

**Experiment Info:**

Planted:	5-25-2014
Harvest:	10/30/2014
Yield Goal:	175 bu/A
Target Fert.:	193-90-33
Variety:	DKC 49-29 RIB
Population:	32,000
Row Width:	30"
Prev. Crop:	Soybeans
Plot Size:	15 x 265
Replications:	4
Sidedress:	6/23/2014

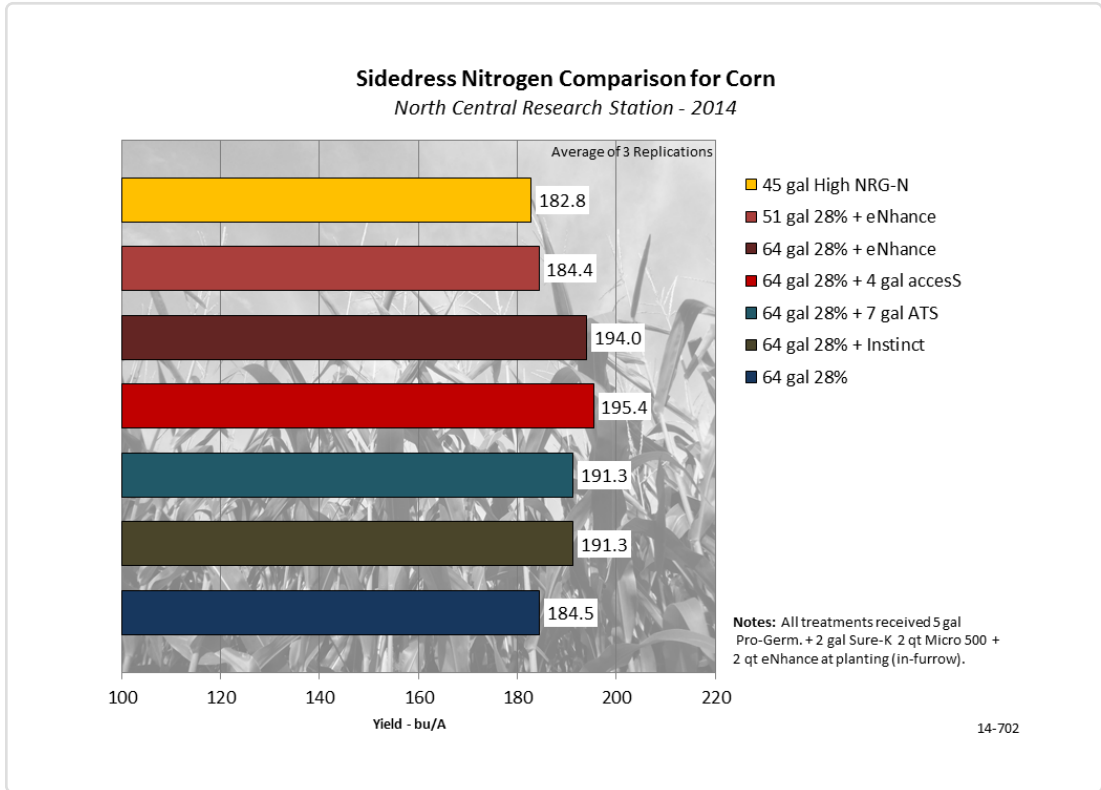
**Soil Test Values (ppm):**

pH:	6.1
CEC:	14.5
%OM:	2.5
Bray P1:	10
Bicarb P:	-
K:	131
S:	11
%K:	2.3
%Mg:	14.4
%Ca:	69.1
%H:	13.9
Zn:	1.4
Mn:	10
B:	0.6

**Objective:**

To evaluate the yield response of different nitrogen sources and additives applied sidedress on corn.

The nitrogen market has many options for liquid fertilizer sources for sidedressing corn. This experiment looks at Agro-Culture Liquid Fertilizers High NRG-N in comparison to 28% UAN, sulfur additives: eNhance, accesS and ammonium thiosulfate (ATS) and a competitors additive Instinct. Each product was applied at recommended rates to provide 193 lbs of nitrogen per acre to meet the yield goal of 175 bu/A corn. The three standard programs included 45 gal/A High NRG-N (70% rate), 51 gal/A 28% + eNhance (80% rate) and 64 gal/A 28% UAN. Sulfur additives accesS and ATS were added to the full rate of 28% UAN to provide 20 pounds of sulfur per acre. Additionally a 100% rate of 28% + eNhance was applied at the same rate as 28% UAN. All treatments received the same planter application of Pro-Germinator, Sure-K and Micro 500. Yields appear on the chart below.



LSD(0.2) 7.9, CV: 6.1%

**Conclusions:**

- The three standard programs, High NRG-N, 28% + eNhance and 28% UAN, applied at recommended rates yielded above the 175 bu/A yield goal, all reaching around 184 bu/A. Although High NRG-N and 28% + eNhance applied fewer gallons per acre.
- The addition of eNhance at 2 gallons per ton of 28% UAN increased corn yield by nearly 10 bu/A.
- Competitors products ATS and Instinct increased corn yield over 28% UAN alone, adding over 6 bu/A more.
- Highest yield was achieved with the addition of 4 gal/A of accesS to 64 gal 28% UAN.
- All additives that included sulfur, significantly increased corn yield over the standard 28% UAN rate alone.