



PrimAgro N Rate Verification in Irrigated Corn (18-502)

Experiment Info:

Planted:	4/30/2018
Harvest:	10/27/2018
Yield Goal:	205 bu/A
Target Fert.:	
Variety:	P0242AMXT
Population:	38,000
Row Width:	30"
Prev. Crop:	Soybeans
Plot Size:	15 x 200
Replications:	2

Soil Test Values (ppm):

pH:	7
CEC:	11
%OM:	2.6
Bray P1:	10
Bicarb P:	3
K:	44
S:	15
%K:	1
%Mg:	22.2
%Ca:	75.9
%H:	0
Zn:	.9
Mn:	2
B:	.5

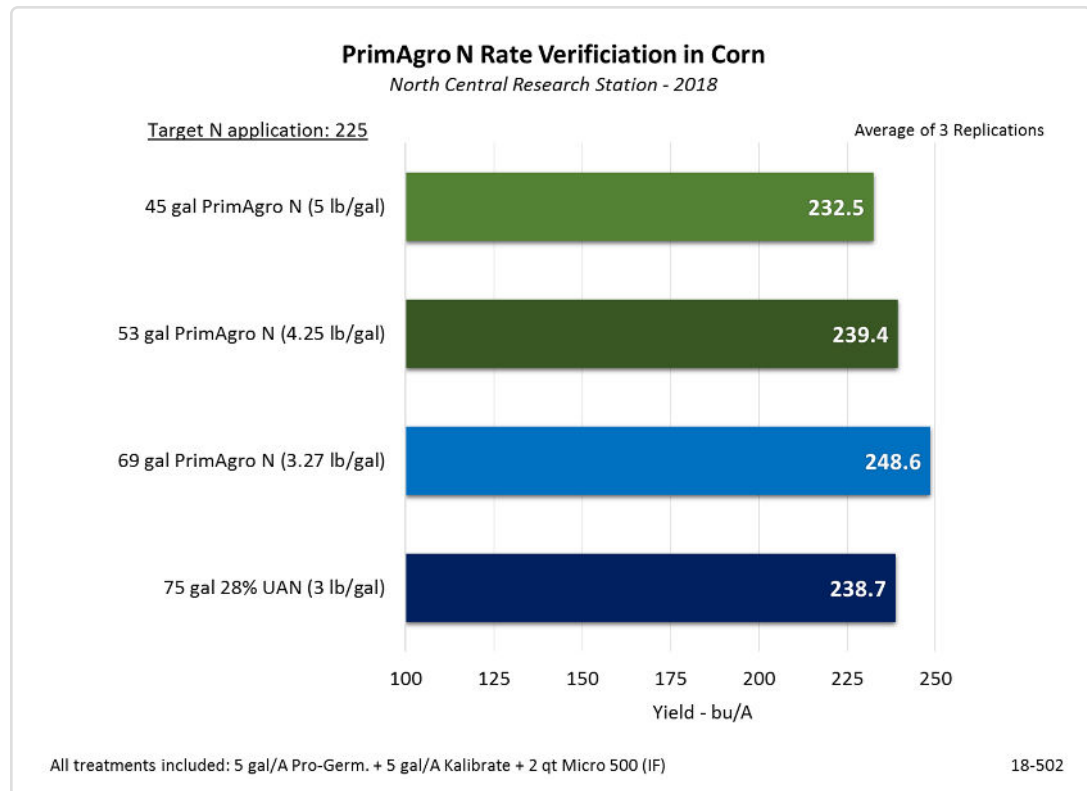
Objective:

To compare the efficiency of AgroLiquids' PrimAgro N at different use rates to conventional 28% UAN nitrogen fertilizer.

New products require continued testing to verify that the set application rate will meet current performance expectations of the product. PrimAgro N in previous testing in Michigan has shown that an application efficiency rate of 4.25 lbs of N per gallon will provide equivalent results to a standard 3 lbs of N per gallon of 28% UAN. This experiment was created to verify that rate and provide grower confidence in nitrogen recommendations.

A product such as PrimAgro N with higher use efficiency than conventional products can help protect the environment and provide more efficient field applications by applying less gallons per trip across the field.

Tested equivalent rates of PrimAgro N were 5 lb-N/gal, 4.25 lb-N/gal and the actual N content of 3.27 lb-N/gal. All treatments received a planter application of 5 gal/A Pro-Germ. + 5 gal/A Kalibrate + 2 qt/A Micro 500 in-furrow and all nitrogen was applied with Y-Drops at V5 growth stage. Yield results appear in the chart below.



LSD(0.2)5.7, CV:2.8%

Conclusions:

- An equivalency N rate of 4.25 lbs of N per gallon (53 gal/A = 225 lbs N) of PrimAgro N showed a yield comparable to conventional 28% UAN (75 gal/A = 225 lbs N), giving confidence to the current recommended use rate. (Note: PrimAgro N is recommended to be applied at the same volume rate per acre as High NRG-N).
- Using 69 gallons of PrimAgro N (30% N) at the actual use rate of 3.27 lbs N per gallon resulted in a significant 10 bu/A yield increase over the 75 gal/A rate of 28% UAN even though both treatments contained equal amounts of nitrogen.
- Lower application volume and efficient use of applied nitrogen results in better environmental stewardship of resources and environment protection.