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 + coulter side-dress application
  - No-till + Y-drop side-dress application
  - Strip-till + coulter 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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