Indigenous Soil Potassium (K) Supply, Fertilizer K Use-Efficiency, and K Budgets in Indiana Corn and Soybean Production
Purpose: Evaluate the agronomic efficiency of currently recommended K fertilizer rates; evaluate theoretically improved soil K tests for the ability to predict soil K supply.
Contact: Shaun Casteel and Jim Camberato; Agronomy

Corn Hybrid Performance Trial
Purpose: Test yield performance of corn hybrids in Indiana.
Contact: Phil DeVillez, Agronomy

Soybean Variety Performance
Purpose: Test yield performance of soybean varieties in Indiana.
Contact: Phil DeVillez, Agronomy

Soybean Seeding Rate Trial
Purpose: Identify agronomically and economically optimum seeding rates for soybean production in Indiana.
Contact: Shaun Casteel; Agronomy

Soybean Date of Planting Study
Purpose: Identify agronomically and economically optimum planting dates for soybean production in Indiana.
Contact: Shaun Casteel; Agronomy

Corn Date of Planting Study
Purpose: Identify agronomically and economically optimum planting dates for corn production in Indiana.
Contact: Bob Nielsen; Agronomy

Drainage Water Management Study
Purpose: Determine effects of drainage water management on crop yields, nitrate loads in tile drains, water table, soil quality, and crop yields.
Contact: Jane Frankenberger; Agricultural & Biological Engineering, Eileen Kladivko, and Laura Bowling; Agronomy
Long Term Impact of Cover Crops on Cash Crop Nutrient Uptake, Yield, and Nitrogen Application Rate
Purpose: Evaluate barriers in cover crop inclusion; deepen our understanding of cover crop to affect the availability of manure and inorganic Nitrogen to cash crops in multiple cropping systems.
Contact: Shalamar Armstrong, Agronomy

Corn Seeding Rate Trial
Purpose: Determine agronomical and economical optimum seeding rates for corn production in Indiana.
Contact: Bob Nielsen; Agronomy

Nitrogen Response of Corn and Soybeans
Purpose: Determine optimum Nitrogen rate for corn.
Contacts: Bob Nielsen & Jim Camberato; Agronomy

Controlled Drainage for Improvement of Water Quality
Purpose: Quantify environmental benefits of managed drainage and use of soil amendments under standard crop production.
Contact: Janae Bos, Biological Science Technician and Javier Gonzalez, Soil Scientist with USDA-ARS National Soil Erosion Research Lab

Soybean Productivity, Soil Quality and Climate Change
Purpose: Develop management techniques using cover crops and gypsum to increase soybean yield while maintaining soil health.
Contact: Brenda Hofmann, Biological Science Technician and Javier Gonzalez, Soil Scientist with USDA-ARS National Soil Erosion Research Lab

Effect of Gypsum on Crop Yield and Soil Properties
Purpose: Evaluate the effect of gypsum on crop yields and soil properties.
Contact: Jim Camberato; Agronomy

Cover Crop Management with Roller-Crimper in Soybean Production System
Purpose: Compare weed management, soybean yield, and soil temperature and moisture in cereal rye plots.
Contact: Michael O’Donnell; Purdue Extension-Delaware County

Long Term Gypsum Effects on Yield and Soil and Water Quality
Purpose: Determine the effects of gypsum on grain yield and soil and water quality.
Contact: Brenda Hofmann, Biological Science Technician and Javier Gonzalez, Soil Scientist with USDA-ARS National Soil Erosion Research Lab

Evaluation of Corn Herbicides and Corn and Soybean Fungicides
Purpose: Determine the effect of corn herbicides on weed control and corn and soybean fungicides on yield in soybeans.
Contact: Greg Webb, Bayer Crop Science

Pre-emerge and Post-emerge Herbicide Evaluation on Grass and Broadleaf Weeds in Corn and Soybeans
Purpose: To determine the control of grass and broadleaf weeds in corn and soybeans by different herbicides.
Contact: Kelly Backscheider, DuPont Crop Protection
**Evaluation of Pre-emerge and Post-Emerge Herbicides in Corn**
Purpose: To determine the effect of corn herbicides on weed control
  Contact: Eric Ott; Valent Biosciences

**Soybean Aphid Suction Trap Network**
Purpose: Monitor flight of soybean aphids.
  Contact: Christian Krupke; Entomology

**Insect Pest Monitoring Network**
Purpose: Monitor insect pest levels of corn, soybeans and wheat.
  Contact: John Obermeyer; Entomology

**Cooperative Ag Pest Survey**
Purpose: Monitoring site for a statewide trap grid for the early detection of exotic, invasive insect pests of soybean and vegetables.
  Contact: Larry Bledsoe; Entomology

**Corn and Soybean Herbicide Demonstration Plots**
Purpose: Evaluate different herbicide treatments in corn and soybeans.
  Contact: Jeff Boyer; Davis-PAC and Bill Johnson; Botany and Plant Pathology

**USDA - People’s Garden Project**
Purpose: Grow fresh sweet corn for those in need.
  Contact: Toby Hollinger, County Executive Director, USDA-FSA, Randolph County

**Native Grass, Wildflower, and Constructed Wetland Demonstration Project**
Purpose: Demonstrate the growth and value of native grasses, wildflowers and constructed wetlands.
  Contact: Rob Chapman; Forestry and Natural Resources

**Mixed Hardwood Demonstration Tree Planting**
Purpose: Demonstrate mixed hardwoods trees planted in Indiana and the effects deer have on growth and survival of the planted and voluntary trees.
  Contact: Don Carlson; Forestry and Natural Resources

**Wildlife Shrub Demonstration Plantings**
Purpose: Demonstrate several commonly planted wildlife species and the effects deer have on growth and survival.
  Contact: Don Carlson; Forestry and Natural Resources

**Forest Regeneration Demonstration Area**
Purpose: Demonstrate how a forest regenerates following the removal of the woody material. Supplemental tree planting of both standard and select nursery stock occurred on the sites along with fencing of half of the site to exclude impacts of deer on regeneration.
  Contact: Don Carlson; Forestry and Natural Resources
Long Term Continuous Forest Inventory
Purpose: Permanent forest inventory plots have been established and maintained on most of the woodlands at Davis-PAC to monitor changes in species abundance, growth, survival, and timber quality over time.
   Contact: Mike Jenkins and Don Carlson; Forestry and Natural Resources

80+ years of Central Hardwood Forest Dynamics
   Contacts: Mike Jenkins and Robert Morrissey, Hardwood Tree Improvement and Regeneration Center, Department of Forestry and Natural Resources