



Corn Foliar Applications (17-712)

Experiment Info:

Planted:	5/18/2017
Harvest:	10/21/2017
Yield Goal:	170 bu/A
Target Fert.:	187-43-91
Variety:	DKC 48-12 RIB
Population:	32,000
Row Width:	30"
Prev. Crop:	Soybeans
Plot Size:	15 x 255
Replications:	4

Soil Test Values (ppm):

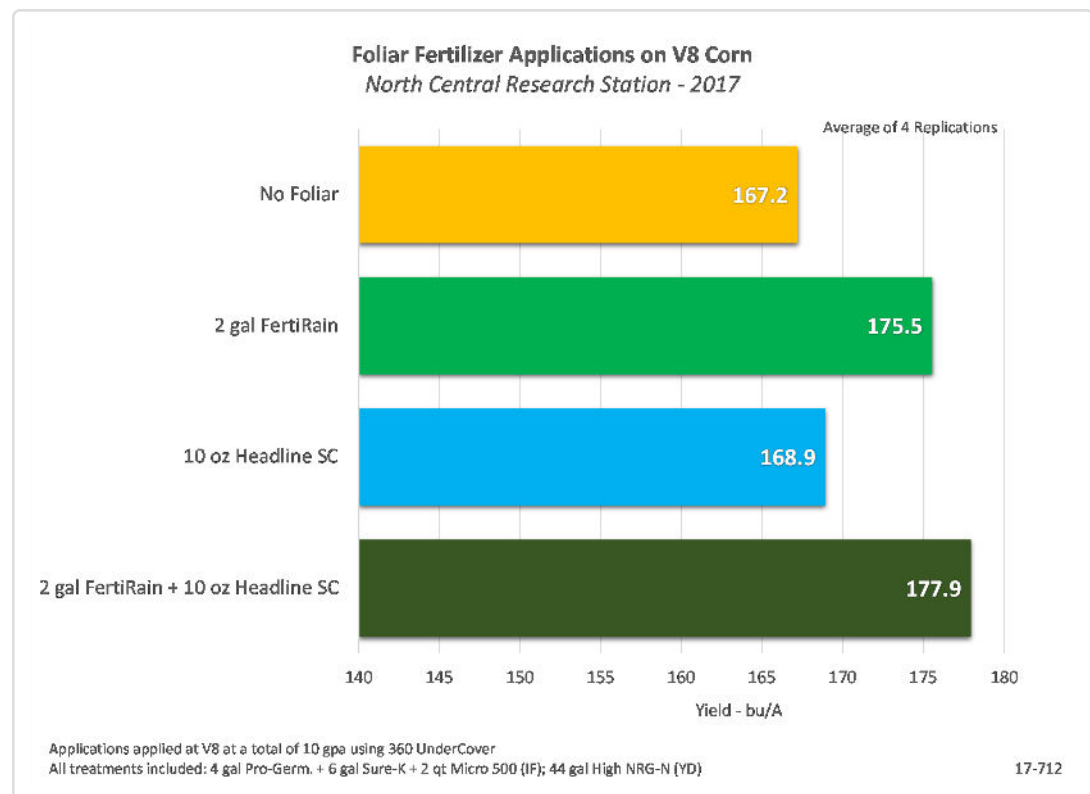
pH:	7.2
CEC:	18
%OM:	5.2
Bray P1:	19
Bicarb P:	11
K:	107
S:	8
%K:	1.5
%Mg:	17.3
%Ca:	81
%H:	
Zn:	1.1
Mn:	2
B:	.7

Objective:

To determine the effects of foliar fertilizer and fungicide applications on corn yields.

The best time to apply additional nutrients for a plant is when it needs it and can use it. Corn in the V6 - V9 stage is transitioning to rapid vegetative development. Many nutrients are needed to provide for the increased biomass being produced. Foliar feeding a plant is one way to efficiently deliver the fundamental nutrients. Previous research at the NCRS shows that the best way to foliar feed a corn plant is to effectively cover both the topside and underside of the leaves and this is possible with the 360 UnderCover apparatus. With a spray coverage targeting the middle area of the plant, nutrients applied are able to move up and down the plant to where they are needed most. This means the nutrients are more readily available for plant growth and the plant exerts less energy in its development phase.

This experiment evaluated the addition of 2 gpa of FertiRain as a foliar treatment on a well fertilized crop. Applying FertiRain with a fungicide treatment is a cost effective application method and was evaluated here using Headline SC.



LSD(0.2)10.6, CV:13.0%

Conclusions:

- The foliar application of FertiRain resulted in a yield advantage of 8.2 bu/A.
- Treatments utilizing the Headline fungicide only application resulted in a small increased yield. Dry summer conditions may have limited yield and disease pressure.
- Combination treatments of fungicide and foliar fertilizer saves trips across the field. Always jar test product combinations before spraying.