

## Field Crops Research Protocols

## **Soybean Row-Width for Rolling Cover Crop**

**Objective**: Determine if (1) soybean row-width has any effect on the success of rolling a cover crop, and (2) whether soybeans seeded in 30-in. rows can be effectively sweep cultivated after rolling cover crop.

## 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 at least 4 replications of the treatments as shown in the diagram below:
  - Seed soybeans in 7.5-in. rows
  - Seed soybeans in 30-in. rows
  - Seed soybeans in 30-in. rows + sweep cultivation
- 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.
- Roll cover crop on same date for all row-width treatments.
  - o Roll once cover crop reaches anthesis (pollen shed), ~early June.
- **Summer 2018**, take photos of progress.
- Perform sweep cultivation in dedicated treatment only.
- Fall 2018, harvest soybeans from strips individually.
- Turn in all info and data pertinent to this trial to Practical Farmers of lowa by the end of the project.

5-in. ro	30-in. rows + sweep 7.5-in. rows	30-in. rows + sweep	7.5-in. rows	30-in. rows	30-in. rows + sweep	7.5-in. rows	30-in. rows	30-in. rows + sweep	
REP 1		REP 2		REP 3			REP 4		

## **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 when yield data is submitted at conclusion of the project in 2018.

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The terms of this Research Protocols document are subject to the terms of the individual Research Cooperator's Memorandum of Understanding agreement with PFI. To the extent these terms may differ or conflict, the Memorandum of Understanding shall control.