

# Cover Crop Comparison Strip Trial

## "MU Certified" Strip Trial Program

### Objective:

Can winter wheat successfully substitute for cereal rye without causing a negative yield impact?

### Approach:

Compare strips of winter wheat, cereal rye, and no cover crop.

### Key design elements:

- Farmer controls timing of cover crop termination date using herbicides.
- Soybean, corn, and milo preferred grain crops to follow the cover crops.
- Minimum of five replicates (15 strips).

### Information needed to layout trial:

#### Farmer Information:

|                                |        |        |
|--------------------------------|--------|--------|
| Farmer Name:                   | Phone: | Email: |
| MU Extension Contact:          | Phone: | Email: |
| Applicator/Ag Specialist Name: | Phone: | Email: |

#### Field Information:

|                             |                  |
|-----------------------------|------------------|
| Field County/location/size: |                  |
| Date cover crop(s) planted: | Seeding Rate:    |
| Planned grain crop:         | 2019 Grain Crop: |

#### Equipment Information:

|                              |                     |                        |
|------------------------------|---------------------|------------------------|
| Sprayer type/model:          | Sprayer width (ft): | GPS enabled? yes or no |
| Spray controller type/model: |                     | GPS enabled? yes or no |
| Planter type/model:          | Planter width (ft): | GPS enabled? yes or no |
| Combine type/model:          | Combine width (ft): | GPS enabled? yes or no |
| Yield monitor type/model:    |                     | GPS enabled? yes or no |

Cover crop comparison trial in Dade County showing winter wheat, cereal rye, and no cover crop strips. Image was taken April 9, 2019.



### Interested?

Contact the local Extension Office or Theresa Musket ([MusketT@missouri.edu](mailto:MusketT@missouri.edu); 573-884-8696).

## More Information

### Key measurements

- Aerial imagery will be taken to monitor cover crop and grain crop growth.
- High-resolution images will be taken to monitor ground cover and weed pressure.
- Farmer provides GPS referenced as-applied map of the cover crop strips.
- Farmer provides GPS referenced yield map of the harvested grain crop.

### Key additional information needed from farmer:

- Farmer estimate of cover crop growth stage and height/biomass at termination date.
- Information on cover crop and grain crop including planting dates, seeding rates, termination/harvest dates, herbicide management, and for corn, nitrogen fertilizer program.

### Key trial implementation notes:

- Assistance will be provided to create a strip layout map for your field.
- For soybean crops, can plant at an angle to both treatment and harvest directions.
- Strip widths need to be wider than combine width.

High resolution images of cover crop treatments taken on April 9, 2019, in Dade County.

Winter Wheat



No Cover



Cereal Rye

