

Pinney Purdue Agricultural Center Research and Demonstration Projects Conducted in 2025

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The Pinney Purdue Ag Center conducted 108 total research projects in 2025.

Agronomy Department

Soybean Seed Treatment and Sulfur Fertilizer Use After Long-Term Continuous Corn

Purpose: Examine the effects of various soybean seed treatments and sulfur fertilizer applications after 20+ years of continuous corn monocropping.

Contact: Shaun Casteel, Agronomy

Phosphorous Deficiency in Soybean Production

Purpose: Evaluate phosphorous deficiency in soybeans due to Low P soil levels

Contact: Megan Bourns, Agronomy

Popcorn Response to Nitrogen Rates

Purpose: Industry funded research plots to examine the effects of nitrogen rates on commercial popcorn hybrids

Contact: Dan Quinn, Agronomy

UAV Sensing in Cereal Rye No-Till Corn Production

Purpose: Evaluate the use of new technology such as UAV imagery to create in-season nitrogen and sulfur fertilizer application recommendations

Contact: Dan Quinn, Agronomy

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4 Small Plot Trials

Purpose: Industry funded research to examine various aspects of corn production

Contact: Dan Quinn, Agronomy

4 Small Plot Trials

Purpose: Evaluate the effects of soybean production using biological products, fertilizer blends, seed treatments, and different varieties.

Contact: Shaun Casteel, Agronomy

Xyway Fungicide Usage During Starter and Sidedress Applications

Purpose: Evaluate the yield and disease effects of Xyway fungicide applied at various growth stages

Contact: Dan Quinn, Agronomy

In-Furrow Potassium Fertilizer Applications in Soybeans

Purpose: Evaluate the yield response of in-furrow potassium (K) fertilizer in soybeans.

Contact: Shaun Casteel, Alex Helms, Stephen Boyer, Agronomy, Purdue Ag Centers

Sulfur Fertilizer Applications vs Planting Date in Soybeans

Purpose: Evaluate the effects of soybean planting dates and sulfur applications using AMS

Contact: Shaun Casteel, Agronomy

Corn Planter Technology Showcase

Purpose: Evaluate the high cost and ROI of new planting technology by comparing it to older conventional equipment

Contact: Alex Helms, Stephen Boyer, Purdue Ag Centers

Soybean Seeding Rate vs Planting Date Study

Purpose: Determine optimal soybean seeding rates for planting dates in April and May.

Contact: Shaun Casteel, Agronomy

Low Nitrogen Tolerance in Perennial Ryegrass Germplasm

Purpose: Evaluate nitrogen levels in ryegrass production.

Contact: Cankui Zhang, Agronomy

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Sorghum Hybrids Production

Purpose: Evaluate various forage and grain sorghum hybrids

Contact: Tesfaye Tesso, Agronomy

6 Small Plot Trials

Purpose: Industry funded research to examine various aspects of corn production such as corn root architecture, fertilizer applications, and carbon sources

Contact: Dan Quinn, Agronomy

In-Furrow Potassium Fertilizer Application

Purpose: Evaluate the yield response of in-furrow potassium (K) fertilizer in corn.

Contact: Dan Quinn, Megan Bourns, Alex Helms, Agronomy, Purdue Ag Centers

4 Small Plot Trials

Purpose: Evaluate the effects of soybean production using biological products, fertilizer blends, seed treatments, and different varieties.

Contact: Shaun Casteel, Agronomy

Botany and Plant Pathology Department

23 Small Plot Trials

Purpose: Corn and soybean production with a focus on disease evaluation and management using various fungicide products, irrigation, spraying techniques, spraying timings, and other practices

Contact: Darcy Telenko, Botany & Plant Pathology

Soybean White Mold Demonstration and Evaluation

Purpose: Monitor and evaluate white mold disease in soybeans

Contact: Darcy Telenko, Botany & Plant Pathology

15 Trials – Weed Science Evaluation of Herbicides

Purpose: Determine the effectiveness of new chemicals, tank mixes, adjuvants, herbicide label recommendations, nozzles, and other technologies.

Contact: Julie Young, Botany & Plant Pathology

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AMVAC Corn Herbicide Carryover Study

Purpose: Study the effects of various herbicide products and their carryover effects from year to year in corn and soybeans

Contact: Julie Young, Botany & Plant Pathology

Early Planted Soybeans and Residual Herbicides – Large Scale

Purpose: Evaluate the effects from cold and wet weather on residual herbicides and early planted soybeans from March through May in sandy soils

Contact: Julie Young, Estevan Cason, Botany & Plant Pathology

Early Planted Soybeans and Residual Herbicides – Small Plot

Purpose: Evaluate the effects from cold and wet weather on residual herbicides and early planted soybeans from March through May in sandy soils

Contact: Julie Young, Estevan Cason, Botany & Plant Pathology

Seed Treatment Effects on Early Planted Soybeans

Purpose: United Soybean Board funded trial investigating the effects of various seed treatments on soybeans planted throughout the spring (March – June)

Contact: Darcy Telenko, Botany & Plant Pathology

Horticulture Department

Herbicide Applications in Pumpkins

Purpose: Evaluate the effectiveness of various herbicides in pumpkin production

Contact: Steve Meyers, Horticulture and Landscape Architecture

High Tunnel Cover Crop Demonstration

Purpose: Demonstrate the use of various cover crops in the outdoor high tunnel footprints

Contact: Liz Maynard, Horticulture and Landscape Architecture

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Mary S. Rice Farm

6 Small Plot Trials

Purpose: Evaluate effects of various soybean production practices including biological products, fertilizer blends, and seed treatments

Contact: Shaun Casteel, Agronomy

DIFM Corn Population Variable Rate Planting Study

Purpose: Large scale research experiment utilizing prescription planting technology to determine the effects of variable rate seeding rates in corn production

Contact: Dan Quinn, Agronomy

Corteva Fungicide Timing Model

Purpose: Large scale corn research trial to evaluate the effectiveness of Corteva's fungicide application and tar spot models

Contact: Carl Joern, Alex Helms, Stephen Boyer, Corteva, Purdue Ag Centers

Irrigation Scheduling Procedures

Purpose: Evaluate the effects of irrigation in corn production according to scheduling tools provided by Purdue and MSU

Contact: Stephen Boyer, Purdue Ag Center

Irrigation Scheduling Procedures

Purpose: Evaluate the effects of irrigation in soybean production according to scheduling tools provided by Purdue and MSU

Contact: Stephen Boyer, Purdue Ag Center

Valent Foliar Study

Purpose: Industry funded large scale research trial to evaluate the effects of Valent foliar biostimulant products in corn production

Contact: Dan Quinn, Agronomy

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Forestry & Natural Resources Department

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: Don Carlson, Brian Beheler, Department of FNR, Phil O'Connor, IN-DNR Forestry

2009 Black Cherry Progeny Test

Purpose: One of a series of progeny tests of various cherry families from a grafted seed orchard.

Contact: Don Carlson, Caleb Kell, and Brian Beheler - Department of FNR

2009 Containerized Stock Test

Purpose: Compare Red Oak and Walnut grown in two different sized containers vs. bare rootstock.

Contact: Don Carlson, Caleb Kell, Lenny Farlee, and Brian Beheler - Department of FNR

2011 MOG Butternut Study

Purpose: Compare hybrid and pure Butternut in relation to Black Walnut and Red Oak.

Contact: Don Carlson, Caleb Kell, Brian Beheler, and Doug Jacobs - Department of FNR

2011-2013 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: Don Carlson, Caleb Kell, and Brian Beheler - Department of Forestry & Natural

Collaborative Forestry Research Study

Purpose: Study the Competition, coexistence and community structure: Identifying the mechanisms that structure Indiana forests.

Contact: Dr. Brady Hardiman

Natural Resources Demonstration Area

Purpose: Demonstration area to showcase FNR research and management examples for public Field Days, workshops, other trainings for future FNR students.

Contact: Don Carlson and Brian Beheler, Forestry & Natural Resources

Spatially Explicit Densities of Indiana Wildlife

Purpose: Use various small UAVs to test and optimize methodology for the detection of nocturnal and diurnal wildlife.

Contact: Tina Jackson, Forestry & Natural Resources

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Entomology Department

Corn Ear Worm Trapping

Purpose: Monitor the presence of corn earworm throughout the corn growing season.

Contact: Laura Ingwell, Entomology

Indiana Invasive Species Council (CAPS)

Purpose: Detect, monitor, prevent, and manage new and established invasive species

Contact: Alicia Kelley, CAPS State Survey Coordinator, Entomology

Crop Rotation Impacts on Parasitic Nematodes

Purpose: Evaluating the effects of corn, soybean and mint crop rotations on nematodes

Contact: Elizabeth Long, Christian Krupke, Entomology

Purdue Extension and Other Cooperating Agencies

Soybean Aphid Suction Trapping

Purpose: Monitor the presence of soybean aphids in NW Indiana.

Contact: Doris Lagos-Kutz, USDA-ARS, University of Illinois

USDA Regional Soybean Trials

Purpose: USDA-ARS funded research to evaluate soybean varieties grouped by maturity.

Contact: Adam Brock, USDA-ARS

National Weather Service Station

Purpose: Provide daily weather information to the National Weather Service.

Contact: Rachel Cobb, Stephen Boyer, NWS, Purdue Ag Center

Purdue Mesonet Weather Station Network

Purpose: Automated collection of weather data

Contact: Beth Hall, Indiana State Climate Office Director

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Porter Co. SWCD Corn Demonstration

Purpose: Evaluate the effects of corn production by comparing no-till and cover crop usage vs conventional tillage to promote conservative farming practices to NW IN farmers

Contact: Porter County Soil and Water Conservation District

Porter Co. SWCD Soybean Demonstration

Purpose: Evaluate the effects of soybean production by comparing no-till and cover crop usage vs conventional tillage to promote conservative farming practices to NW IN farmers

Contact: Porter County Soil and Water Conservation District

Corn Planting Dates

Purpose: Evaluate the effects of various corn planting dates from early April through May

Contact: Nikky Witkowski, Brieanna Slonaker, Area XI Purdue Extension

Soybean Planting Dates

Purpose: Evaluate the effects of various soybean planting dates from early April through May

Contact: Nikky Witkowski, Brieanna Slonaker, Area XI Purdue Extension

Corn Production Practices

Purpose: Evaluate the effects of no-till, tillage and cover crop usage in corn production

Contact: Nikky Witkowski, Brieanna Slonaker, Jesi Davenport, Area XI Purdue Extension

Soybean Production Practices

Purpose: Evaluate the effects of no-till, tillage and cover crop usage in soybean production

Contact: Nikky Witkowski, Brieanna Slonaker, Jesi Davenport, Area XI Purdue Extension

Evolution of Waterhemp Herbicide Resistance

Purpose: Weed sampling to evaluate potential resistance to herbicide applications

Contact: Julia Kreiner, University of Chicago, Dept of Ecology & Evolution