

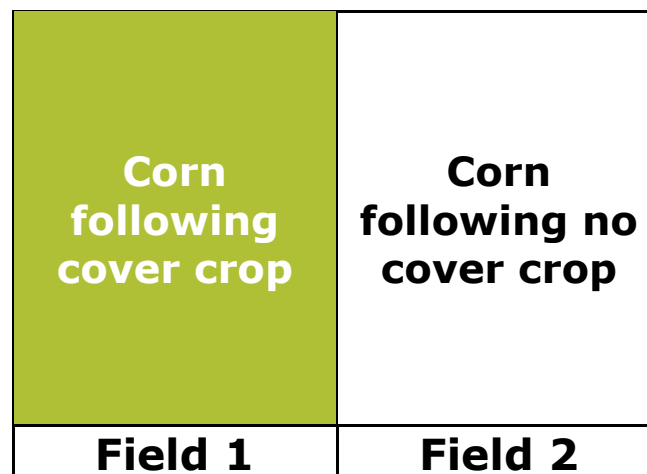
Field Crops Research Protocols

Demonstration of N-Watch™ Program on Two Crop Fields

Objective: Document the availability and movement of soil nitrogen using the N-Watch™ soil sampling program in two crop fields—one with a history of cover crop use and one with no history of cover crop use.

Farmer-cooperator, Jack Boyer, will:

- Take photos throughout the project.
- Keep in contact with PFI with updates and questions.
- **Fall 2014**, plant cereal rye cover crop in one field; no cover crop in second field.
- **Spring 2015**, take first round (spring thaw) of soil samples for N-Watch™ in both fields.
- Terminate cover crop in one field.
- Plant corn in two fields as shown in the diagram below:
 - Corn following a cover crop (Field 1)
 - Corn following no cover crop (Field 2)
- Take second round (V3-V5, pre-sidedress) of soil samples for N-Watch™ in both fields.
- **Summer 2015**, take third round (tassel) of soil samples for N-Watch™ in both fields.
- **Fall 2015**, harvest corn.
- Take fourth round (post-harvest) of soil samples for N-Watch™ in both fields.
- Turn in data to Practical Farmers of Iowa at the end of 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 \$200 compensation at conclusion of the project in 2016.