

Field Day Schedule

The field day will begin at the Agronomy Research Farm, Gate H at the Russell E. Larson Agricultural Research and Education Center

Registration and refreshments beginning at 9am

9:30am: Welcome

9:45 to 11:45am: PSU Cover Crop Research

- Cover crop interseeder
- Herbicide persistence and cover crop plots
- Cool season forage cover crops
- Cover crop cocktail plots

11:45am to 12:30pm: Travel in vans to Myers Farm, Spring Mills, PA

12:30 to 1:15pm: Lunch

1:15 to 2:30pm: Myers Farm Cover Crop Tour

- Cover crop interseeder plots
- Broadcast seeding into soybeans
- Overseeding cover crops in final year alfalfa
- "Planting green" into cover crops
- Measuring cover crop benefits to corn with PSNT and Chlorophyll Meter tests

2:30 to 3:45pm: Van Tour of cover crop inter-seeder plots at neighboring farms

3:45 to 4:30pm: Return travel in vans to the Agronomy Research Farm

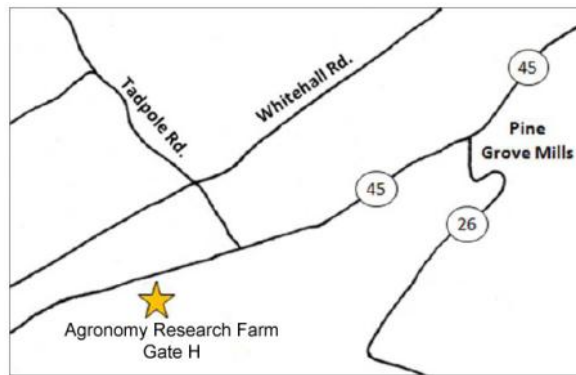
4:30pm: Adjourn

Register online at:

<http://extension.psu.edu/cover-crops/events/oct27-field-day/>

\$10 registration covers lunch and refreshments

For more information or to register by phone, contact Charlie White at 814-863-9922 or cmw29@psu.edu



The Agronomy Research Farm is 2.5 miles west of Pine Grove Mills along Route 45. Enter at Gate H.

**Address: 1796 W. Pine Grove Rd.
Pennsylvania Furnace, PA 16865**



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An OUTREACH program of the College of Agricultural Sciences

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This publication is available in alternative media on request.

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Penn State Extension
Crop Management Team

Cover Crop Innovations Field Day



Date: October 27, 2011

Time: 9:30am - 4:30pm

Place: Agronomy Research Farm at the Russell E. Larson Agricultural Research Center and collaborating farms

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PENN STATE



Cooperative Extension
College of Agricultural Sciences

Field Day Highlights

Cover Crop Interseeder Plots

Penn State designed and built a multipurpose cover crop interseeding tool to plant cover crops into standing corn while sidedressing nitrogen and spraying a post-emergent herbicide at the same time. At the Penn State Agronomy Research Farm you will see a study site where cover crops were inter-seeded at the V6-V8 stage in no-till corn production. Cover crop species planted include red clover, white clover, annual ryegrass, and a red clover / annual ryegrass mix. At the Myers Farm and two neighboring farms, we will tour plots where cover crops were interseeded into corn and the farmers plan to graze the cover crops after silage harvest. Finally, alternative uses of the cover crop interseeder, such as establishing wildlife plots, will be demonstrated.



Cover crops were seeded into standing corn at the V6 stage using the new Penn State seeder. Photo taken October 29, 2010.

Speakers

Corey Dillon, Dept. of Crop and Soil Sciences
Sjoerd Duiker, Dept. of Crop and Soil Sciences
Denise Finney, Dept. of Crop and Soil Sciences
Steve Groff, Cover Crop Solutions
Chris Houser, Dept. of Crop and Soil Sciences
Joel Myers, Myers Farm
Greg Roth, Dept. of Crop and Soil Sciences
Charlie White, Dept. of Crop and Soil Sciences
Dave Wilson, Kings Agriseeds

Herbicide Persistence Study

This study examines the residual effects of corn herbicide programs on both inter-seeded and fall seeded cover crops in Pennsylvania. Many of the current residual herbicides have the ability to persist in the soil up to six weeks after application. Our goals were to provide some herbicide programs that would allow for successful establishment of both inters-seeded and fall seeded cover crops.

Cover Crop Cocktails

Planting multi-species cover crop mixtures instead of a single species of cover crop has the potential to increase the function and value of a cover crop. Two research trials and demonstrations are investigating how cover crop mixtures can increase nitrogen fixation, retention, and supply to the next cash crop. One field was planted in early August with the species sunnhemp, favabeans, soybeans, red clover, annual ryegrass, oats, and sorghum sudan grass in various mixtures of up to 5 species planted together. Another field was planted in early September with the species barley, cereal rye, forage radish, hairy vetch, annual ryegrass, soybean, oats, canola, sorghum sudan grass, red clover, german millet, and sunnhemp in various mixtures of up to 8 species planted together.



A cover crop cocktail at the Agronomy Research Farm.

Cool Season Forage Cover Crops

More and more of Pennsylvania farmers are using winter cover crops for early spring forage to feed their livestock. Penn State has recently started a Short Lived Cool-Season Forage Grass /Cover Crop Trial. This trial is examining the forage potential of several annual ryegrasses and cereal grain forages. Their potential will be based on dry matter yield and feed quality analysis.

Planting Cover Crops into Alfalfa Stands

Joel Myers has been testing systems of planting annual cover crops into his older alfalfa stands to increase soil coverage and allow for timely establishment of a cover crop. We will tour one alfalfa field where triticale was seeded after the 4th cutting and where corn will be planted next spring. In another field that will remain in alfalfa for one more year, oats were seeded after 4th cutting. Finally, we will tour a field that was planted to corn this year following a ryegrass seeding into alfalfa last fall.



Ryegrass planted into an alfalfa field at the Myers Farm.