

Field Crops Research Protocols

Cover Crops to Reduce Herbicide Use in Soybeans

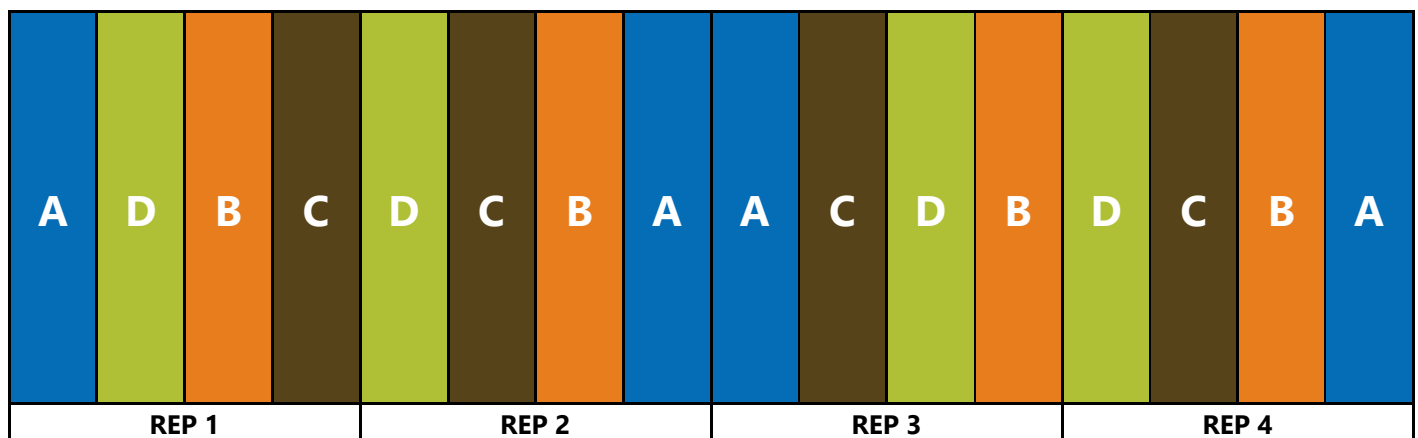
Objective: Determine if terminating a cover crop near soybean planting can reduce the need for herbicides.

Farmer-cooperator will:

- Take photos throughout the project and keep in contact with PFI with updates and questions.
- **Fall 2017**, seed cereal rye cover crop.
- **Spring 2018**, establish 4 replications as shown in the diagram below of the following treatments:

Treatment	Cover Crop?	Herbicide Program
A	No	Full program
B	Yes	Full program
C	Yes	Low-cost program
D	Yes	No-residual program

- Strips will be as wide as at least one combine pass and run the length of the field.
- Soybeans will be seeded into all 4 treatments on the same date and at the same population.
- Collect aboveground biomass samples of cover crop from strips just prior to termination.
- Terminate cover crop near the soybean seeding date according to treatment.
- **Summer 2018**, monitor progress of soybeans and weed pressure in treatment strips.
- **Fall 2018**, harvest soybeans from strips individually.
- Turn in data to Practical Farmers of Iowa at the end of the project.



Practical Farmers of Iowa will:

- Help set up monitoring protocol, monitor progress of project and provide support when needed.
- Publish results in a PFI research report, on PFI website, and potentially other outlets.
- Provide \$550 compensation at conclusion of the project in 2018.

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