



**RESEARCH
 PROTOCOLS**

Nitrogen Fertilizer for Oats

Objective: Determine the effect of nitrogen fertilizer on yield of oats planted into soybean stubble.
Hypothesis: Nitrogen fertilizer (50 lb N/ac) will improve yield and profitability of oats compared to where no fertilizer is applied.

Farmer-Cooperator will:

- Follow Research Protocols in accordance with Project Design, Data to Collect, Photo List and Timeline detailed below.
- Take photos throughout the project. Try to capture photos that depict the differences you observe among the treatments.
- Keep in contact with PFI with updates and questions.
- Turn in data and complete post-project survey by November 2020.

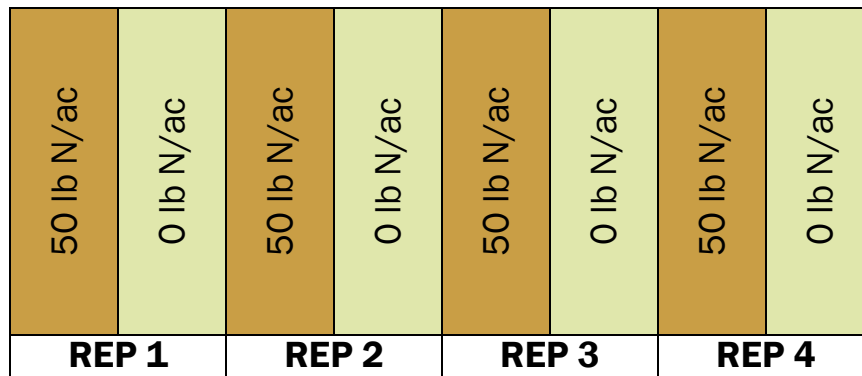
Practical Farmers of Iowa will:

- Help set up research 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 research honorarium to cooperator upon receipt of data.

Project Design:

Treatment	Description
50 lb N/ac	Apply N fertilizer (50 lb N/ac) to oats early spring.
0 lb N/ac	No applied fertilizer (control).

- Apply these two treatments in a replicated trial: at least four replications of paired strips.
 - 2 treatments x 4 replications = 8 strips total.
- Strips must be at least as wide as one combine pass and should run the length of the field.
 - Example layout:



Data to Collect (cooperator):

- Oat grain yield
 - Harvest and record yield and moisture from each strip.

Photo List (cooperator):

- Oats growing in strips (throughout season).
 - Depict any observable differences from side-by-side strips.
- Cooperator in field trial.

Project Timeline:

Spring	Summer
<ul style="list-style-type: none">• Plant oats to entire field.• Apply N fertilizer to designated strips.• Take photos.	<ul style="list-style-type: none">• Harvest oats from all strips.• Turn in data and photos.• Take post-project survey.• Take photos.

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