

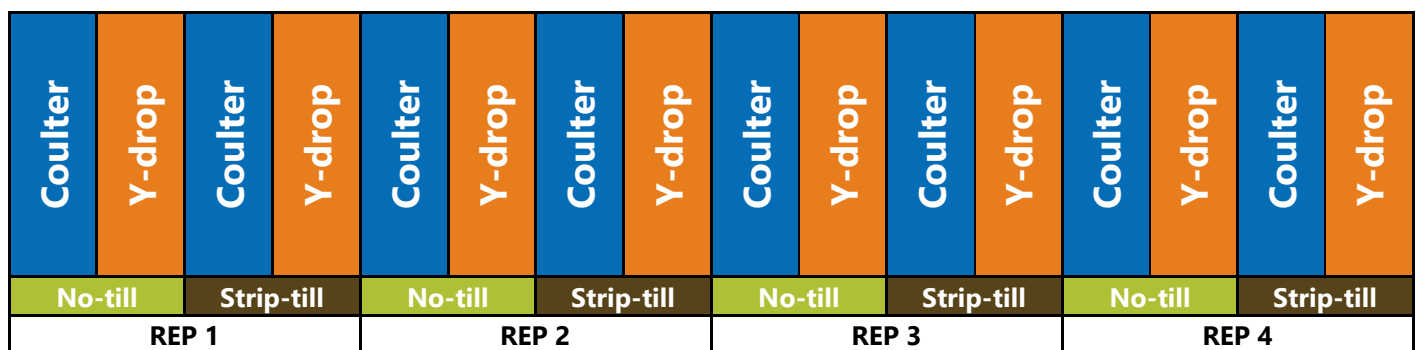
# Field Crops Research Protocols

## No-Till vs. Strip-Till Corn and Side-dress Method Following Cover Crop

**Objective:** Determine the agronomic and economic effects on corn of no-till vs. strip-till planting and side-dress N application method following a cover crop.

**Farmer-cooperator will:**

- Take photos throughout the project and keep in contact with PFI with updates and questions.
- **Fall 2017**, seed cover crop.
- **Spring 2018**, establish 4 replications as shown in the diagram below of the following treatments:
  - **No-till + coultter side-dress application**
  - **No-till + Y-drop side-dress application**
  - **Strip-till + coultter side-dress application**
  - **Strip-till + Y-drop side-dress application**
  - Total N rate of 140 lb N/ac in all treatments.
- 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 near termination.
- Terminate cover crop in all strips on same date.
- Plant corn to all strips on same date.
- Allow Dr. Alison Robertson's team to sample corn seedlings for disease prevalence.
- Apply side-dress N to all strips on same date.
- **Summer 2018**, take photos of crop progress.
- Allow Dr. Robertson's team to sample mature corn plants for stalk disease prevalence.
- **Fall 2018**, harvest corn from strips individually.
- Turn in data to Practical Farmers of Iowa at the end of the project.



**Practical Farmers of Iowa will:**

- Help coordinate with Dr. Robertson (ISU).
- 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 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.*