

Experiment Info:

Planted:	5/7
Variety:	DKC53-78
Population:	4
Row Spacing:	30"
Previous Crop:	Soybeans
Plot Size:	15' x 210'
Replications:	4
Potash:	Fall 2012
PPI:	5/2, 5/6
Sidedress:	6/8
Harvested:	10/15

Soil Test Values (ppm):

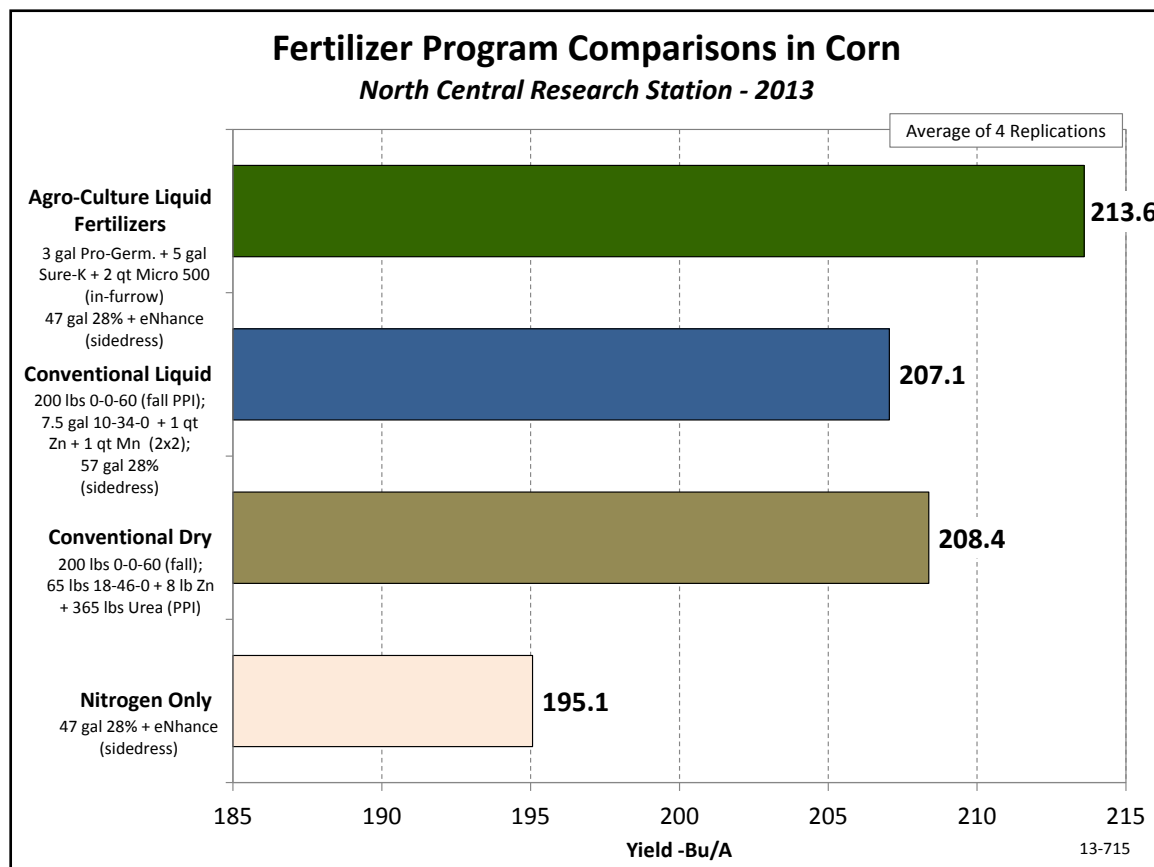
pH:	7
CEC:	12.4
% OM:	3.4
Bicarb P:	17
K:	111
S:	5
% K:	2.3
% Mg:	21.4
% Ca:	75.9
% H:	0
% Na:	0.4
Zn:	1.5
Mn:	4
B:	0.7

Yield Goal:	175 bu
Target Fertilizer Rate:	175-30-60

Objective:

Compare effects of an AgroLiquid corn fertilizer program that applies less than half the amount of nutrients per acre to two conventional fertilizer programs.

AgroLiquid fertilizers are touted as having nutrient formulations that are more efficient and longer lasting in the soil than are comparable conventional fertilizers. Such enhancements enable application of nutrients at reduced rates since said nutrients are not lost or made unavailable to the crop. Three different corn fertilizer programs were developed based on soil test and applied to plots in an experiment that keeps the same fertilizer programs in the same plots in a corn-soybean rotation. The conventional treatments applied a program of 180-30-120 compared to 147-8.5-3.8 for AgroLiquid. (Note: the conventional treatments had 200 lb/A of potash applied in the previous fall after soybean harvest. This is a common practice in the area and is to provide K to the corn and following soybean crops.) This is the third year of this experiment, and the yields from 2013 are in the chart.



LSD (0.2): 7.2 CV: 6.6%

Conclusions:

- All of the treatments increased yield over that of the nitrogen only treatment. This was the reduced rate of nitrogen used in the AgroLiquid treatment, applying 141 lb of N per acre.
- The AgroLiquid treatment produced the highest average yield compared the two conventional treatments that applied over twice the amount of nutrients per acre.
- In addition to higher yield, the in-furrow AgroLiquid treatment is easier to apply.