



Nitrogen Source on Corn (20-708)

Experiment Info:

Planted:	4/28/2020
Harvest:	10/20/2020
Yield Goal:	175 bu/A
Target Fert.:	193-90-59
Variety:	P0306 AM
Population:	33,000
Row Width:	30"
Prev. Crop:	Soybeans
Plot Size:	15 x 265
Replications:	4

Soil Test Values (ppm):

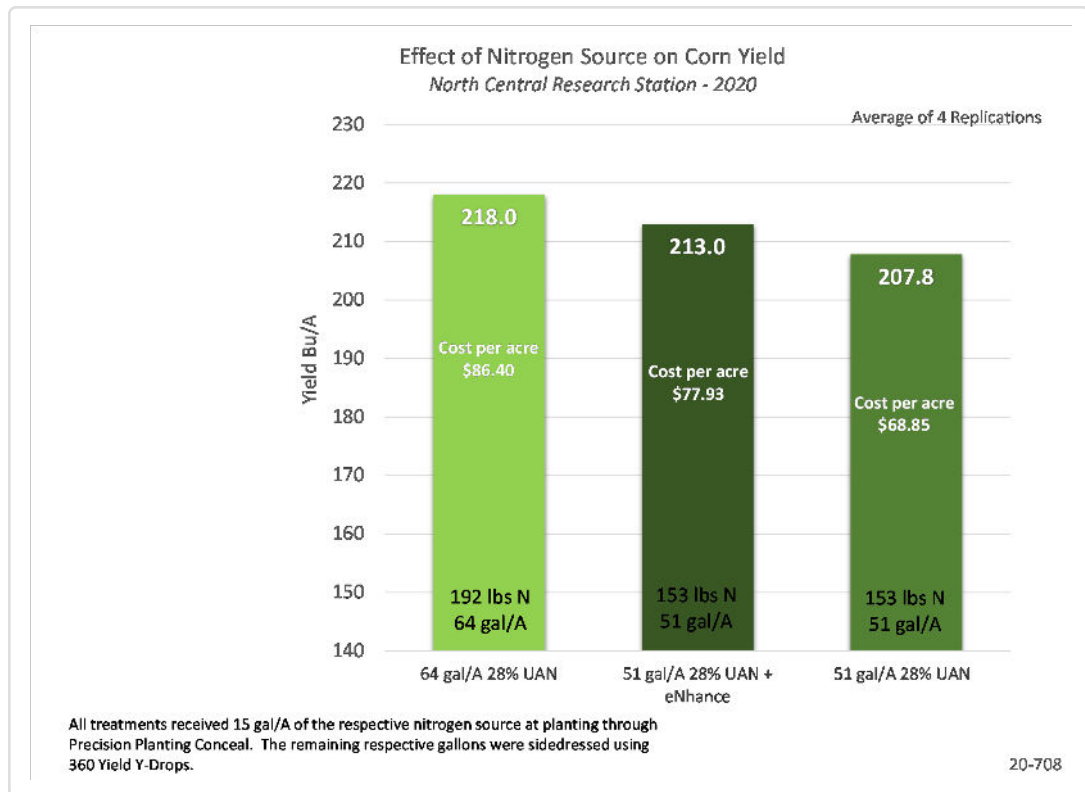
pH:	6.9
CEC:	14.5
%OM:	3.4
Bray P1:	10
Bicarb P:	
K:	116
S:	6
%K:	2.1
%Mg:	19.7
%Ca:	77.9
%H:	
Zn:	1.1
Mn:	2
B:	.4

Objective:

To evaluate the effect of 28% UAN nitrogen rate with and without AgroLiquid eNhanse on corn yield.

AgroLiquid eNhanse is a nutritional supplement that also works to mitigate nitrogen loss pathways such as volatilization, leaching and denitrification in the soil and maximizing the availability of plant useable nitrogen.

Corn was planted on April 28th following a pre-plant application of 125 lbs MAP + 125 lbs Potash. All treatments received 3 gal/A Pro-Germinator + 4 gal/A Sure-K + 0.25 gal/A Micro 500 + 0.25 gal/A Mn placed in-furrow. The nitrogen was split applied as 15 gal/A with the planter on both sides of the row using Precision Planting Conceal and the remaining balance of each nitrogen source was applied sidedress with 360 Yield Y-Drop. Cost per acre for the nitrogen and additive components are shown in the chart below. UAN is priced at \$1.35 per gallon and eNhanse is priced at \$0.13 per ounce.



LSD(0.2)17.1 CV:12.6%

Conclusions:

- The lower rate of 28% UAN at 51 gal/A yielded a respectable 207.8 bu/A using just 0.74 lbs of N per bushel.
- Adding eNhanse to the low rate of UAN at a rate of 2 gal/ton of 28% increased the nitrogen efficiency to 0.71 lbs of N per bushel and yielded 5.2 bu/A more.
- The high rate of 64 gal/A 28% yielded 218 bu/A using 0.88 lbs of N per bushel produced and had the highest cost per acre.