

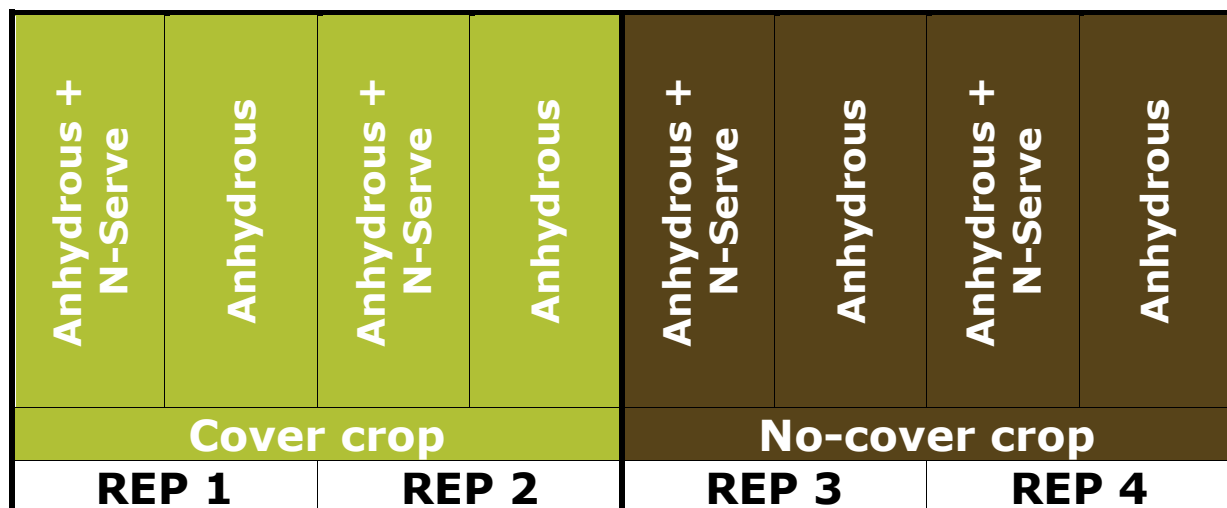
# Field Crops Research Protocols

## Anhydrous ammonia applied to cover and no-cover, with and without N-Serve

**Objective:** Quantify the agronomic and economic performance of corn following anhydrous ammonia that is applied to cover crop and no-cover crop and with or without N-Serve.

**Farmer-cooperator, Tom Irlmeier, will:**

- **Fall 2014**, aerially seed cereal rye cover crop into roughly ½ a field of standing soybeans.
- Harvest soybeans.
- Establish a minimum of 4 replications across the field as shown in the diagram below with alternating strips of:
  - Anhydrous ammonia with N-Serve
  - Anhydrous ammonia without N-Serve
- Will be able to obtain precise yields from strips & strips will run the length of the field
- **Spring 2015**, collect biomass samples of cereal rye cover crop before termination.
- Terminate cover crop and plant corn.
- **Summer 2015**, Collect late-spring nitrate test soil samples from strips when corn is 6-8 inches tall.
- Collect corn stalk samples for stalk nitrate analysis from strips when corn reaches “black layer”.
- **Fall 2015**, harvest corn from strips so as to record precise yields from each strip.
- Take photos throughout the project
- Turn in data to Practical Farmers of Iowa at the end of project.
- Keep in contact with PFI with updates and questions.



**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 costs of soil/stalk sampling & provide \$550 compensation at conclusion of the project in 2015.

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