

Field Crops Research Protocols

Corn Following Cover Crop Planted in 15- vs. 30-in. Rows

Objective: Determine if planting cereal rye cover crop in wide rows is a successful strategy for preceding corn with a cover crop.

Farmer-cooperator will:

- Take photos throughout the project and keep in contact with PFI with updates and questions.
- Fall 2017, establish at least 4 replications as shown in the diagram below.
 - o Plant cereal rye cover crop in 15-in. rows.
 - Plant cereal rye cover crop in 30-in. rows.
 - No cover check strip.
- Strips will be as wide as at least one combine pass and run the length of the field.
- **Spring 2018**, Collect aboveground biomass samples of cover crop from strips just prior to termination.
- Plant corn to all strips on the same day.
- Allow Dr. Alison Robertson's team to sample corn seedlings for disease prevalence.
- Summer 2018, work with Theo Gunther at Iowa Soybean Association to coordinate soil sampling.
- Allow Dr. Robertson's team to sample mature corn plants for stalk disease prevalence.
- Fall 2018, harvest corn from strips individually.
- Turn in all info and data pertinent to this trial to Practical Farmers of lowa by the end of the project.

| Rye in 15-in. rows Rye in 30-in. rows | No cover | Rye in 15-in. rows | Rye in 30-in. rows | No cover | Rye in 15-in. rows | Rye in 30-in. rows | No cover | Rye in 15-in. rows | Rye in 30-in. rows | No cover |
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| REP 1 | | REP 2 | | | REP 3 | | | REP 4 | | |

Practical Farmers of Iowa will:

- Help coordinate with Dr. Robertson (ISU) and Theo Gunther (ISA).
- 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.