



Corn Silage Production - 3 year summary

Dryden, NY, 2021 - 2023

Experiment Info	
Planted:	
Harvested:	
Yield Goal:	30 ton/a
Variety:	
Pop.:	
Row Width:	30"
Prev. Crop:	
Plot Size:	2.5 acres
Reps:	

Objective:

The objective of this project was to demonstrate the value of AgroLiquid fertilizer products on yield and quality of corn silage. This project was conducted in cooperation with Dairy One consulting. The project was conducted in 2021, 2022, and 2023. The three year summary is reported.

An AgroLiquid fertilizer program was developed using soil test information and a high yield goal. That program was compared to a reduced volume program and a competitive standard program used in the area.

Milk production was estimated using "Wisconsin Milk 2006" modeling tool.

Soil Test (ppm)	
pH:	7.1
CEC:	14.5
%OM:	8.5
Bray P1:	
Bicarb P:	48
K:	165
S:	19
%K:	6.7
%Mg:	17
%Ca:	76.3
%H:	
Zn:	11
Mn:	81
B:	0.8

Planter Placement In-furrow	Planter Placement 2X2	Side Dress (V5)	Silage Yield (Ton/acre @ 35% DM)	NEL (Mcal/lb)	30 hr NDFD (% of NDF)	Est. Pounds of Milk/acre (Wisconsin Milk 2006)
Full Program: Pro-Germinator 2 GPA Kalibrate 4 GPA eNhance 0.25 GPA Micro 500 0.5 GPA Manganese 0.25 GPA Boron 0.125 GPA Liberate Ca 0.125 GPA C-Tech 0.25 GPA Total 7.75 GPA	Full Program: High NRG-N 11 GPA Kalibrate 2 GPA accessS 2 GPA Total 15 GPA	Full Program: High NRG-N 38 GPA accessS 2 GPA Total 40 GPA	23.6	0.71	57.8	27,900
Reduced Rate Program: 5 gallon/acre rate of the above mix	Same as above	Same as above	20.2	0.68	54.5	22,200
Commercial Standard: 6-24-6 5 GPA	Commercial Standard: 32-0-0 UAN 15 GPA	Commercial Standard: High NRG-N 38 GPA accessS 2 GPA Total 40 GPA	17.1	0.70	48.5	19,500

Conclusions:

- A full AgroLiquid program that addressed the nutritional needs of the crop and soil test conditions provided the best overall corn silage yield, silage quality, and estimated milk production of the treatments evaluated.
- This trial demonstrates the value of providing proper crop nutrition to corn grown for silage production. The cost of the full AgroLiquid program was approximately \$95 more than the commercial standard, but generated an additional \$1260 in milk production per acre (based on \$0.15/pound of milk). The return on investment in this trial was 13:1.
- Dairy producers should do forage quality testing and develop feed rations appropriate for the herd being fed.