

## Experiment Info:

Planted: 5/15  
 Variety: Prosper  
 Population: 90 lbs  
 Row Spacing: 7.5"  
 Previous Crop: Wheat  
 Plot Size: 10' x 35'  
 Replications: 4  
 PPI: 5/14  
 Harvest: 10/11

## Soil Test Values (ppm):

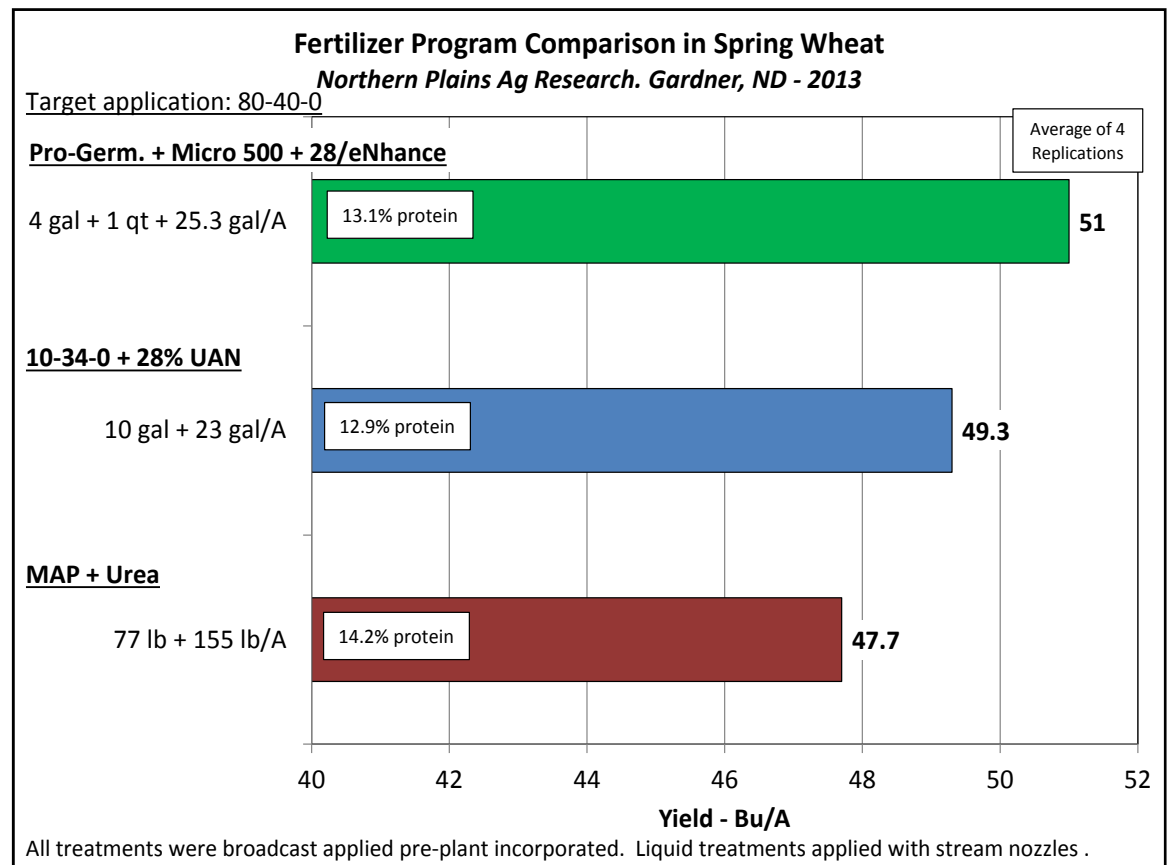
pH: 7.2  
 CEC: 17  
 % OM: 2.5  
 Bicarb P: 7  
 K: 375  
 S: 5.5  
 % K: 5.6  
 % Mg: 20.2  
 % Ca: 73  
 % H: 0  
 % Na: 1.2  
 Zn: 0.5  
 Mn: 4  
 B: 0.5

Yield Goal: 60 bu  
 Target Fertilizer Rate: 80-40-0

## Objective:

Compare different fertilizer sources of P and N for effect on spring wheat grain yield and protein.

The previous experiment on spring wheat evaluated different N programs for spring wheat and found advantage with the addition of eNhanse to 28% UAN as well as the addition of sulfur from accesS. As part of that experiment, conventional fertilizers were evaluated for effect on wheat yield and protein compared to an AgroLiquid program. Conventional sources were 10-34-0 + 28% UAN and MAP (monoammonium phosphate, 11-52-0) + urea (46-0-0). These materials were applied pre-plant and soil incorporated. The liquid treatments were applied with stream nozzles. A nutrient application of 80-40-0 was followed for all treatments. Treatment yields appear in the following chart.



## Conclusions:

- Highest average yield was with the AgroLiquid program. However the dry program had the highest grain protein although with a lower average yield. Conventional liquid yield lower in yield and protein.
- It was shown in the previous report covering the nitrogen comparisons that addition of accesS to the AgroLiquid treatment listed here increased yield to 56.5 Bu/A and 14.2% grain protein. This shows the importance of sulfur. However there was no sulfur with this dry treatment. But addition of sulfur to the AgroLiquid treatment resulted in a yield that is 8.8 Bu/A higher than this dry treatment.
- It is important to consider the entire nutrient need of the crop.