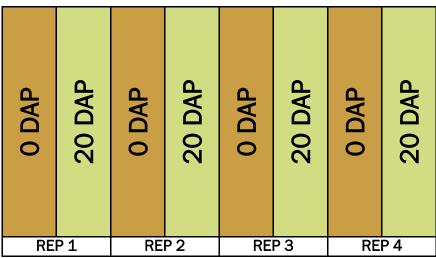**Objective:** Determine the agronomic and economic effects on soybean production of a cover crop that is terminated 2-4 weeks <u>after</u> seeding soybeans. **Hypothesis:** No reduction in soybean yield compared to when cover crop is terminated at planting, but improvements in weed control will result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

Farmer-Cooperator will:
- <u>Take photos throughout the project and keep in contact with PFI with updates and questions.</u>
- **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.
    o **Terminate cover crop near the time of soybean seeding (0 DAP)**
    o **Terminate cover crop 2-4 weeks after time of soybean seeding (~20 DAP)**
- <u>Strips will be as wide as at least one combine pass and run the length of the field.</u>
- 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

0 DAP	20 DAP	0 DAP	20 DAP	0 DAP	20 DAP	0 DAP	20 DAP
REP 1		REP 2		REP 3		REP 4	

DAP = days after planting soybeans

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.

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