

# Nitrogen Source and Timing Comparison in Winter Wheat (14-708)

## Experiment Info:

Planted:	9/26/2013
Harvest:	7/23/2014
Yield Goal:	120 bu/A
Target Fert.:	144-121-63
Variety:	Red Devil
Population:	2 million
Row Width:	7.5"
Prev. Crop:	Navy Beans
Plot Size:	15 x 265
Replications:	4
Liquid BC:	9/26/2014
Topdress:	4/9/2014

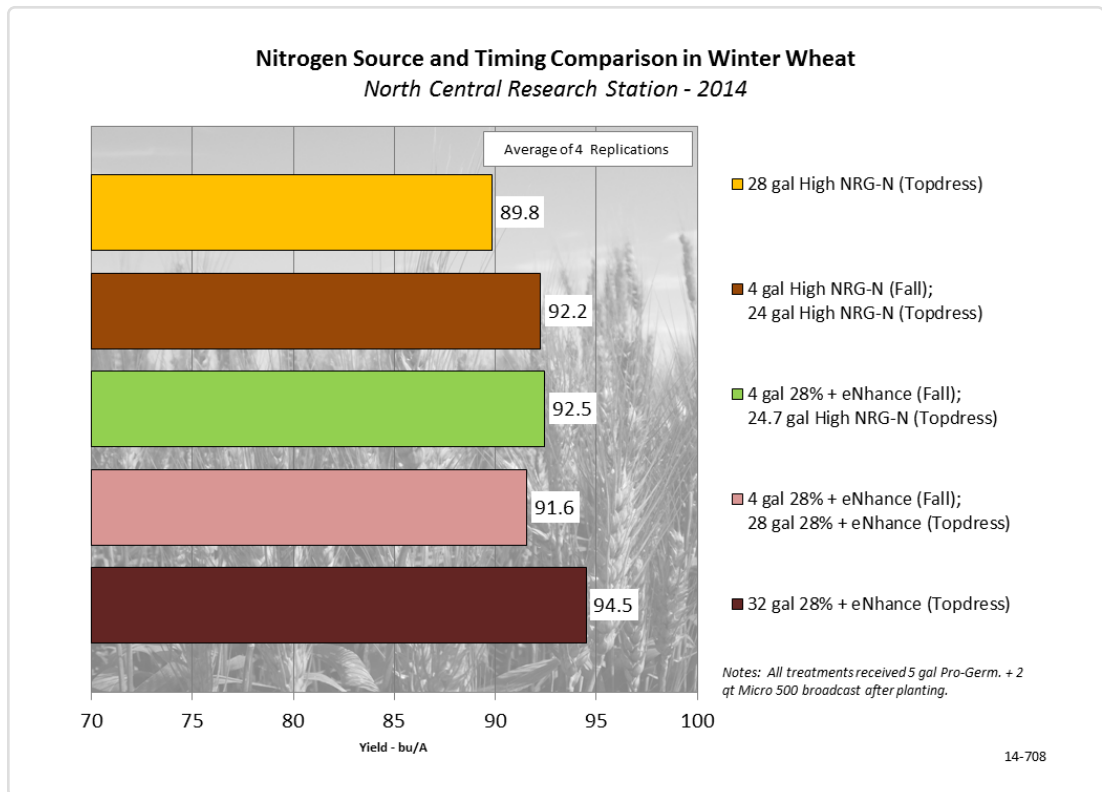
## Soil Test Values (ppm):

pH:	6.7
CEC:	17.2
%OM:	3
Bray P1:	16
Bicarb P:	-
K:	119
S:	12
%K:	1.8
%Mg:	20.2
%Ca:	77.6
%H:	0
Zn:	1.3
Mn:	3
B:	0.6

## Objective:

To evaluate different nitrogen sources and their application timing on dryland winter wheat yields.

This experiment was designed to see if a small amount nitrogen fertilizer broadcast in the fall would help promote early fall growth and tillering to increase wheat yield. The target rate of nitrogen was 120 lbs/A. High NRG-N and 28% + eNhance were applied as topdress only applications for comparisons. The rate chosen for fall application was 4 gal/A broadcast sprayed after planting. The 4 gallons or equivalent pounds of nitrogen was subtracted from the total amount of recommended nitrogen and the remainder rate was applied in the spring as a topdress. Broadcast applications were made over the entire soil surface and topdress applications were made using stream nozzles to evenly place the nitrogen in bands 5" apart across the soil surface. Topdress applications were applied on April 9th. Yield comparisons appear in the chart below.



LSD(0.05) 7.3, CV: 9.1%

## Conclusions:

- High NRG-N did have a slight yield advantage when applied as a split application with 4 gal/A applied in the fall.
- 28% + eNhance applied only as a topdress in the spring produced the highest yield in this comparison.
- Further testing will continue to determine if different environmental conditions will change the outcomes.