Department of Agronomy

**Purdue Crop Performance Trial**
Purpose: RR soybean trials.
   Contacts: Phil DeVillez & Bill Foster

**Purdue Crop Performance Trial**
Purpose: Bayer LL soybean plot
   Contacts: Phil DeVillez & Bill Foster

**Purdue Crop Performance Trials**
Purpose: RR corn trial
   Contacts: Phil DeVillez & Bill Foster

**CASTNet Dry Deposition Measurements**
Purpose: The measurement of gaseous and collection of gaseous and particulate pollutants in combination with meteorological conditions are made at this site in order to 1) characterize geographic patterns and temporal trends in chemical atmospheric dry deposition 2) support assessments of atmospherically – deposited nutrients.
   Contact: Rich Grant

**National Atmospheric Deposition Program/Mercury Deposition Network**
Purpose: The collection of rain water from this site in order to: 1) characterize geographic patterns and temporal trends in wet chemical mercury deposition and 2) Support assessments of atmospherically-deposited mercury on the productivity of biological accumulators such as fish.
   Contact: Rich Grant

**National Atmospheric Deposition Program/National Trends Network**
Purpose: The collection of rain water from this site is made in order to: 1) Characterize geographic patterns and temporal trends in chemicals as well as quantity and conductivity of atmospheric wet deposition and 2) support assessments of atmospherically – deposited nutrients influencing crop productivity.
   Contact: Rich Grant
Ammonia Monitoring Network
Purpose: The collection of gaseous ammonia from the site is made in order to 1) characterize geographic patterns and temporal trends in background ammonia levels, 2) support assessments of atmospherically-deposited nitrogen on the ecosystem function.
   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

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

U.S. Geological Survey
Purpose: Monitoring of atmospheric mercury dry deposition in litter fall

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

Winter Canola Proprietary Germplasm Screen
Purpose: Evaluate winter canola entries for winter hardness, stand ability, disease tolerance, and yield potential.
   Contacts: Charles Mansfield & Brian Caldbeck

Canola Plant Growth Regulator Evaluation
Purpose: Evaluate the effect of various plant growth regulators on canola for winter hardness, standability, disease tolerance, grain yield and quality.
   Contacts: Charles Mansfield & Brian Caldbeck

Canola Early Germplasm Screen with Plant Growth Regulator
Purpose: Evaluate the effect of various plant growth regulators on canola for winter hardness, standability, disease tolerance, grain yield and quality.
   Contacts: Charles Mansfield & Brian Caldbeck

Clearfield Canola Screen
Purpose: Compare no herbicide with the 2X rate of Beyond herbicide on the growth and early development of Clearfield canola lines as compared to non-tolerant control lines of canola for purposes of verifying herbicide tolerance in the Clearfield lines.
   Contacts: Charles Mansfield & Brian Caldbeck

Wheat Plant Growth Regulator Evaluation
Purpose: Evaluate the effect of two plant growth regulators on winter wheat for lodging, plant height, grain yield and quality.
   Contacts: Charles Mansfield & Brian Caldbeck
Department of Agronomy (Continued)

**Canola Desiccant Timing Study**
Purpose: Evaluate the effect of 6 different desiccant application timings on canola dry-down, grain shattering, and grain quality and yield.
Contacts: Chuck Mansfield & Brian Caldbeck

**Evaluation of Hemp Varieties for Fiber Use**
Purpose: Evaluate hemp varieties (seed origin – Canada) for fiber production in southern Indiana. Varieties will be evaluated for seedling vigor, stand establishment, days to flower, height lodging, and biomass production.
Contacts: Chuck Mansfield, Ron Turco & Dennis Nowaskie

**Soft Red Winter Wheat Yield Trial**
Purpose: To generate yield, yield component, & disease resistance data for soft red winter wheat that can be used in cultivar recommendation.
Contact: Mohsen Mohammadi

**Sulfur Effects on Soybean Yields**
Purpose: Evaluate yield response of sulfur applications to soybeans.
Contact: Shaun Casteel

**Sulfur Effects on Corn Yield**
Purpose: Determine the effects of sulfur on corn yield.
Contact: Jim Camberato

Department of Botany & Plant Pathology

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

**Evaluate Stroller Products in Pumpkin Production**
Purpose: Evaluate Stroller products in pumpkins.
Contact: Dan Egel

**Fungal Tomato Trial**
Purpose: Field experiment that compares products and their effects on fungal diseases of processing tomatoes.
Contact: Dan Egel

**Bacterial Diseases Tomato Trial**
Purpose: Field experiment that compares products and their effects on bacterial diseases of processing tomatoes.
Contact: Dan Egel

**Fusarium Greenhouse Study**
Purpose: Managing fusarium wilt of greenhouse watermelon transplants.
Contact: Dan Egel
OREI Organic Tomato Plot
Purpose: Practical approach to foliar pathogen control in organic tomato production through participatory breeding and integrated pest management
Contact: Dan Egel

Southern Rust in Corn
Purpose: Efficacy of foliar fungicides on southern rust in corn.
Contacts: Darcy Telenko & Jeffrey Ravellette

Department of Entomology

Squash Collection Site
Purpose: These plants are for collecting cucumber beetles for the row cover study.
Contact: Rick Foster & Dan Egel

Muskmelon Row Cover Study
Purpose: This is a follow-up study to some previous research.
Contact: Rick Foster

Watermelon Best Practices
Purpose: To determine which practices will allow control of cucumber beetles with the least impact on pollinators.
Contact: Rick Foster

Earworm Pheromone Trapping
Purpose: To monitor the presence of earworm moths.
Contact: Rick Foster

Indiana Cooperative Agricultural Pest Survey (CAPS) for Exotic Insect Pests of Soybean & Corn
Purpose: Establish traps sites and sample areas needed to monitor for exotic insect species.
Contact: Larry Bledsoe

Armyworm Pheromone Trapping
Purpose: To monitor the presence of armyworm moths.
Contact: John Obermeyer

Specialty Crop Research Initiative Impact of Neonicotinoid Insecticides on Honey Bee Pollinators of Melons
Purpose: Effect within & surrounding field impacts of neonicotinoid insecticides on honey bees.
Contact: Laura Ingwell, Ian Kaplan & Steve Yaninek
Department of Entomology (continued)

**Specialty Crop Research Initiative Impact of Neonicotinoid Insecticides on Cucumber Beetle Natural Enemy Communities**
Purpose: Effect within & surrounding field impacts of neonicotinoid insecticides on cucumber beetle natural enemy populations.
   Contact: Laura Ingwell, Ian Kaplan & Steve Yaninek

**Investigating the Role of Symbiotic Microbes in the Transmission of Insect-vectored Plant Pathogens**
Purpose: Investigates whether bacterial communities associated with aphids can influence transmission of Barley yellow dwarf virus.
   Contact: Laramy Enders, Laura Ingwell & Brandi Schemerhorn

Purdue Extension

**Wheat Variety Trials**
Purpose: Southwestern Indiana Independent Wheat Variety Trials exist to provide growers in this area unique information to their geographic area.
   Contact: Hans Schmitz & Chuck Mansfield

**Southwest Indiana Crop Diagnostic Training Clinic**
Purpose: To demonstrate and teach timely agronomic information to crop consultants and growers.
   Contact: Valerie Clingerman, Bob Nielsen, Chuck Mansfield, Shaun Castell, Anna Marrow, Hans Schmidt, Luis Santiago, Amanda Mosiman, Bill Johnson & Kenny Eck

**Southwest Indiana Crop Diagnostic Training Clinic**
Purpose: To demonstrate and teach crop consultants and growers about corn issues including: incorrect planting depth, down pressure, row cleaner settings, cold weather effects, and incorrect Nitrogen fertilizer application.
   Contact: Valerie Clingerman & Bob Nielsen

**Southwest Indiana Crop Diagnostic Training Clinic**
Purpose: To demonstrate and teach crop consultants and growers about cover crops.
   Contact: Valerie Clingerman, Anna Morrow & Chuck Mansfield

**Southwest Indiana Crop Diagnostic Training Clinic**
Purpose: To demonstrate and teach crop consultants and growers about soybean planting date and maturity groups
   Contact: Valerie Clingerman & Shaun Casteel

**Southwest Indiana Crop Diagnostic Training Clinic**
Purpose: To demonstrate and teach crop consultants about sulfur applications in soybeans.
   Contact: Valerie Clingerman, Shaun Casteel & Chuck Mansfield
Day on the Farm for 3rd Graders
Purpose: To allow Knox County 3rd graders an opportunity to plant a watermelon and visit a farm.
   Contact: Valerie Clingerman

Pumpkin Days for 1st Graders
Purpose: To allow Knox County 1st graders an opportunity to see a pumpkin field and pick their own pumpkins
   Contact: Valerie Clingerman

Identification of Food Safety Best Practice for Indiana Cantaloupe Production
Purpose: Best practice for use of biological amendments of animal origin in cantaloupe production.
   Contact: Scott Monroe

Department of Forestry & Natural Resources

Testing Organic Herbicides
Purpose: Testing various enzymes, including some present in the gut of termites, for their ability to kill woody plants after injection.
Contact: Rick Meilan

Department of Horticulture & Landscape Architecture

Seedless Watermelon Variety Trial
Purpose: Evaluate yield and fruit quality of seedless watermelon varieties.
   Contact: Wenjing Guan

Seeded Watermelon Variety Trial
Purpose: Evaluate yield and fruit quality of seeded watermelon varieties.
   Contact: Wenjing Guan

Personal Size Watermelon Variety Trial
Purpose: Evaluate yield and fruit quality of personal size watermelon varieties.
   Contact: Wenjing Guan

Evaluate Pruning Methods for Growing Grafted Tomatoes
Purpose: This trial will evaluate yield of grafted and non-grafted tomatoes grown with three pruning methods.
   Contact: Wenjing Guan
**Evaluate Seedless Cucumber Varieties in High Tunnel**
Purpose: This trial will evaluate yield, cucumber quality and plant growth parameter of 16 cucumber varieties.
   Contact: Wenjing Guan, Dan Egel & Liz Maynard

**Evaluate Grafting to Enhance Early Season Cucumber Production in High Tunnel**
Purpose: This trial will evaluate yield, cucumber quality and plant growth parameters of 3 cucumber varieties and 6 rootstock combinations. This project is part of the NCR-SARE project for developing production recommendation for high tunnel cucumber production.
   Contact: Wenjing Guan

**Evaluate Different Pruning Methods for Cucumber Production in High Tunnel**
Purpose: This trial will evaluate yield, disease severity, and labor requirement of four cucumber pruning methods.
   Contact: Wenjing Guan & Dan Egel

**Evaluate Different Pruning Methods on Yield of Peppers in High Tunnel**
Purpose: This trial will evaluate two pruning methods of growing peppers in high tunnels.
   Contact: Wenjing Guan

**Evaluate Summer Squash Variety for High Tunnel Production**
Purpose: This trial will evaluate yields of 6 summer squash varieties grown in high tunnels.
   Contact: Wenjing Guan

**Evaluate Organic Potting Soil for Growing Tomato and Watermelon Transplants**
Purpose: Evaluate organic potting soil for growing tomato and watermelon transplants.
   Contact: Wenjing Guan & Liz Maynard

**Muskmelon Variety Trial**
Purpose: Evaluate yield and fruit quality of muskmelon varieties.
   Contact: Wenjing Guan

**Plant Spacing of Grafted Watermelons**
Purpose: Optimize plant spacing of grafted watermelons.
   Contact: Wenjing Guan

**Seedless Cucumbers Susceptibility toward Cucumber Beetle & Bacterial Wilt**
Purpose: Evaluate susceptibility of seedless cucumbers toward cucumber beetle and bacterial wilt damage.
   Contact: Wenjing Guan, Dan Egel & Laura Ingwell

**Evaluate Strawberry Production in an Annual Production System**
Purpose: The project involves 8 strawberry varieties grown with and without low tunnels for annual production.
   Contact: Wenjing Guan
Wine Grape Research
Purpose: Evaluation of wine grape varieties in southwest Indiana.
    Contact: Bruce Bordelon & Paul Howard

Table Grape Research
Purpose: Evaluation of wine grape varieties in southwest Indiana.
    Contact: Bruce Bordelon & Paul Howard

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