

## **Field Crops** Research Protocols

## **Terminating Cover Crop Twin Rows After Planting Corn**

**Objective**: Determine if a cover crop, when planted in twin-rows on 30-in. centers, can be terminated after the time of corn planting without causing corn yield drag.

## Farmer-cooperator will:

- <u>Take photos throughout the project and keep in contact with PFI with updates and questions.</u>
- Fall 2017, seed oat + cereal rye cover crop in 8-in. twin rows on 30-in. centers.
- Spring 2018, establish at least 4 replications as shown in the diagram below of two treatments:
  - Cover crop terminated 14-21 days after planting (DAP) corn
    - Cover crop terminated the day of planting corn
- 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.
- 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 Iowa by the end of the project.



## 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.