

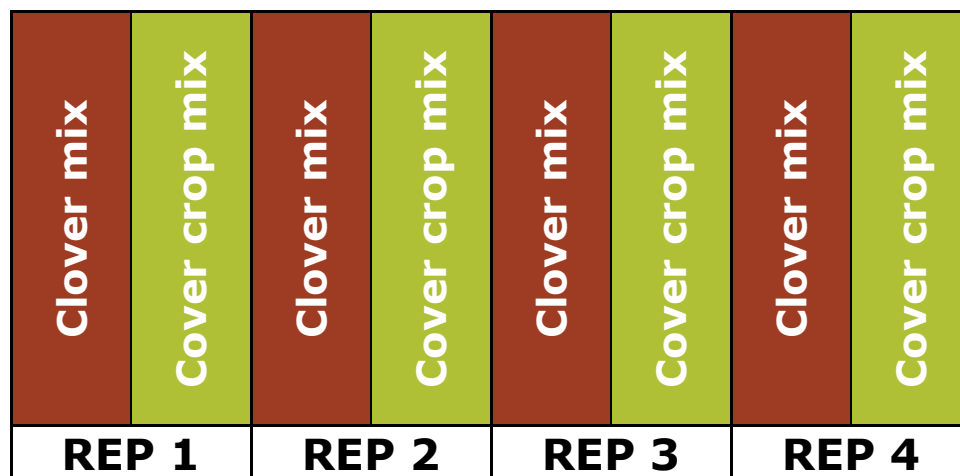
Field Crops Research Protocols

Effect on corn of green manure cover crops established with cereal rye

Objective: Quantify the agronomic and economic effect on corn yields of seeding a red + sweet clover mix with cereal rye or planting a diverse, cover crop mix immediately after grain and straw harvest of rye.

Farmer-cooperator, Wade Dooley, will:

- Take photos throughout the project.
- Keep in contact with PFI with updates and questions.
- **Fall 2014**, plant winter cereal rye
- **Spring 2015**, establish a minimum of 4 replications as shown in the diagram below with randomized and replicated strips of:
 - Red clover + sweet clover mix drilled into cereal rye at 15 lb/ac in March/April
 - Cover crop mix to be seeded after rye harvest in July (sole crop rye)
- Strips will be as wide as at least one combine pass and run the length of the field
- **Summer 2015**, harvest rye grain and straw
 - Drill cover crop mix into sole crop rye strips following grain and straw harvest
 - Mix consists of: cowpeas (11.5 lb/ac); crimson clover (4 lb/ac); berseem clover (3 lb/ac); sunn hemp (2.5 lb/ac); radish (3.5 lb/ac); oats (3 lb/ac)
- **Early-Spring 2016**, terminate clover mix and cover crop mix
- **Spring 2016**, plant corn of the same variety and plant population to all strips
- **Fall 2016**, harvest corn in strips, record yield of each strip
- 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
- Cover the cost of clover and mix; provide \$550 compensation at conclusion of the project in 2016