



## Influence of various foliar fertilizer products on the yield of fresh market sweet corn. Experiment 15-203

### Experiment Info:

Planted:	4-27-2015
Harvest:	8-16-2015
Yield Goal:	12.5 tons /acre
Target Fert.:	
Variety:	
Population:	32,000
Row Width:	30"
Prev. Crop:	
Plot Size:	30'
Replications:	3

### Soil Test Values (ppm):

pH:	6.9
CEC:	7.8
%OM:	4.4
Bray P1:	8
Bicarb P:	-
K:	110 ppm
S:	42 ppm
%K:	
%Mg:	
%Ca:	
%H:	
Zn:	5.8 ppm
Mn:	5 ppm
B:	0.8 ppm

### Objective:

Determine which foliar fertilizer application, if any, can be used to increase the yield of fresh market sweet corn.

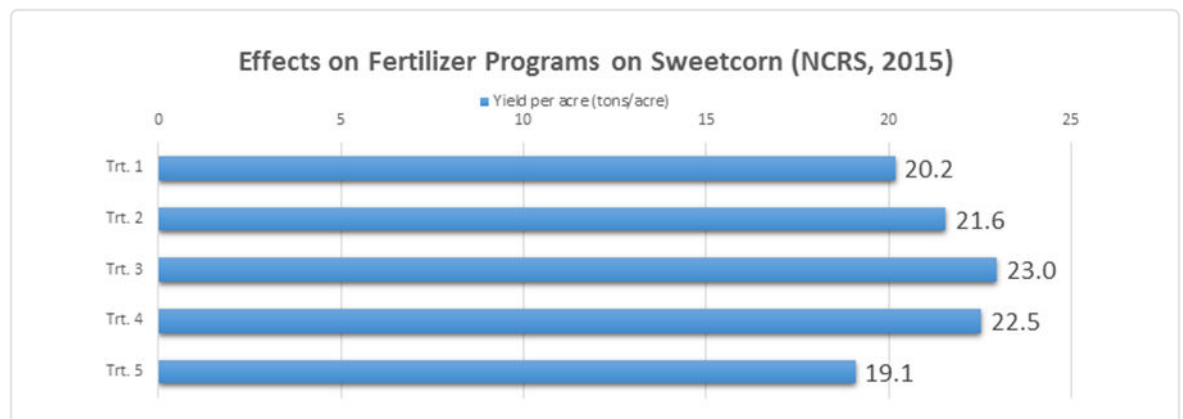
### Material & Methods:

All plots were planted in 2" x 2" placement with a 6 row Monosem planter. The base program was applied with the mixture consisting of High NRG-N at 16 gallons per acre, Pro-germination at 4 gallons per acre, Sure-K at 8.5 gallons per acre, and Micro-500 at 0.75 gallons per acre. The AgroLiquid Base program was based off the soil test results from this field and yield goals. The plot was planted on April 27th and then side dressed on May 18<sup>th</sup> with 28% UAN + eNhanse at 30 GPA. Corn development was approximately V-4 when side dressed. Foliar fertilizer applications were completed when a majority of the corn in the plot area reached the V-6 growth stage. Various foliar fertilizers were combined with water and applied in a total volume of 15 gallons per acre using a backpack sprayer and two flat-fan, size yellow #2 nozzles operated at approximately 40 PSI. The rate and product used for each foliar application can be found below.

- Trt. 1 = AgroLiquid base program only
- Trt. 2 = AgroLiquid base program + Foliar application of PTS at 2 ounces per acre.
- Trt. 3 = AgroLiquid base program + Foliar application of Sure-K at 2 gallons per acre.
- Trt. 4 = AgroLiquid base program + Foliar application of GrowRight at 2 quarts per acre
- Trt. 5 = AgroLiquid base program + Foliar application of 20-20-20 at 2 quarts per acre.

At harvest, only marketable sized ears were handpicked and removed from each plot. Plots were only harvested once for this trial. Any small and/or immature ears were left in the plots at the time of harvest. The weight and counts from both rows of the plot were combined for data analysis

### Results:



### Conclusions:

- The addition of AgroLiquid products used as a foliar applications across plots increased yields compared to using standard 20-20-20.
- Foliar application of Sure-K and GrowRight (formerly Green and Grow Wright Professional) had the biggest impact on increasing yield.
- These experiments show that Sweet corn responds positively to in season foliar applications of fertilizer.