

Field Crops *Research Protocols*

Termination date of cereal rye cover crop ahead of corn

Objective: Quantify the agronomic performance of corn when delaying termination of a cereal rye cover crop (i.e. planting corn into "green" cover crop).

Farmer-cooperators will:

- <u>Take photos throughout the project.</u>
- Keep in contact with PFI with updates and questions.
- Fall 2015, plant winter cereal rye.
- **Spring 2016**, terminate strips of cereal rye with herbicide in late April to mid-May and plant corn.
- Establish a minimum of 4 replications as shown in the diagram below with <u>randomized and</u> <u>replicated</u> strips of:
 - Cover crop terminated ~7-10 days prior to planting corn. (Early)
 - Cover crop terminated within 1 day of planting corn. (Late)
- <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 rye from strips at each termination date.
- Collect soil moisture and temperature with NRCS assistance at both termination dates and once in July. PFI will help to arrange NRCS assistance.
- Collect LSNT soil samples in June and stalk samples at corn maturity.
- Fall 2016, harvest corn from strips separately.
- Turn in data to Practical Farmers of Iowa at 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 compensation at conclusion of the project in 2016.

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

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.