

# 2016 Producer Survey of Grower's Cover Crop Integration Experience



## Cover Crops Integration

*Building Resilient Crop Systems*

4<sup>th</sup> Annual Soil Health - Cover Crop Workshop  
Elsberry Plant Materials Center

November 9, 2016

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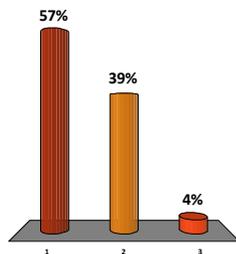
The intent of this survey was to capture information on grower's methods of incorporating cover crops (CC) into their cropping system. The survey was conducted at the 4th Annual Soil Health & Cover Crop Workshop held at the USDA Elsberry Plant Materials Center on November 9, 2016.

The survey was conducted using TurningPoint technology, a wireless electronic technology that enables participants to express their views and compare their views to their peers in an interactive environment. The results are tabulated and displayed in graphic form enabling the presenter to lead discussion about the results with the audience. The workshop had 27 farmers.

## Survey discussion questions presented to the participants

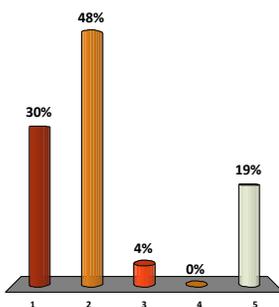
### Which best describes your starting cover crop program?

- 1) single species 2) mix up to three species 3) mix of four or more species



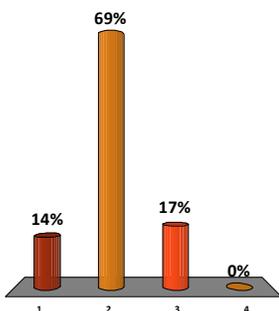
### Which CC termination program do you use for early planted corn?

- 1) winter killed species 2) burndown in Spring 3) grazing 4) light tillage E) roller crimper



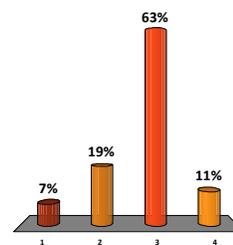
### My target month for CC seeding.

- 1) August 2) September 3) October 4) November



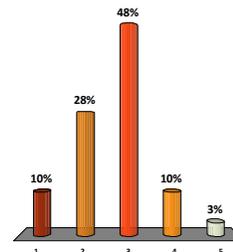
### Most years I seed during this time period.

- 1) August 2) September 3) October 4) November



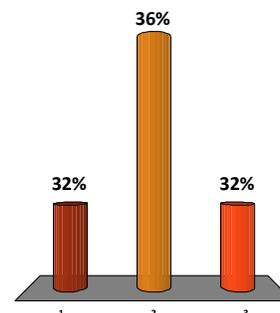
### For your cropping system, which month should researchers target for species selection and seeding data.

- 1) August 2) September 3) October 4) November 5) don't know



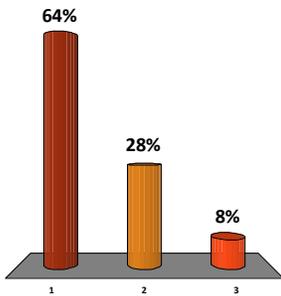
### I \_\_\_\_\_ add wheat into my crop rotation to get more consistent stand of cover crops in the next few years.

- 1) Will 2) Might 3) Won't



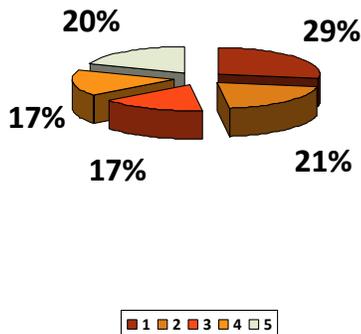
**I \_\_\_\_\_add wheat into my crop rotation to get a 10 % increase in corn/bean yield over a ten-year period.**

1)Would 2) might 3) wouldn't



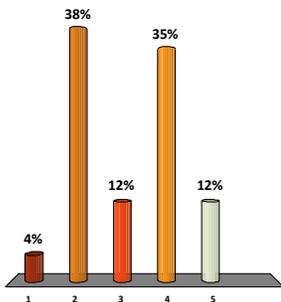
**I am seeing measurable yield differences due to cover crops.**

1)Too soon 2) Not yet 3) Maybe 4) Some 5) Definitely yes



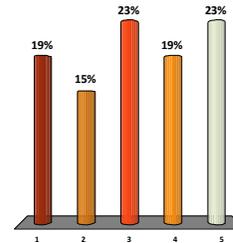
**My priority needs for cover crop research is \_\_\_?**

1)Better termination herbicides 2) New forage species for fall/winter grazing 3) Seed coat technology for summer planting 4) New cold tolerant species 5) Radish varieties with wider germination window



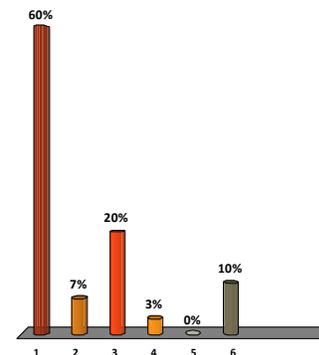
**My take on equipment needs to grow the acres of cover crops.**

1)Greater access to aerial applicators 2) Drill rental options 3) Seeding unit on combine 4) Greater access to custom seeding 5) Custom work by my retail ag center



**The seeding program I use most years is...**

1) Drill after harvest 2) Fly into standing crop 3) Broadcast or with fertilizer after harvest 3) Drill into standing crop 5) Broadcast with combine 6) Weather dependent



## About the Workshop

The Annual Soil Health & Cover Crop Workshop is a joint effort by the following organizations: USDA-NRCS, University of Missouri Extension, Sustainable Agriculture Research & Education, and Lincoln, Pike, Montgomery and Warren County Soil & Water Conservation Districts. Special thanks to Ron Cordsiemon, PMC Manager, for hosting the annual meeting.

## Survey Summary:

**Species mix and Timing:** The majority of farmer's CC program consists of seeding a single CC by drilling after harvest. While most farmers target September for seed, harvest reality pushes most farmers CC seeding operations into October. As a result, farmers would like to see greater research efforts into cold tolerant species for October seeding window. A secondary research priority is new species for fall grazing.

**Crop Rotation:** Survey results indicate that typical harvest timing limited farmer CC species selection. A minority (33%) of farmers would add wheat to a rotation to enable timely planting of wider range of CC species. However, a majority (64%) would change their rotation to include wheat, when told that sustainablecorn.org reported research of a 10% increase of corn-bean yield over 10 years by adding wheat.

**Termination:** A majority of farmers use burndown for termination, with significant number using winter kill species. There is little interest in new burndown herbicide research.

**Equipment Needs:** There was no significant separation on equipment needs identified to increase CC acres. However, seeding units on combines and custom seeding by their retailers had a slightly greater percentage of interest.

**Yield Response:** Measureable crop yield increases were reported by 37% of the farmers. The majority (50%) report it is too soon or they are not yet seeing yield increases. The survey question requesting years of CC seeding in their cropping system did not register at the time of the survey.

## Survey Conclusions:

Farmers from the EC Cropping Region of Missouri have continued interest in integrating CC into their existing cropping systems even with lack of measureable yield increases. They are limited in the cover crop species selection currently available due to the timing of harvests in this growing region. There is interest in the development of greater selection of CC species for the October planning window.

There is reluctance to make changes in cropping row rotations to accommodate a greater CC seeding window by adding wheat into the rotation, unless the change results in greater corn-soybean yield over time.