



Effects of Planter Applied Fertilizer on Corn Silage Yield

Ithaca, NY 2021

Experiment Info:	
Planted:	5-3-2021
Harvest:	9-15-2021
Yield Goal:	30 Tons
Target Fert.:	
Variety:	
Population:	
Row Width:	
Prev. Crop:	Corn
Plot Size:	
Replications:	

Soil Test Values (ppm):	
pH:	6.3
CEC:	11
%OM:	5.1
Bray P1:	142
Bicarb P:	
K:	250
S:	17
%K:	5.7
%Mg:	13.9
%Ca:	70.8
%H:	
Zn:	9.6
Mn:	55
B:	0.6

Objective:

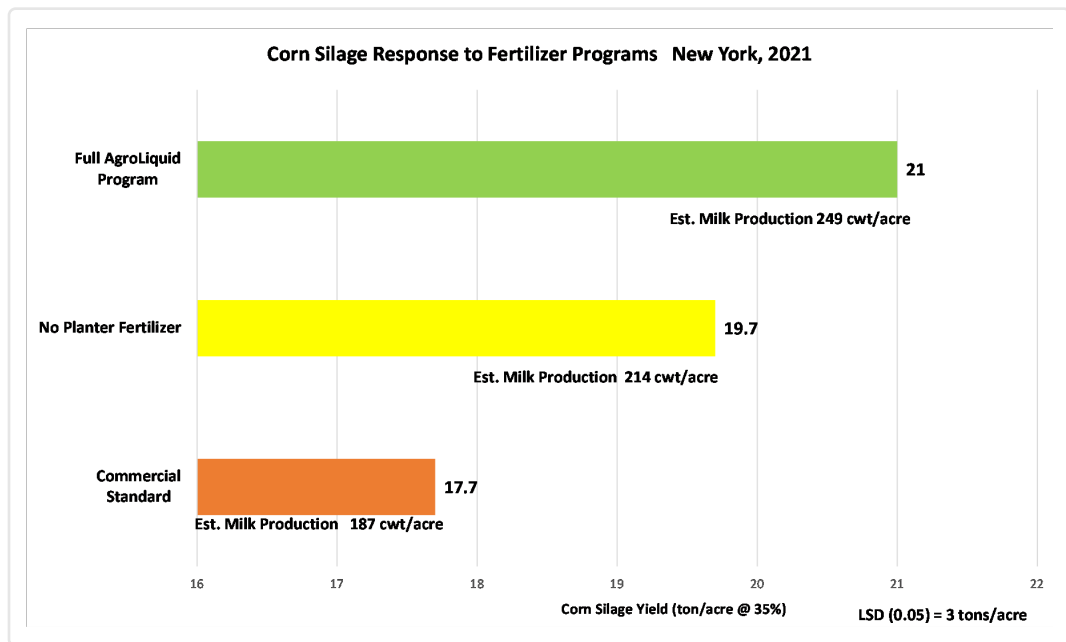
Evaluate the response of corn grown for corn silage to fertilizer programs.

This trial was done in partnership with AgroLiquid, Precision Planting, Dairy One consulting, and several seed companies. This trial was conducted on land managed by the Cornell University Ruminant Center in New York.

AgroLiquid Program = Pro-Germinator 2 gal/a + Kalibrate 4 gal/a + eNhance 0.25 gal/a + Micro 500 0.5 gal/a + Manganese 0.25 gal/a + Boron 0.125 gal/a + Liberate Ca 0.125 gal/a + C-Tech 0.25 gal/a applied through FurrowJet (three streams); High NRG-N 11 gal/a + Kalibrate 2 gal/a + accesS 2 gal/a applied through Conceal (both sides of row); High NRG-N 38 gal/a + accesS 2 gal/a side dress.

Commercial Standard Program: 6-24-6 5 gal/a applied through FurrowJet (three streams); 32-0-0 15 gal/a through Conceal (both sides of row); High NRG-N 38 gal/a + accesS 2 gal/a side dress.

A treatment that did not include any fertilizer applied through FurrowJet was also included in this trial.



Conclusions:

- Corn plots incurred hail damage during two storms during tassel and pollination which may have reduced yield from targeted yield goal.
- Forage yield was adjusted to 35% moisture. Subsamples from each plot were taken and analyzed for forage quality. Yield and quality data were used by the milk production estimation model "Wisconsin Milk 2006".
- Corn silage yield achieved with the full AgroLiquid program was over 3 ton/acre higher than the yield in the commercial standard. Estimated milk production for corn receiving the AgroLiquid program was 62 cwt higher than the estimated milk production for corn receiving the commercial standard fertilizer. This trial demonstrates the value of proper crop nutrition of corn silage to livestock producers, particularly dairy producers.