Department of Agronomy

Soybean Varietal Glyphosate Tolerant Performance Trial
Purpose: State variety performance trials.
Contact: Phil DeVillez and Bill Foster, Agronomy

Soybean Variety Conventional Trial
Purpose: State variety performance trials.
Contact: Phil DeVillez and Bill Foster, Agronomy

Specialty Soybean Study
Purpose: Evaluate Specialty variety performance trials.
Contact: Phil DeVillez and Bill Foster, Agronomy

Corn Population Study
Purpose: Evaluate industry-provided seed hybrids with different planting populations.
Contact: Phil DeVillez and Bill Foster, Agronomy

Corn Hybrid Glyphosate Tolerant Performance Trial
Purpose: State hybrid performance trials.
Contact: Phil DeVillez and Bill Foster, Agronomy

Corn Hybrid Conventional Performance Trial
Purpose: State hybrid performance trials.
Contact: Phil DeVillez and Bill Foster, Agronomy

Specialty Corn Study
Purpose: Evaluate specialty hybrid performance trials.
Contact: Phil DeVillez and Bill Foster, Agronomy

Indigenous Soil Potassium Supply
Fertilizer Potassium Use Efficiency
Potassium Budgets in Indiana Corn and Soybean Production
Purpose: Evaluate the agronomic efficiency of currently recommended Potassium (K) fertilizer rates and evaluate theoretically improved soil potassium tests for ability to predict soil K supply.
Contact: Sylvie Brouder, Shaun Casteel, and James Camberato, Agronomy
Phase-out of Long-term Nitrogen Rate Trial for Corn
Purpose: Documenting any changes in soil characteristics and nutrient levels that have occurred over time due to the repeated positioning of the various N rates in the same plots
Contact: Bob Nielsen & Jim Camberato, Agronomy

Comparison of In-furrow and 2”x2” Starter Fertilizers on the Growth, Development, and Yield of Continuous Corn
Purpose: Trial in 2014, dependent on successfully retrofitting the Pinney-PAC planter with in-furrow starter fertilizer capability.
Contact: Bob Nielsen & Jim Camberato, Agronomy

Effects on Soybean Growth and Yield of Previous, Long-Term Variable N Rates to Corn (John Scott Trial)
Purpose: Bulk seeding of soybeans in a soybean/corn rotation.
Contact: Bob Nielsen & Jim Camberato, Agronomy

Yield Component Response of Two Hybrids to Plant Population – Mary Rice Farm
Purpose: Comparing yield component responses to seeding rates for two hybrids identified by a supporting seed company as responding differently to seeding rates and side dress rates.
Contact: Bob Nielsen, Agronomy

Nitrogen Use Efficiency in Corn on Contrasting Soil Types (i.e. Sand & Loam)
Purpose: To evaluate nitrogen efficiency with corn production on different soils.
Contact: Jim Camberato, Agronomy

Phosphorous (P) Response of Corn-Soybeans on a Low P Soil
Purpose: To evaluate the response on low phosphorous soil on corn and soybean crops.
Contact: James Camberato, Agronomy

Soybean Micronutrient Study
Purpose: To evaluate soybean performance as influenced by foliar applied micronutrients.
Contact: Tony Vyn, Agronomy

Corn Micronutrient Trial
Purpose: To evaluate corn performance as influenced by foliar applied micronutrients.
Contact: Tony Vyn, Agronomy

Industry-supported Corn Nitrogen Drought Tolerance
Purpose: To evaluate corn performance as influenced by hybrid, nitrogen rate, and population on a droughty soil.
Contact: Tony Vyn, Agronomy

Industry-supported Calibration Study for Corn
Purpose: To evaluate corn performance as influenced by nitrogen rate, hybrid, and population
Contact: Tony Vyn, Agronomy
Soybean Seeding Rate Trial  
Purpose: Evaluate the performance of soybean seeding rates in large plots.  
Contact: Shaun Casteel, Agronomy

Soybean Date of Planting Trial  
Purpose: Planting dates are important for both soybean and corn crops – this study is to determine which crop should be planted to maximize yield of the respective crop as relates to the calendar.  
Contact: Shaun Casteel, Agronomy

Corn Date of Planting Trial  
Purpose: Planting dates are important for both soybean and corn crops – this study is to determine which crop should be planted to maximize yield of the respective crop as relates to the calendar.  
Contact: Shaun Casteel, Agronomy

Product Evaluations  
Purpose: Evaluation of commercial inoculants in this type of rotation as well as new products applied to the seed and to the plants.  
Contact: Shaun Casteel, Agronomy

Nitrogen x Source-Rate with Soybeans  
Purpose: To investigate the opportunity of applying much lower amounts of N and still improving soybean yield.  
Contact: Shaun Casteel, Agronomy

Soybean Competition: Maturity Blending  
Soybean ability to compensate for various plant stands, emergence rates, and overall development.  
Contact: Shaun Casteel, Agronomy

Soybean Competition: Delayed Emergence  
Soybean ability to compensate for various plant stands, emergence rates, and overall development.  
Contact: Shaun Casteel, Agronomy

Soybean Competition: Replant  
Soybean ability to compensate for various plant stands, emergence rates, and overall development.  
Contact: Shaun Casteel, Agronomy

Irrigated Soybean – Seeding Rate x Plant Type  
Soybean seeding rate recommendation refinement based on region or soil and to determine the underlying factors for the various soybean responses to plant populations.  
Contact: Shaun Casteel, Agronomy
Department of Agronomy (Continued)

Climatology – Automated Weather Station
Purpose: To collect information from automated weather station equipment at Pinney-PAC.
Contact: Ken Scheeringa, Agronomy

Evaluation of Flowering Time in Perennial Ryegrass
Purpose: Examination of flowering time and related traits in perennial ryegrass and mapping population identification of genotypes with late flowering time, high biomass yield and good stress tolerance.
Contact: Yiwei Jang, Agronomy

Department of Entomology

Isolated Corn Refuge Trial
Contact: Larry Bledsoe, Entomology

Black Cutworm Pheromone Trapping
Purpose: To monitor the presence of black cutworm.
Contact: John Obermeyer, Entomology

Western Bean Cutworm Trapping
Purpose: To monitor the presence of western bean cutworm.
Contact: John Obermeyer, Entomology

Corn Ear Worm Trapping
Purpose: To monitor the presence of corn ear worm.
Contact: John Obermeyer, Entomology

Corn Trap Crop
Purpose: A trap crop for corn rootworm eggs in 2014 to provide experimental area in 2015.
Contact: Christian Krupke, Entomology

Evaluation of Various rates of Poncho Insecticide on Corn Rootworm
Purpose: Evaluate new products and generate data for Extension recommendations.
Contact: Christian Krupke, Entomology

Efficacy of Commercial and Experimental Insecticides Used to Control Corn Insects
Purpose: Evaluate new products and generate data for extension recommendations.
Contact: Christian Krupke, Entomology

Indiana Cooperative Agricultural Pest Survey (CAPS) for Invasive Pests
Purpose: Site for trap grid to monitor for invasive insect species.
Contact: Larry Bledsoe, Entomology

Evaluate Rootworm Mating Biology in Transgenic Corn
Purpose: Study mating probabilities in resistant vs. susceptible rootworm populations.
Contact: Christian Krupke, Entomology
The Effect of Carbon Amendments on Prairie Restoration
Purpose: How carbon amendments impact prairie community development, prairie site invasive plants, and soil community diversity and structure.
Contact: Dr. Gibson & Dustin Houghton, Botany & Plant Pathology

Soybean Sudden Death Syndrome (SDS) Pre-Emerge Fungicide Trial
Purpose: To determine the efficacy of labeled fungicides when applied prior to emergence for control of SDS in soybeans.
Contact: Kiersten Wise, Botany & Plant Pathology

Soybean Sudden Death Syndrome (SDS) Product Evaluation Trial
Purpose: To determine the efficacy of products on disease control and yield in soybeans.
Contact: Kiersten Wise, Botany & Plant Pathology

Soybean Sudden Death Syndrome (SDS) Pre-Emerge Herbicide Trial
Purpose: To determine the efficacy of products on disease control and yield in soybeans.
Contact: Kiersten Wise, Botany & Plant Pathology

Soybean Sudden Death Syndrome (SDS) Planting Date Trial
Purpose: To determine the impact of planting date, varietal selection, and seed treatment on SDS severity.
Contact: Kiersten Wise, Botany & Plant Pathology

Soybean Sudden Death Syndrome (SDS) Soybean Cyst Nematode (SCN) Trial
Purpose: To determine how seed treatments will affect SCN reproduction and subsequently yield and SDS development.
Contact: Kiersten Wise, Botany & Plant Pathology

Soybean Sudden Death Syndrome (SDS) Seed Treatment Trial
Purpose: Determine how new products will affect SDS under different management regimes
Contact: Kiersten Wise, Botany & Plant Pathology

Soybean Sudden Death Syndrome (SDS) Pre-erme Herbicide Trial
Purpose: Evaluate early season phytotoxicity caused by herbicides in combination with seed treatments and subsequently yield and SDS development.
Contact: Kiersten Wise, Botany & Plant Pathology

Soybean In-furrow Fungicide Trial
Purpose: Determine the efficacy of in-furrow applications on disease control and yield in soybeans.
Contact: Kiersten Wise, Botany & Plant Pathology
Volunteer Corn Trial
Purpose: Evaluation of disease survival on volunteer corn.
Contact: Kiersten Wise, Botany & Plant Pathology

Sudden Death Syndrome (SDS) Residue Trial
Purpose: Determine how seed treatments will affect SDS development with different levels of corn residue.
Contact: Kiersten Wise, Botany & Plant Pathology

Charcoal Rot In-Furrow Fungicide Trial
Purpose: Determine the efficacy of in-furrow fungicide on charcoal rot in soybeans.
Contact: Kiersten Wise, Botany & Plant Pathology

Charcoal Rot Seed Treatments Trial
Purpose: Determine the efficacy of seed treatments on charcoal rot in soybeans.
Contact: Kiersten Wise, Botany & Plant Pathology

Sudden Death Syndrome (SDS) Company Seed Treatment Trial
Purpose: Efficacy of seed treatment options for SDS protection in soybeans.
Contact: Kiersten Wise, Botany & Plant Pathology

Company Seed Treatment Trial
Purpose: Determine the efficacy of seed treatment options in soybeans.
Contact: Kiersten Wise, Botany & Plant Pathology

Sudden Death Syndrome (SDS) Company Seed Treatment Trial
Purpose: Evaluation of seed treatments on SDS severity.
Contact: Kiersten Wise, Botany & Plant Pathology

Sudden Death Syndrome (SDS) Company Trial
Purpose: Determine efficacy and selectivity of fungicide when soil-applied for control of SDS.
Contact: Kiersten Wise, Botany & Plant Pathology

Effect of Carbon Soil Amendments on Prairie Restoration Site Invisibility and Native Plant Diversity
Purpose: A comprehensive approach utilizing both field and laboratory techniques will be used to assess the effect of carbon soil amendments on soil characteristics, AMF community structure, native and invasive plant growth and overall prairie community diversity.
Contact: Kevin Gibson, Dustin Houghton, Botany & Plant Pathology

ASTM Water Conditioner Screen – Trial 1
Purpose: Determine the influence of adjuvants on hard water antagonism of glyphosate
Contact: Julie Young, Botany & Plant Pathology

ASTM Water Conditioner Screen – Trial 2
Purpose: Determine the influence of adjuvants on hard water antagonism of glyphosate
Contact: Julie Young, Botany & Plant Pathology
Department of Botany & Plant Pathology (Continued)

**Herbicide & Adjuvant Combination Effects – Company 1**  
Purpose: Determine the influence of adjuvants on the efficacy of company herbicides.  
Contact: Julie Young, Botany & Plant Pathology

**Herbicide Adjuvant Evaluation – Company 2**  
Purpose: Determine the influence of adjuvants on the efficacy of company herbicides.  
Contact: Julie Young, Botany & Plant Pathology

**Herbicide Adjuvant Evaluation – Company 3 – Herbicide 1**  
Purpose: Determine the influence of adjuvants on the efficacy of company herbicides.  
Contact: Julie Young, Botany & Plant Pathology

**Herbicide Adjuvant Evaluation – Company 3 – Herbicide 2**  
Purpose: Determine the influence of adjuvants on the efficacy of company herbicides.  
Contact: Julie Young, Botany & Plant Pathology

**Herbicide Micro Nutrient Evaluation – Company 4**  
Purpose: Determine the influence of micro nutrients on the efficacy of company herbicides.  
Contact: Julie Young, Botany & Plant Pathology

Department of Horticulture & Landscape Architecture

**Supersweet (sh2) Sweet Corn Variety Evaluation**  
Purpose: Sweet corn varieties will be evaluated for yield, plant characteristics, and ear quality to determine suitability for fresh market production.  
Contact: Elizabeth Maynard, Horticulture

**Sugar-enhanced and Synergistic sweet corn variety evaluation**  
Purpose: Sweet corn varieties will be evaluated for yield, plant characteristics, and ear quality to determine suitability for fresh market production.  
Contact: Elizabeth Maynard, Horticulture

**Cucurbit and Basil Downy Mildew Sentinel Plot**  
Purpose: Monitor cucurbits and basil for downy mildew as part of a multi-state project.  
Contact: Elizabeth Maynard, Horticulture and Dan Egel, Botany & Plant Pathology

**High Tunnel Vegetable Production – Organic**  
Purpose: Evaluate support systems with a High Tunnel growing fresh peppers.  
Contact: Elizabeth Maynard, Horticulture

**High Tunnel Vegetable Production – Conventional**  
Purpose: Evaluate support systems with a High Tunnel growing fresh peppers.  
Contact: Elizabeth Maynard, Horticulture
Department of Horticulture & Landscape Architecture
(Continued)

Organic Soil Amendments Influence on Vegetables
Purpose: To evaluate soil amendments in a transitional organic vegetable production system and the effects on soil microbial community, available nitrogen, plant disease, and tomato yield.
Contact: Lori Hoagland and Elizabeth Maynard, Horticulture

Susceptibility of Melon Varieties to Striped Cucumber Beetles and Bacterial Wilt
Purpose: susceptibility of melon varieties to striped cucumber beetles and bacterial wilt and the effect on yield.
Contact: Rick Foster, Elizabeth Maynard, and Mohammadi, Horticulture

Department of Forestry & Natural Resources

Assessing Poplar Species Suitability and Productivity in Indiana
Purpose: Testing of Poplar trees for biofuel production from cellulosic feedstock.
Contact: Rick Meilan, Associate Professor, Department of Forestry & Natural Resources

2005 Black Cherry Coppice Trial
Purpose: To test the effect of coppicing cherry trees after four years of growth on timber form and quality.
Contact: Jim McKenna, Brian Beheler, and Don Carlson, Forestry & Natural Resources

2009 Black Cherry progeny test
Purpose: One of a series of progeny tests of various cherry families from a grafted seed orchard.
Contact: Jim McKenna, Brian Beheler, and Don Carlson, USDA-ARS and Department of Forestry & Natural Resources

2009 Containerized Stock Test
Purpose: Compare Red Oak and Walnut grown in two different sized containers vs. bare root stock.
Contact: Jim McKenna, Brian Beheler, and Don Carlson, USDA-ARS and Department of Forestry & Natural Resources

2011 MOG Butternut Study
Purpose: Compare hybrid and pure Butternut in relation to Black Walnut and Red Oak.
Contact: Jim McKenna, Brian Beheler, and Don Carlson, Forestry & Natural Resources
Department of Forestry & Natural Resources (continued)

2011 Advanced Butternut Seed Orchard
Purpose: A grafted seed orchard with new selections that have proven resistant to Butternut Canker fungus in screening tests at Purdue University.
Contact: Jim McKenna, Brian Beheler, and Don Carlson, USDA-ARS and Forestry & Natural Resources

Natural Resources Demonstration Area Initiation
Purpose: To establish a natural resources demonstration area at Pinney-PAC.
Contact: Don Carlson, Forestry & Natural Resources

United States Department of Agriculture-ARS

USDA-ARS Northern Regional Soybean Trials
Contact: Gary Knowling, USDA-ARS

Other Cooperating Units or Areas

Soybean Aphid Suction Trapping
Purpose: To monitor the presence of soybean aphid.
Contact: Dave Voegtlin, National Soybean Research Center

National Weather Service Manual Read Station
Purpose: To provide daily weather information to the National Weather Service.
Contact: Pinney-PAC Staff

Purdue Automatic Weather Station (PAAWS)
Purpose: Automated collection of weather data from this site sent to a computer at the Indiana State Climate Office which can be observed at http://climate.agry.purdue.edu .
Contact: Rich Grant and Ken Scheeringa

Morgan Township FFA
Purpose: Work with our local FFA High School kids on greenhouse operation, transplanting, and field crop maintenance. Contact: Angie Sutherland, Morgan Township FFA teacher