

## Experiment Info:

Planted: 5/9  
 Previous Crop: wheat  
 Plot Size: 10' x 40'  
 Replications: 4  
 Harvested: 8/24

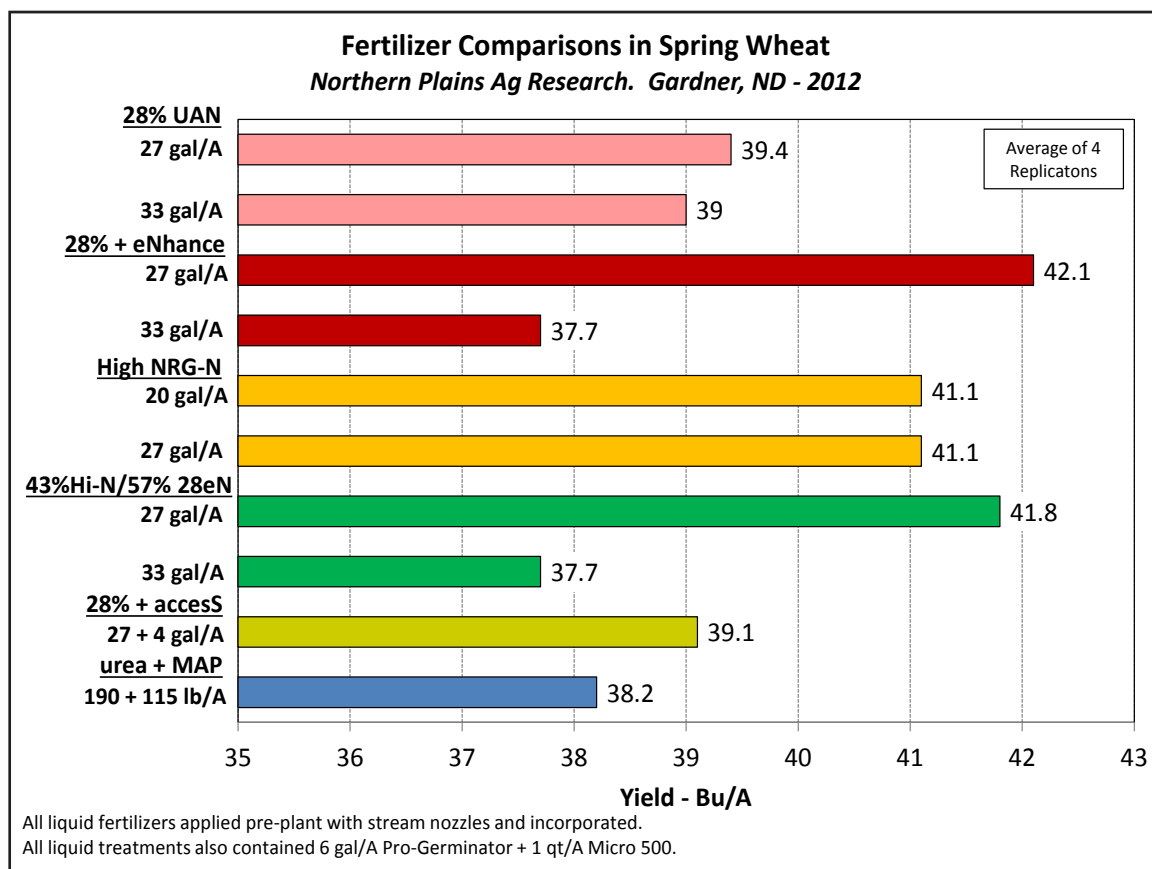
## Soil Test Values (ppm):

pH: 7.4  
 % OM: 3.2  
 Bray P1: 3  
 K: 385  
 S: 11  
 %Zn: 0.9

## Objective:

Evaluate different N sources and rates for effect on yield and protein of spring wheat.

An experiment was established in Eastern North Dakota to compare six different nitrogen sources for performance in spring wheat. A base rate of 100 lb of N per acre was set as the standard. A lower rate was also applied, that being 80 lb of N per acre for further comparison. High NRG-N was applied at 78 and 58 lb of N per acre as it is promoted at lower rates than other N sources. Treatments were broadcast and incorporated into the soil prior to planting. Liquid treatments were combined with Pro-Germinator + Micro 500 for a complete nutrient application. Dry fertilizer was combined with 11-52-0 (MAP). As was the case for the area, it was a very dry growing season and yields were lower than desired. Yields appear in the following chart.



Treatment f test indicated no statistically significant yield differences.

## Conclusions:

- Due to reduced yield potential for the N rates that were applied, there were no significant differences in wheat yield. Grain protein for all treatments was also very similar, with an average of 15.65%.
- It was interesting to observe that for 28% UAN, 28% + eNhance and the Hi-N/28% eNhance blend, that the higher rate resulted in a lower (but not significant) yield. The higher N rates could have restricted reproductive growth.
- High NRG-N resulted in identical yields for both rates applied.
- Due to experiment size restrictions, a zero N treatment was not included, but would have been valuable in a year like this. Perhaps a low N rate test should be established if there are going to be dry conditions in 2013. Then if conditions improve, more N could be applied to the growing crop.