

THROCKMORTON-PURDUE AGRICULTURAL CENTER
(INCLUDING THE MEIGS FARM)
RESEARCH AND DEMONSTRATION PROJECTS
2017

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Department of Agronomy

TPAC/AGRY/S Casteel/High Yield Management Rotation Effects in Soybean and Corn/2017

Purpose: Establish soybean-corn rotation blocks for intense studies in following years.
Contact: Shaun Casteel

TPAC/AGRY/S Casteel/K Plots/2017

Purpose: Monitor yield levels of corn, soybean in the K plots, soil samples to be taken, and potash will be applied to reestablish a soil K gradient.
Contact: Shaun Casteel, Jim Camberato

TPAC/AGRY/S Casteel/Enhance Seed Fill – MG THREE/2017

Purpose: Determine seed fill rates of modern and old varieties x mgt.
Contact: Shaun Casteel

TPAC/AGRY/Caste/UnderCover – Manganese/2017

Purpose: Determine if 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 x Plant Population/2017

Purpose: Evaluate new delivery method to apply fungicide, insecticide, fertilizer in canopy.
Contact: Shaun Casteel

TPAC/AGRY/S Casteel/Enhance Seed Fill – MG2/2017

Purpose: Determine seed fill rates of modern and old varieties x mgt.
Contact: Shaun Casteel

Department of Agronomy (cont'd)

TPAC/AGRY/S Casteel/Undercover X Row Width/2017

Purpose: Evaluate new delivery method to apply fungicide, insecticide, fertilizer in canopy.

Contact: Shaun Casteel

TPAC/AGRY/K Rainey/Evaluation and Selection of Preliminary and Advanced Soybeans Breeding Lines/2017

Purpose:

Contact: Katy Rainey, Chris Hoagland, Curtis Brackett

Department of Biology

Department of Botany & Plant Pathology

TPAC/BTNY/J Beckerman/Industrial Hemp Research and Demonstration Plot – Organic + Conventional/2017

Purpose: Examine the performance of oil and teed hemp when grown organically and conventionally.

Contact: Janna Beckerman, Ron Turco, Kevin Gibson

TPAC/BTNY/J Beckerman/Implementing New IPM Strategies for Summer Disease Control in Apple/2017

Purpose: Determine strategies to prevent summer rot, which is responsible for loss in grower blocks.

Contact: Janna Beckerman

TPAC/BTNY/K Gibson/Hemp Cultivar & Planting dates Trial/2017

Purpose: Investigating eight (8) different industrial hemp cultivars at five (5) different planting dates.

Contact: Kevin Gibson

TPAC/BTNY/K Gibson/Industrial hemp Critical Weed Period Trial/2017

Purpose: Classic critical weed period trial with industrial hemp.

Contact Kevin Gibson

TPAC/BTNY/Alver-Pascuzzi/Seed Stock – RILa from Traditional Breeding/2017

Purpose:

Contact: Anjali Iver-Pascuzzi

TPAC/BTNY/B Johnson/Diflexx Duo/2017

Purpose: Diflexx Duo efficacy and comparison between competitors

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/Corn Sale Support/2017

Purpose: Comparing Companies Products in Corn System.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Panther Pro Weed Size Screen/2017

Purpose: Panther Pro on different weed heights on fallow ground.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/LL Sale Support/2017

Purpose: Comparing Companies Products in Liberty Link Soybean System.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Panther Pro in LL Soybeans/2017

Purpose: Panther Pro on different weed heights in LL soybean system.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Panther Pro in Roundup Ready 2 Xtend Soybeans/2017

Purpose: Panther Pro on different weed heights in Roundup Ready 2 Xtend soybean system.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Authority Anthem Maxx/2017

Purpose: Authority Anthem Maxx Product Understanding.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/FMC Burndown Strategies/2017

Purpose: FMC Burndown Strategies with Xtendimax Systems.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Fierce/2017

Purpose: Fierce Herbicide in LL Soybean System

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Cobra/2017

Purpose: Cobra Herbicide in LL Soybean System

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Fierce (2)/2017

Purpose: Fierce Herbicide in Xtend Soybean System Burndown Trial.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Cobra (2)/2017

Purpose: Cobra Herbicide in Xtend Soybean System Burndown Trial.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/Liberty Herbicide/2017

Purpose: Liberty Rate Study.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Balance Beans/2017

Purpose: Regulated Balance Bean Study.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Umbrella weed Control Trial/2017

Purpose: Umbrella adjuvant trail on waterhemp.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/FeXapan in No-till 2 pass programs for RR2X Soybeans/2017

Purpose: FeXapan Efficacy Trial.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/DuPont Herbicides in LL Soybean System/2017

Purpose: DuPont Herbicides in LL Soybean System.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Windfield Adjuvants with Xtend/2017

Purpose: Soil Residual and Post Program with different Adjuvants inn Xtend Soybeans.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Enlist Programs/2017

Purpose: Comparing Different Products in Enlist Soybean System.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Xtend Sale Support/2017

Purpose: Comparing Companies Products inn Xtend Soybean System.

Contact: Bill Johnson, Taylor Campbell, Dustin Johnson

TPAC/BTNY/B Johnson/Brent Mansfield Grad Student Project/2017

Purpose: Evaluating Soil Residual PPO herbicide on Waterhemp Control.

Contact: Bill Johnson, Taylor Campbell, Brent Mansfield

TPAC/BTNY/B Johnson/Jodie Boe Grad Student Project/2017

Purpose: Evaluating Soil Residual ALS herbicide on Waterhemp Control.

Contact: Bill Johnson, Taylor Campbell, Jodie Boe

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/17S-TPAC-Corn-01/2017

Purpose: Glystar & Glufosinate + AB5000 in Corn.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-05/2017

Purpose: Anthem Maxx & Solstice Pre & Post Program.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-06/2017

Purpose: Two Pass Corn Program.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-07/2017

Purpose: Acuron Performance on Grass-Foxtail.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-08/2017

Purpose: Efficacy of Tank Mix partners for Halex GT in Corn.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-10/2017

Purpose: Armezon Pro Adjuvant Efficacy & Timing.

Contact Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-11/2017

Purpose: Status + Armezon+Diflexx Crop Safety Trial.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-12/2017

Purpose: Status & Diflexx Efficacy.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-13/2017

Purpose: Two Pass Corn Herbicide Programs.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-19/2017

Purpose: ImpactZ Performance in Corn.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-20/2017

Purpose: Different Rates of Liberty in Two Varieties of Corn.

Contact: Bill Johnson, Dustin Johnson

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/17S-TPAC-Corn-21/2017

Purpose: Bayer Corn Herbicide Demo.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-22/2017

Purpose: Diflexx Early Post One Pass – Crop Safety.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-25/2017

Purpose: IT1402 with Glyphosate & Glufosinate in Corn.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-27/2017

Purpose: Aceto +Meso Pre Only Program.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-28/2017

Purpose: Aceto + Meso Post Program.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-31/2017

Purpose: Different Post Timings using SL-574
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-32/2017

Purpose: Two Pass System Corn Program with Tolpyralate.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-34/2017

Purpose: Corn Herbicide Showcase for Syngenta, UPI, DuPont, & Dow.
Contact Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Corn-Long Term Trial/2017

Purpose: Long Term Weed Shift Study-Corn.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-FOLLOW-42/2017

Purpose: Spray Quality Trial with Rimsulfuron.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-POP-34/2017

Purpose: Assess Pyridate + Mesotrione on Later Stage Corn.
Contact: Bill Johnson, Dustin Johnson

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/17S-TPAC-Soy-02/2017

Purpose: Glystar + AB5000 in Xtend Soybean.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-03/2017

Purpose: UPI Herbicide Programs in Enlist Soybean.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-04/2017

Purpose: Surmise + AB5000 in LL Soybean.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy09/2017

Purpose: Herbicide Pre Options & Tank Mixes in Xtend Soybean.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-14/2017

Purpose: Pre Zidua Programs in Xtend Soybeans (Stale Seed Bed).

Contact: Bill Johnson , Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-15/2017

Purpose: Engenia Plus Graminicide Efficacy.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-16/2017

Purpose: Fierce + Dicamba – Conventional Tillage.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-17/2017

Purpose: Fierce + Dicamba – Burndown (Stale Seed Bed).

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-18/2017

Purpose: Scepter Tank Mixtures for PRE Application in Soybeans.

Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-23/2017

Purpose: Balance Bean & Balance GT Demo.

Contact: Bill Johnson, Dustin Johnson

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B Johnson/17S-TPAC-Soy-24/2017

Purpose: FeXapan in conventional two pass programs in Xtend Soybean.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-26/2017

Purpose: IT1402 with Glyphosate & Glufosinate in Soybean.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-29/2017

Purpose: Xtendimax Tank Partners Efficacy & Crop Safety.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-30/2017

Purpose: Photoperiod of Xtendimax on Efficacy.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-33/2017

Purpose: Evaluation of metobromuron in soybean.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-35/2017

Purpose: Soybean Herbicide Showcase for DuPont & DOW.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-40/2017

Purpose: ISA LL & Xtend Soybean Demo.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Soy-41/2017

Purpose: Liberty Adjuvant Spray Retention in LL Soybean-ATV Trial.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Sweet-36/2017

Purpose: Pyrdiate Evaluation & Crop Tolerance in Different Sweet Corn Varieties.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Sweet-37/2017

Purpose: Pyrdiate Evaluation & Crop Tolerance in Different Sweet Corn Varieties.
Contact: Bill Johnson, Dustin Johnson

TPAC/BTNY/B Johnson/17S-TPAC-Sweet-38/2017

Purpose: Pyrdiate Evaluation & Crop Tolerance in Different Sweet Corn Varieties.
Contact: Bill Johnson, Dustin Johnson

Department of Botany & Plant Pathology (cont'd)

TPAC/BTNY/B J Young/17-TPAC-USB BMP/2017

Purpose: Confidential.

Contact: Bryan Young, Julie Young, Dustin Johnson

Department of Entomology

TPAC/ENTY/R Foster/Effect of FarMore Treatments on Insects, Disease, and yield in Muskmelon/2017

Purpose: Study will look at effect of FarMore 300 and FarMore 400 treated seeds on insects, diseases, and yield in muskmelons.

Contact: Rick Foster

TPAC/ENTY/R Foster/Insect Best management Practices on Watermelon/2017

Purpose: Investigate how to best manage insects on watermelon with minimal impacts on pollinators.

Contact: Rick Foster

TPAC/ENTY/R Foster/Timing of Insecticide Applications for Managing Corn Earworms on Sweet Corn/2017

Purpose: Experiment will test insecticides for control of spotted wing drosophila on raspberries.

Contact: Rick Foster

TPAC/ENTY/R Foster/Raspberry Insecticide Trial/2017

Purpose: Experiment will look at spray coverage with four different sprayer types

Contact: Rick Foster

TPAC/ENTY/R Foster/Comparison of Sprayer Types for Control of Corn Earworm in Sweet Corn/2017

Purpose: Experiment will compare efficacy of corn earworm control using boom sprayer, boom with drop nozzles, and air blast sprayer.

Contact: Rick Foster

TPAC/ENTY/R Foster/Sweet Corn Insecticide Trial/2017

Purpose: Experiment will compare different insecticides for control of corn earworm.

Contact: Rick Foster

TPAC/ENTY/L Ingwell/Control Bacterial Wilt in Cucurbit Production by Exclusion Screening and Grafting/2017

Purpose: Examining two different screen sizes on the high tunnels to exclude cucumber beetles. Grafted plants will be integrated.

Contact: Laura Ingwell, Ian Kaplan

Department of Entomology (cont'd)

TPAC/ENTY/L Ingwell/Phylogenetic Farming: Can Evolutionary History Inform Crop Management/2017

Purpose:

Contact: Laura Ingwell

Department of Horticulture and Landscape Architecture

TPAC/HORT/B Bordelon/Wine Grape Vineyard/2017

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.)

Contacts: Bruce Bordelon, Paul Howard

TPAC/HORT/B Bordelon/Small Fruit Observation and Demonstration Trails/2017

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/2017

Purpose: This planting is one of 13 regional variety trial ls 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. Results have been shared with the organizer: Kirk Pomper 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/A Handa/Development of High Polyamine Tomato Powder/2017

Purpose: Investigate the effects of high polyamine powder in chicken to improve their growth and accumulation in eggs.

Contact: Avtar Handa, Tatsiana Datsanka, Tahira Fatima

TPAC/HORT/P Langenhoven/Specialty Crop Production: Diversification of the Indiana Fresh Market Cantaloupe Industry High Tunnel #7/2017

Purpose: Long-term initiative is to increase planted acreage, Farm Productivity and profit margins. Short term, address the demand for smaller high quality fruit by evaluating a market driven selection of melon types not currently grown in Indiana.

Contact: Petrus Langenhoven

TPAC/HORT/P Langenhoven/Specialty Crop Production: Diversification of the Indiana Fresh Market Cantaloupe Industry Field Plot/2017

Purpose: Long-term initiative is to increase planted acreage, Farm Productivity and profit margins. Short term, address the demand for smaller high quality fruit by evaluating a market driven selection of melon types not currently grown in Indiana.

Contact: Petrus Langenhoven

Department of USDA-ARS-NSERL/Agronomy

TPAC/USDA/J Gonzalez/Long Term Erosion Study/2017

Purpose: Quantify effects of tillage and crop rotation on yield and soil quality.

Contact: Dr. Javier Gonzalez, Brenda Hofmann

TPAC/USDA/J Gonzalez/Long Term Phosphorus Stratification/2017

Purpose: Quantify effects of phosphorus production and crop rotation on yield and soil quality.

Contact: Dr. Javier Gonzalez, Brenda Hofmann

Throckmorton Purdue Ag Center

TPAC/MEIGS/T Tucker/Field Management of Fields O and B2 at the Meigs Horticultural Facility/2017

Purpose: A management strategy developed for the Organic fields at the Meigs Farm to build soil fertility, reduce weed production, and limit financial impact on total farming operations.

Contact Tristand Tucker

TPAC/MEIGS/T Tucker/Grape Vineyard/2017

Purpose:

Contact Tristand Tucker