

## Fertilizer Program Evaluations in Corn Virginia Polytechnic Institute and University, Blacksburg.

# Experiment Info:

i luntou.	0/0
Variety:	MA5120
Population:	24,500
Row Spacing:	30″
Previous Crop:	Corn
Plot Size:	4 rows x 25'
Replications:	4
Harvest:	10/15

Soil Test Values (ppm):		
pH:	5.6	
CEC:	7.1	
% OM:	2.2	
Bicarb P:	15	
К:	70	
S:	8	
% <b>K</b> :	2.5	
% Mg:	16.2	
% Ca:	56.3	
% <b>H</b> :	25	
Zn:	1.6	
Mn:	12.3	
В:	0.3	

Yield Goal:	150 bu
Target Fertilizer Rate:	160-80-80

#### **Objective:**

Compare University recommendations for corn with those using AgroLiquid fertilizers.

Making proper corn fertilizer recommendations is a challenge. The nutrient aspects are considered, but the weather and growing conditions have the most impact. Sometimes high yields are obtained with minimal inputs in good weather, and sometimes yields are less than the yield goal when weather conditions are extreme. But it is interesting to compare programs from different sources, as was done this year at Virginia Tech under Dr. Wade Thomason. The recommendations were based on a soil test for a no-till corn following corn experiment. The university recommendations consisted of broadcast dry fertilizer followed by 2x2 placement of a liquid fertilizer and then a sidedress of 30% UAN for a total of 160-80-80 per acre. There were no micronutrients or sulfur. The total AgroLiquid program consisted of an in-furrow application of Pro-Germinator + Sure-K + Micro 500 + eNhance in furrow and 30%/eNhance sidedress. Because of the infurrow maximum rate recommendation of 10 gal/A (here we used 11); the AgroLiquid treatment was less than the 80 lb/A each of P2O5 and K2O. But with in-furrow, it was felt that this would suffice. Additional treatments included using 30%/eNhance at sidedress for the university treatment, and using Pro-Germinator + Micro 500 + eNhance in-furrow instead of the 20-10-10 in 2x2 placement for the university treatment. Yield results appear in the following chart.



### **Conclusions:**

- The AgroLiquid recommendation was as effective as the university recommendation, but eliminated the dry application trip, and applied less fertilizer per acre at planting which would be more time efficient.
- Using eNhance with 30% UAN (2.125 gal/Ton) resulted in a yield increase.
- Using Pro-Germinator + Micro 500 + eNhance in-furrow at 3.5 total gal/A was as effective as the 17 gal/A of 20-10-10 applied 2x2 in the university recommendation.

#### www.agroliquid.com /research-results