



# Fall Applications of Different Nitrogen Source for Northern Winter Wheat ( 15-716 )

## Experiment Info:

Planted:	10/12/2014
Harvest:	7/24/2015
Yield Goal:	100 bu/A
Target Fert.:	120-153-125
Variety:	P25R40
Population:	2 million
Row Width:	7.5"
Prev. Crop:	Soybeans
Plot Size:	15 x 210
Replications:	4
LBC (Fall)	10/2/2015
TD	4/6/2015
TD	5/14/2015

## Soil Test Values (ppm):

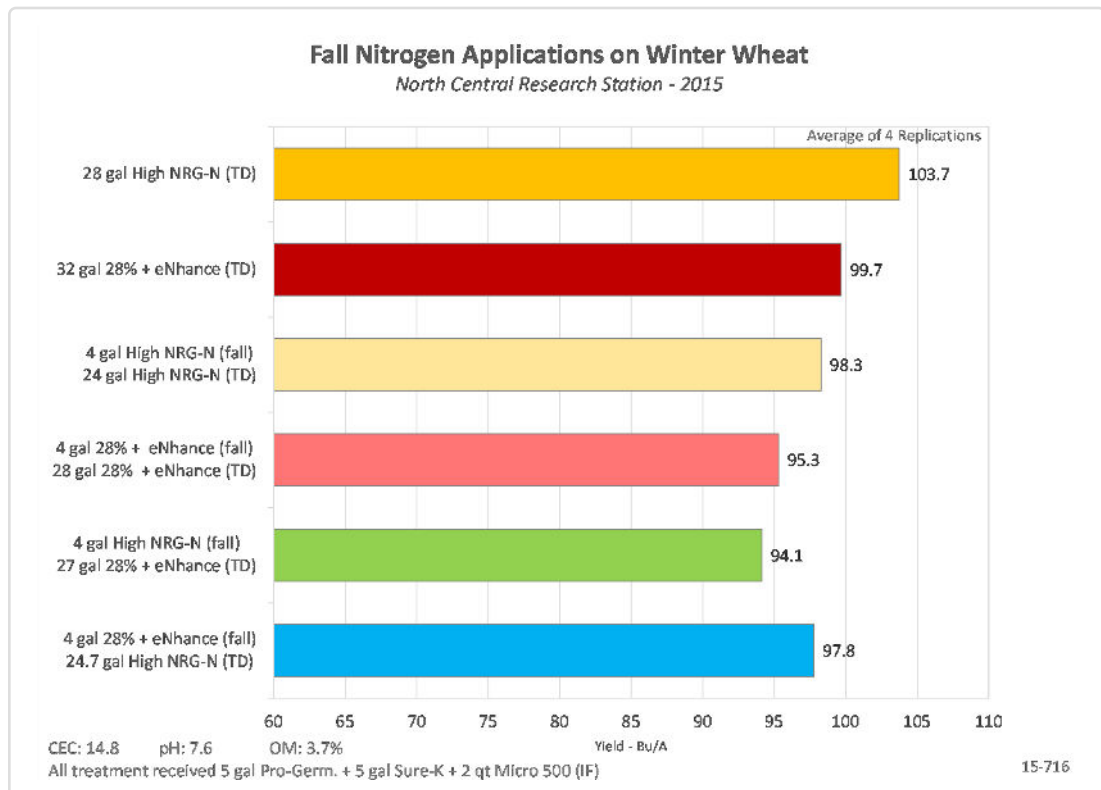
pH:	7.6
CEC:	14.8
%OM:	3.7
Bray P1:	7
Bicarb P:	5
K:	73
S:	7
%K:	1.3
%Mg:	21.7
%Ca:	76.8
%H:	0
Zn:	0.8
Mn:	2
B:	0.5

## Objective:

To evaluate different nitrogen timings effects on wheat yield.

The question often arises, does winter wheat grown in northern climates, need some of its nitrogen in the fall. This experiment was established to compare two nitrogen sources, High NRG-N and 28% + eNhance along with combinations of the two. A full topdress program applied at dormancy break of each product was compared to applications were 4 gal/A of either product was applied in the fall with the remaining nitrogen applied at topdress. Because High NRG-N and 28% + eNhance have different nitrogen release patterns, combinations of the two were done to determine if one product fit a particular timing better. All treatments provided 120 pounds of equivalent nitrogen/A.

Yield results appear on the chart below.



LSD(0.2) 5.8, CV: 8%

## Conclusions:

- Top yield was achieved by the two treatments where all the of the nitrogen was applied topdress at dormancy break. This is consistent with what we have recommended for the northern climates, as the shorten fall and long winter does not give the crop enough time to utilize the nitrogen in a way that correlates to yield.
- When evaluating split applications including fall nitrogen, this data shows that applications that included High NRG-N as the topdress nitrogen source provided the best yields.