Early Soybean System in Southern Indiana
Purpose: Planting dates and variety selections are critical components of maximizing soybean yields. Hot and dry periods during reproductive growth often limit the yield potential in southern Indiana, so some growers are choosing earlier maturity groups to plant earlier. This study will aim to determine the yield impacts of planting early versus full maturing soybeans at various planting dates.
Contacts: Shawn Casteel, Andrew Westfall, and Chuck Mansfield

Double Crop Soybean – Previous Crop x Maturity Group Study
Purpose: Canola has been produced by several farmers in southwestern Indiana. These farmers have observed increased yields in soybeans that are double cropped relative to soybeans planted after wheat.
Contacts: Shawn Casteel, Andrew Westfall and Chuck Mansfield

Purdue Crop Performance Study
Purpose: Pioneer Seed Company corn population study.
Contacts: Phil DeVillez & Bill Foster

Stewart Seeds Corn Nitrogen Study
Purpose: To determine the interaction between corn hybrid population and nitrogen rate.
Contacts: Phil DeVillez & Bill Foster

Purdue Crop Performance Study
Purpose: Kaiima corn study.
Contacts: Phil DeVillez & Bill Foster

Purdue Crop Performance Trial
Purpose: Testing of glyphosate-tolerant soybean varieties.
Contacts: Phil DeVillez & Bill Foster

Stewart Seeds Soybean Trial
Purpose: To determine the impact of soybean biological treatments at an average population and a lowered “stress” population.
Contacts: Phil DeVillez & Bill Foster
Department of Agronomy (Continued)

**Clean Air Status and Trends Network (CASNET)**
Purpose: The collection of weather data from this site in order to: 1) characterize geographic patterns and temporal trends in chemical atmospheric dry deposition; 2) support assessments of atmospherically-deposited nutrients (nitrogen and sulfur) influencing crop productivity and; 3) evaluating source/receptor relationships of air pollutants.
   Contact: Rich Grant

**National Atmospheric Deposition Program**
Purpose: The collection of rain water from this site in order to: 1) characterize geographic patterns and temporal trends in wet chemical (primarily nitrogen and sulfur) atmospheric deposition and; 2) Support assessments of atmospherically-deposited nutrients (nitrogen and sulfur) influencing crop productivity.
   Contact: Rich Grant

**Purdue Automated Agricultural Weather Station (PAAWS)**
Purpose: Automated collection of weather data from this site is sent to the Indiana State Climate Office at Purdue University - data can be observed at: [http://climate.agry.purdue.edu](http://climate.agry.purdue.edu)
   Contacts: Rich Grant & Ken Scheeringa

**National Weather Service Station (NWS)**
Purpose: Manual collection of daily weather observations from this site are sent to the NWS via a web-based application known as WxCoder.
   Contact: Rich Grant & SWPAC Staff

**Mercury Deposition Network**
Purpose: The collection of rain water from this site is made in order to characterize geographic patterns and temporal trends in wet chemical mercury deposition and support assessments of atmospherically-deposited mercury on the productivity of biological accumulators such as fish.
   Contact: Rich Grant

**National Winter Canola Variety Trial**
Purpose: Evaluate canola varieties to identify best adapted varieties for southwestern Indiana.
   Contacts: Charles Mansfield & Mike Stamm

**Effect of Row Width and Seeding Rate on Canola Production**
Purpose: Evaluate the effect of 3 different row widths and 3 planting populations on growth and development, disease and insect problems, reproductive growth, and grain yield of Canola.
   Contacts: Charles Mansfield & Brian Caldbeck

**Canola Herbicide Screen Study**
Purpose: Evaluate the effect of 5 different pre-emergence and post emergence herbicides with different additives on growth and development, reproductive growth, and grain yield of Canola.
   Contacts: Charles Mansfield & Brian Caldbeck

**Long-Term Nitrogen Rate Trial for Corn**
Purpose: Evaluation of corn yield response to Nitrogen rates.
   Contacts: Bob Nielsen & Jim Camberato

**Zinc Starter Trial**
Purpose: Test new Zinc fertilizer against Zinc sulfate standard.
   Contact: Jim Camberato
Wheat Improvement Trial
Purpose: To develop new winter wheat cultivars.
Contact: Department of Agronomy – Purdue University

Wheat Demonstration Area
Purpose: To establish demonstration plots used for Diagnostic Training Center efforts.
Contact: Chuck Mansfield & Valeria Clingerman

Soybean Growth & Development Demonstration
Purpose: To establish demonstration plots used for Diagnostic Training Center efforts.
Contact: Shawn Casteel & Valeria Clingerman

Corn Growth & Development Demonstration Area
Purpose: To establish demonstration plots used for Diagnostic Training Center efforts.
Contact: Bob Nielson & Valeria Clingerman

Herbicide Screen Demonstration Area
Purpose: To establish demonstration plots used for Diagnostic Training Center efforts.
Contact: Bill Johnson & Valeria Clingerman

Micro Nutrient Demonstration Area
Purpose: To establish demonstration plots used for Diagnostic Training Center efforts.
Contact: Jim Camberato & Valeria Clingerman

Fungicide Timing Demonstration Area
Purpose: To establish demonstration plots used for Diagnostic Training Center efforts.
Contact: Kiersten Wise & Valeria Clingerman

Downy Mildew Sentinel Plot
Purpose: To monitor the possible on-set of Downy Mildew in Indiana.
Contact: Dan Egel

Tomato Early Blight Control Study
Purpose: To determine products for early blight control.
Contact: Dan Egel

Tomato Plant Density and Disease Pressure in High Tunnels
Purpose: Researching different population densities by planting the plants at 4 different intervals and also caging a treatment.
Contact: Dan Egel

Management of Powdery Mildew of Pumpkins with Fungicides
Purpose: Testing of several products to manage powdery mildew of pumpkins.
Contact: Dan Egel

Fusarium Wilt on Grafted Plants
Purpose: To evaluate the efficacy of using grafted plants to combat Fusarium Wilt.
Contact: Dan Egel
**Organic Watermelon Variety Trials**
Purpose: To grow a few commercial varieties in organic environment and compare to commercially grown of the same varieties.
  Contact: Dan Egel

**Muskmelon Variety Trial**
Evaluate muskmelon varieties for production in southwest Indiana.
  Contact: Dan Egel

**Triploid Watermelon Variety Trial**
Evaluate triploid watermelon varieties for production in Southwest Indiana
  Contact: Dan Egel

**High Tunnel Colored Bell Pepper Variety Trial**
Evaluation of bell peppers for yield and quality produced in high tunnels
  Contact: Dan Egel

**Bejo Seeds Observation Trial**
Observe some new seedless varieties before they are released to the commercial growers.
  Contact: Dan Egel

**Open Pollinated Plants for Seed Use**
To grow a few open-pollinated plants to harvest for seed only.
  Contact: Dan Egel

**Management of Bacterial Wilt with Actigard**
Fine tuning Actigard rate to optimize yield.
  Contacts: Dan Egel & Rick Foster

**Evaluation of Early Application Fungicides on Disease Control and Yield in Corn**
Examine efficacy and profitability of early fungicide applications in corn
  Contacts: Kiersten Wise & Jeffrey Ravellette

**Evaluation of Fungicides on Disease Control and Yield of Hybrid Corn**
Examine new fungicide modes of action for efficacy against diseases of hybrid corn
  Contacts: Kiersten Wise & Jeffrey Ravellette

**Efficacy of Early Fungicide on Head Scab of Wheat**
Determine the efficacy of foliar fungicide applications on disease control and yield
  Contacts: Kiersten Wise & Jeffrey Ravellette

**Department of Entomology**

**Timing of Infection of Muskemelon with Bacterial Wilt**
Plots will be either protected with row covers or exposed to Striped Cucumber Beetle feeding early in the season to help determine the most important time for infection with bacterial wilt
  Contacts: Rick Foster & Kira Albright
Indiana Cooperative Agricultural Pest Survey (CASPS) for Invasive Pests
Establish traps sites and sample areas needed to monitor for invasive insect species.
Contact: Larry Bledsoe

Surveying Indiana Soybean for Soybean Vein Necrosis Associated Virus (SVNaV) and Evaluating New Management Practices
To learn more about SVNaV epidemiology in Indiana and to quantify the level of the threat.
Also, evaluate new management practices for Indiana soybean growers
Contacts: Punya Nachappa & Cristian Krupke

Surveying Armyworm Populations
To monitor collection of specific pests for Southwest Indiana
Contacts: John Obermeyer & Sara Hoke

Surveying Black Cutworm Populations
To monitor collection of specific pests for Southwest Indiana
Contacts: John Obermeyer & Sara Hoke

Surveying Corn Earworm Populations
To monitor collection of specific pests for Southwest Indiana
Contacts: John Obermeyer & Sara Hoke

Surveying Western Bean Cutworm Populations
To monitor collection of specific pests for Southwest Indiana
Contacts: John Obermeyer & Sara Hoke

Purdue Extension

Southwest Indiana Crop Diagnostic Training Clinic
To demonstrate and teach agronomic information to Pioneer consultants and growers.
Contact: Valerie Clingerman & Chuck Mansfield

Southwest Indiana Crop Diagnostic Training Clinic
To demonstrate and teach agronomic information to Monsanto consultants and growers.
Contact: Valerie Clingerman & Chuck Mansfield

Southwest Indiana Crop Diagnostic Training Clinic
To demonstrate and teach agronomic information to Beck’s consultants and growers.
Contact: Valerie Clingerman & Chuck Mansfield

Southwest Indiana Crop Diagnostic Training Clinic
To demonstrate and teach agronomic information to Certified Crop Advisors.
Contact: Valerie Clingerman & Chuck Mansfield

Valent Corn Trial
To evaluate corn seeding rates response to a Valent-provided treatment.
Contact: Valerie Clingerman
Black Bean Variety Trial
To evaluate different varieties of black beans that will be conducive to Indiana’s climate and soil.
   Contact: Scott Monroe

Department of Forestry & Natural Resources

Assessing Poplar Species Suitability and Productivity in Indiana
Testing of Poplar trees for Biofuel production from cellulosic feedstock.
   Contact: Rick Meilan & Matt Kraushar

Department of Horticulture & Landscape Architecture

Evaluation of Grape Cultivars and Production Practices
Evaluate wine and table grape cultivars for climate and soils of Indiana.
   Contact: Bruce Bordelon

NE-1020 Vinifera Grape Cultivars
Multi-state evaluation of wine grape and production practices in an effort to improve the competitiveness of the industry in Indiana.
   Contact: Bruce Bordelon

Chestnut Study
Evaluate Chestnut tree growth and nut production.
   Contact: Bruce Bordelon