

Nitrogen combinations in field corn.

Mulford Agronomics, Quantico, MD

Experiment Info:

Planted:	4-18-2018
Harvest:	10-21-2018
Yield Goal:	
Target Fert.:	
Variety:	
Population:	
Row Width:	30"
Prev. Crop:	
Plot Size:	15' X 50'
Replications:	4

Soil Test Values (ppm):

pH:	6.7
CEC:	5.0
%OM:	2.5
Bray P1:	19
Bicarb P:	
K:	76
S:	10
%K:	4
%Mg:	11
%Ca:	79
%Ca:	79 6
%H:	6

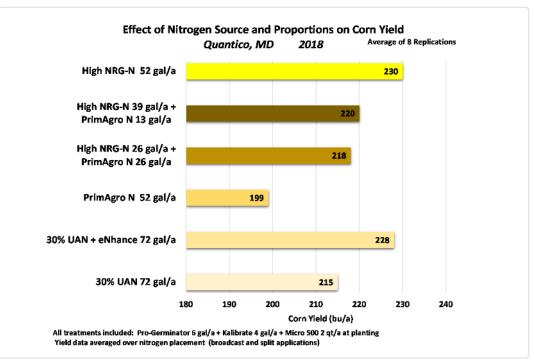
Objective:

Evaluate the effect of different ratios of High NRG-N and PrimAgro N on corn yield.

Corn was planted on April 18, 2018. All plots received PrimAgro P 6 gal/a + PrimAgro K 4 gal/a + Micro 500 0.5 gal/a as a 4" band over the row on the soil surface.

High NRG-N and PrimAgro N were applied at equal volumes alone, or in a 50:50 mix or a 70:30 mix. The nitrogen treatments were applied at a total 52 gal/a broadcast preemergence or at a total 20 gal/a broadcast preemergence + a total 32 gal/a side dress at V5. 30% UAN + eNhance and 30% UAN at 72 gal/a were included as standards in the trial. A performance equivalency of 4.5 lb nitrogen/gallon was used for both High NRG-N and PrimAgro N.

Corn was harvested on October 21, 2018



LSD (0.05) = 5 bu/a

Conclusions:

- Since performance of broadcast applications was similar to split applications of nitrogen the data was averaged across nitrogen application options.
- When used at equal volumes, High NRG-N out yielded PrimAgro N when applied alone. Mixtures of 50:50 or 70:30 increased yield compared to PrimAgro N alone, but neither combination performed as well as High NRG-N alone. PrimAgro N did not have the same performance equivalency as High NRG-N in this trial.
- 30% UAN + eNhance at 72 gal/a performed as well as High NRG-N at 52 gal/a, and both performed better than 30% UAN without eNhance.