

Nitrogen response by variety

Objective

Compare the response of current varieties to increasing N rates to update the UMN's current wheat N recommendations.

*Note – Fertilizer application and yield maps are required for this trial

Varieties

TBD

Treatments

- Use a variable rate N application to apply rates of 60, 90, 120, 150, and 180 units N, replicated 4 times in the field (See example below)
- Total N rate should include starter fertilizer contribution

Plot size:

- Each plot will be at least 300' long and at least wide enough to harvest 1 pass of combine WITHOUT sprayer tracks
 - Plot placement will depend on width of sprayer and combine
- Specific trial layouts will vary by field

Harvest

- Cooperator's yield monitor must be calibrated with MN Wheat's weigh wagon within the field, prior to harvesting the trial strips
- Combine passes MUST avoid sprayer tracks
- MN Wheat will hand sample grain for protein prior to harvest
- MN Wheat will collect the as-applied map and yield map following harvest, if available
 - Participants will be compensated \$1500 for this trial

Data MN Wheat will Collect

- Precipitation and other weather data
- Satellite NDVI imagery
- Grain yield, moisture, test weight, protein
- Protein will be sampled by hand prior to harvest



Producer Report

- Participants will receive a preliminary statistical analysis of all harvested trials as soon as all trials are harvested, and the data can be analyzed by MN Wheat.
- Participants will receive a pdf copy of the annual On-Farm Research Report following the annual On-Farm Research Summit (paper copies can be mailed upon request).
- Participants are eligible for one free night at the CanadInn during the Prairie Grains conference in December in Grand Forks, ND, if they plan to attend MN Wheat's annual On-Farm Research Summit.

Data Use

- According to MN Wheat's data use and privacy policy, trial data will be included anonymously in the annual On-Farm Research Report booklet, shared at MN Wheat's annual On-Farm Research Summit in December, and posted on-line on MN Wheat's On-Farm Research Network homepage at the link below.

Compensation

Participants will be compensated according to the payment structure outlined in the Producer Agreement upon the successful implementation and harvest of each trial and submission of all necessary supporting field data. This trial is eligible to receive \$1500 in compensation with the delivery of an application and yield map. The Producer Agreement can be found at www.mnwheat.org/farm-research-network/