



# Long-Term PRIMAGRO Evaluations: Corn (17-903)

## Experiment Info:

Planted:	5/15/2017
Harvest:	10/13/2017
Yield Goal:	170 bu/A
Target Fert.:	186-74-40
Variety:	DKC 46-36 RIB
Population:	32500
Row Width:	30"
Prev. Crop:	Soybeans
Plot Size:	45 x 555
Replications:	4

## Soil Test Values (ppm):

pH:	7
CEC:	10.3
%OM:	2.1
Bray P1:	11
Bicarb P:	11
K:	95
S:	9
%K:	2.4
%Mg:	19.8
%Ca:	77.2
%H:	0
Zn:	1
Mn:	5
B:	0.4

## Objective:

To evaluate long-term AgroLiquid and conventional fertilizer programs effects on crop yield and soil health.

With the development of AgroLiquid's latest product line, PRIMAGRO a large scale, long-term trial was established to compare five fertility programs. The five fertilizer programs were developed with a yield goal of 170 bu/A corn using a soil test recommendation of 185-50-50. Products and rate applied were as followed:

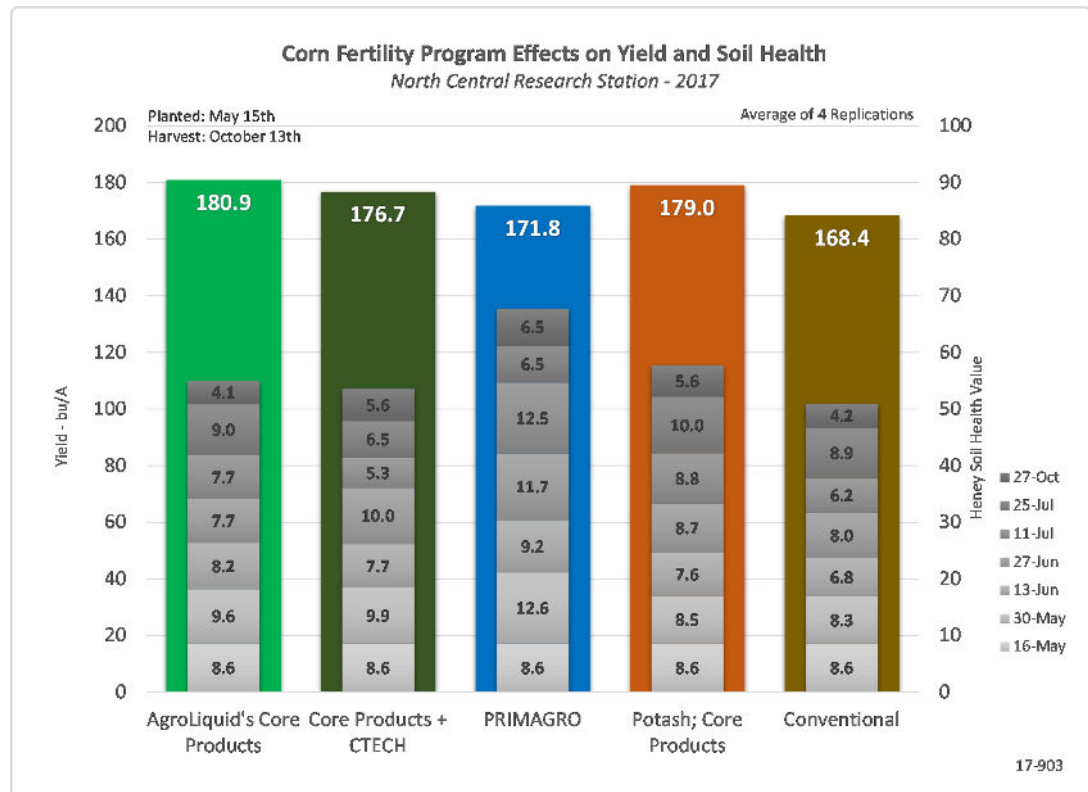
AgroLiquid Core: 5 gal Pro-Germ.+5 gal Kal +2 qt Micro 500 (IF); 10 gal High NRG-N (2x2); 48 gal 28% + eNhance (SD)

Core products + C-TECH: same program as above + 2 qt/A C-TECH applied in-furrow.

PRIMAGRO: 5 gal PRIMAGRO P + 5 gal PRIMAGRO K + 2 qt Micro 500 (IF); PRIMAGRO N 10 gal (2x2) 37 gal (SD) -applied with an without cover crops when feasible to plant them.

Potash; AgroLiquid core products: same program as above + 60 lbs 0-0-62 applied PPI

Conventional: 120 lbs 0-0-62 (PPI); 10 gal 10-34-0 + 10 gal 28% (2x2); 52 gal 28% (SD)



LSD(0.2)14.6, CV:11.6%

## Conclusions:

- The gray boxes within the yield bars are soil health values taken from planting through the summer and one after harvest. The Haney soil health value is a snapshot of what the soil health looks like at that date in time.
- After the first year of testing, the AgroLiquid core products program yielded highest at 180.9 bu/A, this was over a 10 bu/A yield increase over the conventional fertilizer program.
- Adding 60 pounds/A of muriate of potash to the AgroLiquid program did not provide any more yield.
- This year, because no cover crop was applied, the two PRIMAGRO treatments were the same and produced the same yield, just shy of 172 bu/A. However, this treatment showed the highest Haney soil health levels at all sample dates. Research will continue to determine if improving soil health will influence crop yield.