Objective: Determine the agronomic and economic effects on soybean production of a cover crop that is terminated 2-4 weeks after seeding soybeans. Hypothesis: No reduction in soybean yield compared to when cover crop is terminated at planting, but improvements in weed control will result in better economic return.

Farmer-Cooperator will:
- Take photos throughout the project and keep in contact with PFI with updates and questions.
- Fall 2018, seed cereal rye cover crop at target population of 1 million PLS/ac.
- Spring 2019, establish at least 4 replications as shown in the diagram below.
  - Terminate cover crop near the time of soybean seeding (0 DAP)
  - Terminate cover crop 2-4 weeks after time of soybean seeding (~20 DAP)
- Strips will be as wide as at least one combine pass and run the length of the field.
- Collect aboveground biomass samples of cover crop from strips just prior to termination.
- Seed soybeans on same date for both treatments.
- Summer 2019, take photos of progress.
- Take soybean stand counts from each strip individually.
- Fall 2019, harvest soybeans from each strip individually.
- Turn in all info and data pertinent to this trial to Practical Farmers of Iowa by 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 honorarium when yield data is submitted at conclusion of the project in 2019.

Contact: Stefan Gailans, Research and Field Crops Director, (515) 232-5661; stefan@practicalfarmers.org