemp when grown conventionally. This research will inform extension efforts to educate Hoosiers about hemp production in Indiana.

Contact: Janna Beckerman, Ron Turco, Kevin Gibson

TPAC/BTNY/K Gibson/Hemp – Planting Date + Cultivar Trial /2018

Purpose:

Contact: Kevin Gibson, Leah Sandler

TPAC/BTNY/K Gibson/Hemp – Weed Competition Trial /2018

Purpose:

Contact: Kevin Gibson, Leah Sandler

TPAC/BTNY/B Johnson/Anthem Maxx Efficacy vs. Competitive Treatments/2018

Purpose: Evaluate anthem maxx weed control

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Authority Supreme in Xtend System/2018

Purpose: Evaluate Authority Supreme with Xtendimax

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Fierce plus Dicamba in Burndown Situation/2018

Purpose: Evaluate different burndown treatments

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Flumi HPPD Combinations/2018

Purpose: Evaluate pre only herbicides on waterhemp control

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Valuse of Flexstar and Dual in Post Tank Mix on RR2Xtend Soybeans/2018

Purpose: Evaluate benefit of residual herbicides with xtend system

Contact: Bill Johnson, Taylor Campbell

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/MTZ + Sulf Formulations Tank Mix Comparisons Residual Weed Control/2018

Purpose: Evaluate tank mix residual of different Winfield herbicides

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/FMC Base Residual Treatments in Xtend Programs/2018

Purpose: Evaluate FMC residual treatments with xtendimax

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Balance GT Soybeans/2018

Purpose: Evaluate new HPPD tolerant soybeans

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Enlist Soybeans Program/2018

Purpose: Evaluate different enlist soybean programs

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Dicamba Residual in Burndown Trail/2018

Purpose: Evaluate different dicamba products and determine value of residual

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Zone, Zone Assist, and Zone Elite Tank Mixes/2018

Purpose: Evaluating tank mixes

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Flumioxazin Premix Components/2018

Purpose: Evaluate pre only herbicides on waterhemp control

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Pre Plant Burndown Corn and Soybean/2018

Purpose: Helm herbicide evaluation.

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Westrih/MGI Soybeans-Residual/2018

Purpose: Comparing Companies Products in Corn System.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Tough 5EC in Common Tank Mixuters for Waterhemp Control/2018

Purpose: Evaluate Tough with other herbicide combinations.

Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Assessment of Prydate+Mesotrione in Roundup System/2018

Purpose: Evaluate Tough with other herbicide combinations.

Contact: Bill Johnson, Taylor Campbell

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/Agros and Agros Ultra Tankmixed with Dicamba in Corn/2018

Purpose: Evaluating tank mixes with dicamba.
Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Marestail and Waterhemp Control in Enlist System/2018

Purpose: Evaluate different herbicides with Enlist to control marestail and waterhemp.
Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Microencapsulated Fierce/2018

Purpose: Determine crop safety and weed control on new formulations of Fierce.
Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Panther Pro No-Till/Liberty Link System/2018

Purpose: Evaluate Panther Pro in No till Liberty Link System.
Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/18-Regrowth-Flexstar-GR/2018

Purpose: Assess weed regrowth after herbicide application.
Contact: Bill Johnson, Dustin Johnson, Jesse Haarmann

TPAC/BTNY/B Johnson/18-Regrowth-Flexstar2-GR/2018

Purpose: Assess weed regrowth after herbicide application.
Contact: Bill Johnson, Dustin Johnson, Jesse Haarmann

TPAC/BTNY/B Johnson/18-Regrowth-Liberty-GR/2018

Purpose: Assess weed regrowth after herbicide application.
Contact: Bill Johnson, Dustin Johnson, Jesse Haarmann

TPAC/BTNY/B Johnson/Regrowth Flexstar MEIGS/2018

Purpose: Evaluate the effects of timing and herbicide on weed regrowth
Contact: Bill Johnson, Jesse Haarmann

TPAC/BTNY/B Johnson/Regrowth Liberty MEIGS/2018

Purpose: Evaluate the effects of timing and herbicide on weed regrowth
Contact: Bill Johnson, Jesse Haarmann

TPAC/BTNY/B Johnson/Liberty Link Adjuvant Effects2018

Purpose: Evaluate Rosen adjuvants in liberty link system
Contact: Bill Johnson, Taylor Campbell

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/Roundup Power Max and Fomesafen Adjuvant Effects/2018

Purpose: Evaluate Rosen adjuvants on roundup and fomesafen
Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Xtendimax Adjuvants Effects/2018

Purpose: Evaluate Rosen adjuvants on xtendimax
Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Enginia Adjuvants Effects/2018

Purpose: Evaluate Rosen adjuvants on engenia
Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Dicamba Choline Salt Weed Efficacy and Soybean Tolerance/2018

Purpose: Evaluate new dicamba choline salt formulation on waterhemp control and soybean tolerance
Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Soybean Showcase/2018

Purpose: Evaluate Syngenta Products in Xtend and Liberty Link System
Contact: Bill Johnson, Taylor Campbell

TPAC/BTNY/B Johnson/Cover Crop Termination Timing/2018

Purpose: Evaluation of weed control looking various termination timings.
Contact: Bill Johnson, Dustin Johnson, Stephanie DeSimini

TPAC/BTNY/B Johnson/RR Canola Termination/2018

Purpose: Herbicide programs for termination of RoundUp Ready Canola.
Contact: Bill Johnson, Dustin Johnson, Stephanie DeSimini

TPAC/BTNY/B Johnson/TPAC Corn SA/2018

Purpose: Evaluate effect of cover crops on weed control of summer annuals in corn production.
Contact: Bill Johnson, Wyatt Petersen

TPAC/BTNY/B Johnson/TPAC Corn TER/2018

Purpose: Evaluate effect of cover crops termination and herbicide programs on corn production.
Contact: Bill Johnson, Wyatt Petersen

TPAC/BTNY/B Johnson/18S-TPAC-Corn-01/2018

Purpose: Harness Mas PRE Application timing.
Contact: Bill Johnson, Dustin Johnson

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/18S-TPAC-Corn-02/2018

Purpose: Harness Max Post only Application timing.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-03/2018

Purpose: Harness Mas PRE fb Post Application timing.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-04/2018

Purpose: Syngenta & UPI Corn Showcase.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-05/2018

Purpose: Effectiveness of PRE + Post and One Pass Early Post Programs.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-06/2018

Purpose: Addition of Micronutrient & PGR Products to Herbicides Impact Weed Control in Corn.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-07/2018

Purpose: 2-Pass Corn Herbicide Programs.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-08/2018

Purpose: Diflexx Duo Program Comparison.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-09/2018

Purpose: Acuron Flexi PRE Broadleaf Performance.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-10/2018

Purpose: Postemergence Weed Control in Corn ShieldEx.
Contact Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-11/2018

Purpose: Influence of EXP-1422 on Glyphosate & Glufosinate in Corn.
Contact: Bill Johnson, Dustin Johnson

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/18S-TPAC-Corn-12/2018

Purpose: Corn Tolerance to Post Applications of Topyralate Premix.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-13/2018

Purpose: Enlist Corn Weed Control Programs.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-14/2018

Purpose: Cover Crop Tolerance to Copyralid & Rimsulfuron.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Corn-15/2018

Purpose: Argos & Argos Ultra Performance Comparison.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-16/2018

Purpose: EXP-1422 on Glyphosate & Glufosinate in Soybeans.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-17/2018

Purpose: UPI Soybean Herbicide Showcase.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-18/2018

Purpose: Liberty Link Soybean Programs in Conv. Tillage.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-19/2018

Purpose: Addition of Micronutrient & PGR Products to Herbicide Impact Weed Control in LL Soybeans.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-20/2018

Purpose: Flumioxazin in LL Soybeans System.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-21/2018

Purpose: High Rates of Fierce XLT.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-22/2018

Purpose: Fierce & Dicamba Soybean Programs.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-23/2018

Purpose: Tavium Plus in RR2 Xtend Soybeans.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-24/2018

Purpose: Tavium Comparison in Xtend Soybean Herbicide Programs.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-25/2018

Purpose: BAS 859 Program Comparison.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-26/2018

Purpose: Engenia/BAS 859 Efficacy.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-27/2018

Purpose: ISA Soybean Systems Demonstration.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-28/2018

Purpose: MGI Tolerant Soybeans on Medium Soil Type.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-29/2018

Purpose: Balance GT Soybean Showcase.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-30/2018

Purpose: HT3 Soybean System Comparison.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-31/2018

Purpose: Zone Maxx Efficacy & Crop Injury.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-32/2018

Purpose: Quizalofop Performance on Volunteer Crop.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/18S-TPAC-Soy-33/2018

Purpose: Conventional vs. Non-conventional Soybean Herbicide Programs.

Contact: Bill Johnson, Dustin Johnson

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/TPAC Cover Crop Project/2018

Purpose: Weed control in cover crops terminated at 3 different timings with 3 different herbicide strategies in Enlist and Xtend Soybeans.

Contact: Bill Johnson, Dustin, Johnson, Connor Hodgskiss

TPAC/BTNY/B Johnson/TPAC Long Term Trial/2018

Purpose: Long Term Weed Shift Study-Xtend & Enlist Soybean.

Contact: Bill Johnson, Dustin Johnson, Connor Hodgskiss

TPAC/BTNY/B Young/18-TPAC-Corteva Tunnel 1/2018

Purpose: Evaluate the volatility of different dicamba formulations.

Contact: Bryan Young, Dustin Johnson, Cade Hayden

TPAC/BTNY/B Young/18-TPAC-Corteva Tunnel 2/2018

Purpose: Evaluate the volatility of different dicamba formulations.

Contact: Bryan Young, Dustin Johnson, Cade Hayden

TPAC/BTNY/B Young/2018 BAS850 Group 15 Tank-Mix/2018

Purpose: Evaluate Soybean Response to PRE Applications of BAS 850 Alone and in Combination with Group 15 Herbicides.

Contact: Bryan Young, Dustin Johnson, Nick Steppig

TPAC/BTNY/B Young/2018 BAS850 Ragweed/2018

Purpose: Evaluate Control of Giant Ragweed Using BAS850 Alone and in combination with Other Herbicides.

Contact: Bryan Young, Dustin Johnson, Nick Steppig

TPAC/BTNY/B Young/2018 BAS850 Timing/2018

Purpose: Evaluate Soybean Response to PRE Timings of BAS850.

Contact: Bryan Young, Dustin Johnson, Nick Steppig

TPAC/BTNY/B Young/2018 BAS850 POST/2018

Purpose: Evaluate POST Control of Waterhemp using BAS850

Contact: Bill Johnson, Taylor Campbell, Nick Steppig

TPAC/BTNY/B Young/2018 BAS850 PRE/2018

Purpose: Evaluate PRE Control of Waterhemp using BAS850

Contact: Bill Johnson, Taylor Campbell, Nick Steppig

TPAC/BTNY/B Young/18-TPAC-Monsanto B7-13/2018

Purpose: Evaluate the volatility of different dicamba formulations.

Contact: Bryan Young, Dustin Johnson, Cade Hayden

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Young/18-TPAC-Monsanto CP-13/2018

Purpose: Evaluate the volatility of different dicamba formulations.

Contact: Bryan Young, Dustin Johnson, Cade Hayden

TPAC/BTNY/B Young/18-TPAC-Monsanto Volatility 1/2018

Purpose: Evaluate the volatility of different dicamba formulations.

Contact: Bryan Young, Dustin Johnson, Cade Hayden

TPAC/BTNY/B Young/18-TPAC-Monsanto Volatility 2/2018

Purpose: Evaluate the volatility of different dicamba formulations.

Contact: Bryan Young, Dustin Johnson, Cade Hayden

TPAC/BTNY/B Young/18-TPAC-Multiple Herbicide Injury/2018

Purpose: Evaluate soybean response to postemergence herbicides and dicamba.

Contact: Bryan Young, Dustin Johnson, Cade Hayden

TPAC/BTNY/B Young/18-TPAC-USB-Enlist/2018

Purpose: Evaluate Enlist soybean response to dicamba exposure.

Contact: Bryan Young, Dustin Johnson, Cade Hayden

TPAC/BTNY/B Young/18-TPAC-USB-Multiple Dicamba Exposure/2018

Purpose: Evaluate soybean response to multiple dicamba exposures.

Contact: Bryan Young, Dustin Johnson, Cade Hayden

TPAC/BTNY/B Westrich/MGI Soybeans-Residual/2018

Purpose: Soil-applied herbicide combinations for use in MGI soybeans.

Contact: Ben Westrich

TPAC/BTNY/B Westrich/MGI Soybeans-Sequential/2018

Purpose: Soil-applied herbicide combinations followed by post-emergence herbicide combinations for use in MGI soybeans.

Contact: Ben Westrich

TPAC/BTNY/AIyer-Pascuzzi/Bulking Tomato Seed for use in Identification of Bacterial wilt Resistance Genes/2018

Purpose:

Contact: Anjali Iyer-Pascuzzi, Denise Caldwell

Department of Entomology

TPAC/ENTM/C Krupke/Corn Rootworm Trap Crop/2018

Purpose: A late-planted trap crop in 2018 to provide an enhanced test area in 2019.
Contact: Christian Krupke, Larry Bledsoe

TPAC/ENTM/C Krupke/Efficacy of Commercial and Experimental Insecticides Used to Control/2018

Purpose: Evaluate new products and generate data for extension recommendations.
Contact: Christian Krupke, Larry Bledsoe

TPAC/ENTM/C Krupke/Evaluate Efficacy of Pest Management Products on Soybean Pest/2018

Purpose: Evaluate efficacy of pest management products on soybean pest.
Contact: Christian Krupke, Larry Bledsoe

TPAC/ENTM/L Enders/Investigating the Role of Symbiotic Microbes in the Transmission of Insect-vectored Plant Pathogens/2018

Purpose: This project investigates whether bacterial communities associated with aphids can influence transmission of Barley yellow dwarf virus, a globally destructive pathogen of cereal crops. We plan to collect aphids from existing cereal crops (e.g. wheat, rye, corn, other cover crops) and surrounding natural areas using several methods (pan traps, sweep netting, planting trap crop/strips) in Spring 2018 (May-June) and Fall 2018 (Aug-Sept).

Contact: Laramy Enders, Laura Ingwell, Brandon (Brandi) Schemerhorn

TPAC/ENTM/R Foster/Cabbage Insect Demonstration/2018

Purpose: This small plot will be used for my class to learn about pesticide application, data collection, and identification of cabbage insects.

Contact: Rick Foster, Larry Bledsoe

TPAC/ENTM/R Foster/Squash Collection Site/2018

Purpose: These plants are for collecting cucumber beetles for the row cover study.

Contact: Rick Foster, Larry Bledsoe

TPAC/ENTM/R Foster/Watermelon Best Practices/2018

Purpose: This study is to determine which practices will allow control of cucumber beetles with the least impact on pollinators.

Contact: Rick Foster, Larry Bledsoe

TPAC/ENTM/R Foster/Muskmelon Row Cover Study/2018

Purpose: This is a follow-up study to some of Mohammadi's previous research that we need to be able to publish.

Contact: Rick Foster, Larry Bledsoe

Department of Entomology (cont'd)

TPAC/ENTM/R Foster/Sweet Corn Sprayers/2018

Purpose: This study is to compare various sweet corn sprays for control of corn earworm

Contact: Rick Foster, Larry Bledsoe

TPAC/ENTM/R Foster/Sweet Corn Insecticide Trial/2018

Purpose: This study is to compare various insecticide combinations for control of corn earworm.

Contact: Rick Foster, Larry Bledsoe

TPAC/ENTM/C Shee/Mass Trapping of Striped Cucumber Beetles/2018

Purpose: Using yellow gallon traps to kill SCP

Contact: Christie Shee, Ian Kaplan

TPAC/ENTM/C Shee/Cucumber Beetle-host Plant-pathogen Interactions/2018

Purpose: We request a trap crop of squash planted to collect cucumber beetles for lab exps. We are anticipating approximately 100 zucchini plants at about 12-inch spacing?

Contact: Christie Shee, Ian Kaplan

TPAC/ENTM/L Ingwell/Cucumber Variety Evaluation for High Tunnel Production/2018

Purpose: Evaluate the susceptibility of cucumber varieties used in high tunnel production to cucumber beetles and bacterial wilt in field production (not tunnels) 16 varieties, 4 plants of each variety. 6 feet between rows. 4 feet spacing within row. Need 5, 300' rows.

Contact: Laura Ingwell, Wenjing Guan

TPAC/ENTM/L Ingwell/Specialty Crop Research Initiative (SCRI) Impact of Neonicotinoid Insecticides on Honey Bee Pollinators of Melons/2018

Purpose: The within and surround field impacts of neonicotinoid insecticides on honey bees. 15-acre corn fields with 0.5 acre watermelon and honey bee hives located within. Project will continue through 2020.

Contact: Laura Ingwell, Ian Kaplan, Christian Krupke

TPAC/ENTM/L Ingwell/Specialty Crop Research Initiative (SCRI) Impact of Neonicotinoid Insecticides on Bumble Bee Pollinators of Melons /2018

Purpose: Exploring the impact of neonicotinoids on bumble bee pollinators in melon production. Screens will be installed on all 6 tunnels, bumblebees will be in all tunnels, cover crop (clover mix) will remain in half of the tunnels.

Contact: Laura Ingwell, Ian Kaplan, John Ternest

Department of Entomology (cont'd)

TPAC/ENTM/L Ingwell/Specialty Crop Research Initiative (SCRI) Impact of Neonicotinoid Insecticides on Honey Bee Pollinators of Melons/2018

Purpose: Exploring the impact of herbicides on honey bee colony health using an attractive food source, Phacelia tanacetifolia..

Contact: Laura Ingwell, Christian Krupke

TPAC/ENTM/K Ingerslew/Phylogenetic Farming/2018

Purpose:

Contact: Kathryn Ingerslew, Ian Kaplan

TPAC/ENTM/W Ghanem/Optimizing Plant-Soil Feedbacks in High Intensity Crop Production Systems/2018

Purpose: Utilizing different growing techniques (cover crops, crop rotation, grafting) to test the effect of varying soil communities on plant and pest performance.

Contact: Wadih Ghanem

Department of Horticulture and Landscape Architecture

TPAC/HORT/B Bordelon/Wine Grape Vineyard/2018

Purpose: Replicated variety and advanced selection trial, advanced selection observations, a few bulk rows for miscellaneous studies (harvest date, etc effects on wine quality, SWD management, leaf phylloxera control, frost damage mitigation, etc.)

Contact: Bruce Bordelon, Paul Howard

TPAC/HORT/B Bordelon/Small Fruit Observation and Demonstration Trails/2018

Purpose: Planting primarily used as teaching block for HORT 318. Observations of winter injury, plant phenology, disease and insect incidence. Master Gardeners and others use the block as demonstration and in field days.

Contact: Bruce Bordelon, Paul Howard

TPAC/HORT/B Bordelon/Paw Paw Regional Variety Trial/2018

Purpose: This planting is one of 13 regional variety trials established in 1999. Many of those since have been removed, but ours is still in good condition. We plan to continue to collect data from this trial for the next few years. at Kentucky State University. The trial is also a popular stop for visitors to the farm. Paw paws are a novelty fruit.

Contact: Bruce Bordelon, Paul Howard

TPAC/HORT/K Daniel/NC-7 OrnamentalTrials/2018

Purpose: Evaluation of Woody Plants

Contact: Kyle Daniels

Department of Horticulture and Landscape Architecture (cont'd)

TPAC/HORT/P Hirst/Evercrisp/2018

Purpose: To evaluate and define management systems for Evercrisp apples.

Contact: Peter Hirst

TPAC/HORT/P Hirst/Magnum Gala/2018

Purpose: Genotype evaluation.

Contact: Peter Hirst

TPAC/HORT/P Hirst/New Apple Cultivars/2018

Purpose: Multi-purpose collection and evaluation of new apple cultivars.

Contact: Peter Hirst

TPAC/HORT/P Hirst/ Honey Crisp Selections/2018

Purpose: Evaluation of new Honey Crisp apple trees>

Contact: Peter Hirst, Mokhles Ahmed Mokh Elsy

TPAC/HORT/J JANICK/AppleTrees/2018

Purpose: Identify advanced selections and maintain scion collection.

Contact: Jules Janick, Anna Whipkey

TPAC/HORT/J JANICK/Coop and Elite Selections Planting/2018

Purpose: Establish new block for coops and elite selections.

Contact: Jules Janick, Anna Whipkey

TPAC/HORT/J JANICK/Arugula Planting/2018

Purpose: Plant and harvest seed of Adagio arugula

Contact: Jules Janick, Anna Whipkey

TPAC/HORT/P Langenhoven/Specialty Crop Production: Diversification of the Indiana Fresh Market Cantaloupe Industry/2018

Purpose: 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 market driven selection of melon types currently not grown in Indiana. Additionally new production technologies that would increase yield and enhance product quality will be tested.

Contact: Petrus Langenhoven

TPAC/HORT/P Langenhoven/Specialty Crop Production: Evaluation of Summer Squash for Local market Consumption/2018

Purpose: The objectives of this study are to explore the yield potential of summer squash varieties and varietal preferences amongst chefs.

Contact: Petrus Langenhoven

USDA - ARS

TPAC/USDA-ARS/J Gonzalez/Long Term Erosion Study/2018

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

Contact: Javier Gonzalez, Brenda Hofmann

TPAC/USDA-ARS/J Gonzalez/Legacy phosphorus study/2018

Purpose: The purpose of the project is to evaluate soil phosphorus levels under different applications rate.

Contact: Javier Gonzalez, Brenda Hofmann

TPAC/USDA-ARS/C Penn/Long Term Phosphorus Stratification Study/2018

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

Contact: Chad Penn, Brenda Hofmann