

Experiment Info:

Planted:	5/12/2014
Harvest:	10/22/2014
Yield Goal:	170 bu/A
Target Fert.:	175-30-60
Variety:	DKC 53-56 RIB
Population:	34,000
Row Width:	30"
Prev. Crop:	Soybeans
Plot Size:	15 x 210
Replications:	4
Sidedress:	6/9/2014

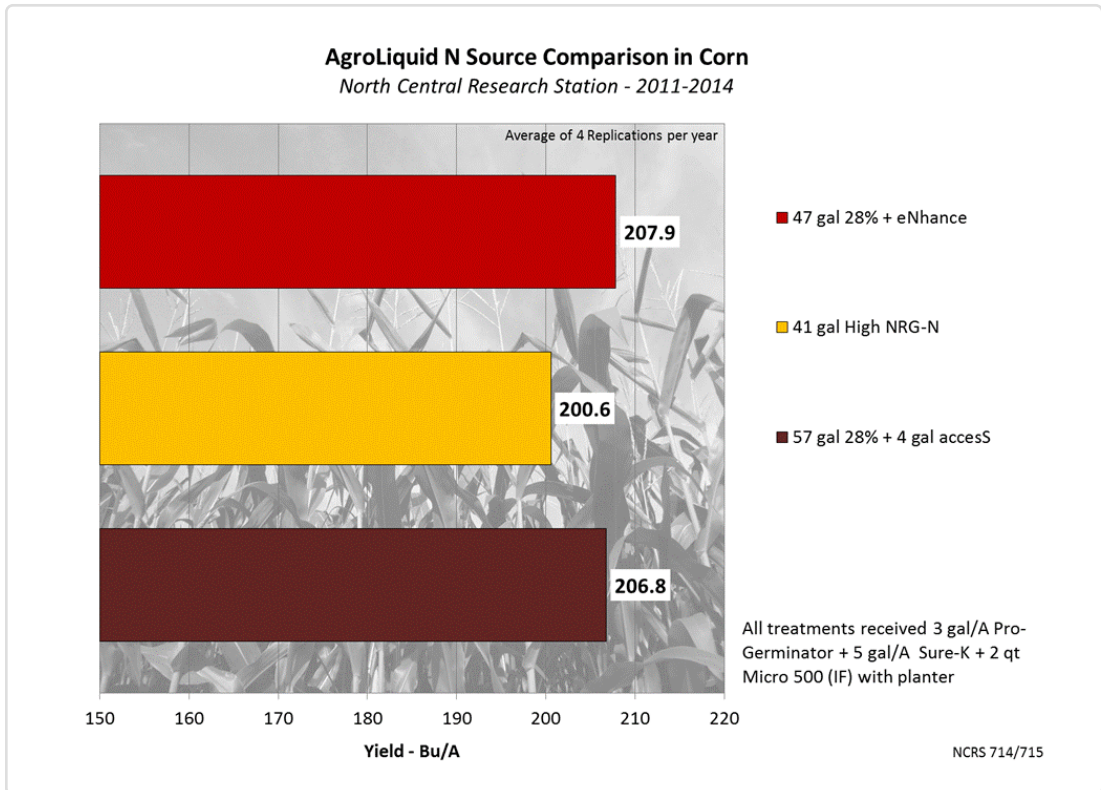
Soil Test Values (ppm):

pH:	6.1
CEC:	11.6
%OM:	2.5
Bray P1:	13
Bicarb P:	-
K:	118
S:	9
%K:	2.6
%Mg:	17.4
%Ca:	65.8
%H:	13.8
Zn:	1.3
Mn:	8
B:	0.4

Objective:

Compare multi-year performance of several AgroLiquid nitrogen sources for effects on corn yield.

It is good to evaluate fertilizer performance for corn yield over several years to check for consistency. In this experiment, these three nitrogen treatments received the same planter fertilizer treatment each year. Additionally, they were in the same area of the research farm as part of a multi-year experiment in a corn-soybean rotation in two adjacent plot areas. The target N rate from sidedress was approximately 175 lb/A. Two of the sidedress treatments were applied at reduced rates: the 28% + eNhance was applied at 47 gal/A and the High NRG-N was applied at 41 gal/A. This would be 82% and 72% by volume, respectively, compared to the full rate of 28% + accesS. Unfortunately, a treatment of 28% UAN alone at the 57 gal/A rate was not included in this experiment, but such comparisons are part of other reports targeting N comparisons.



LSD(0.05) 7.7 LSD(0.1) 6.5 LSD(0.2) 5, CV: 7.1%

Conclusions:

- All treatments resulted in yields much higher than the 175 Bu/A yield goal over the four years.
- The treatments with eNhance and accesS resulted in higher average yields. This may be due to the higher rates of applied N, as well as the effects of the added sulfur. However, the addition of eNhance to UAN solutions is not in sufficient quantity to act as a sulfur source, but rather as a nitrogen enhancer and stabilizer.
- It should be recognized that the average yield with the High NRG-N is still very good considering that 16 fewer gallons per acre was applied with that treatment.
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