Foliar Applications of FertiRain on Corn (19-706)

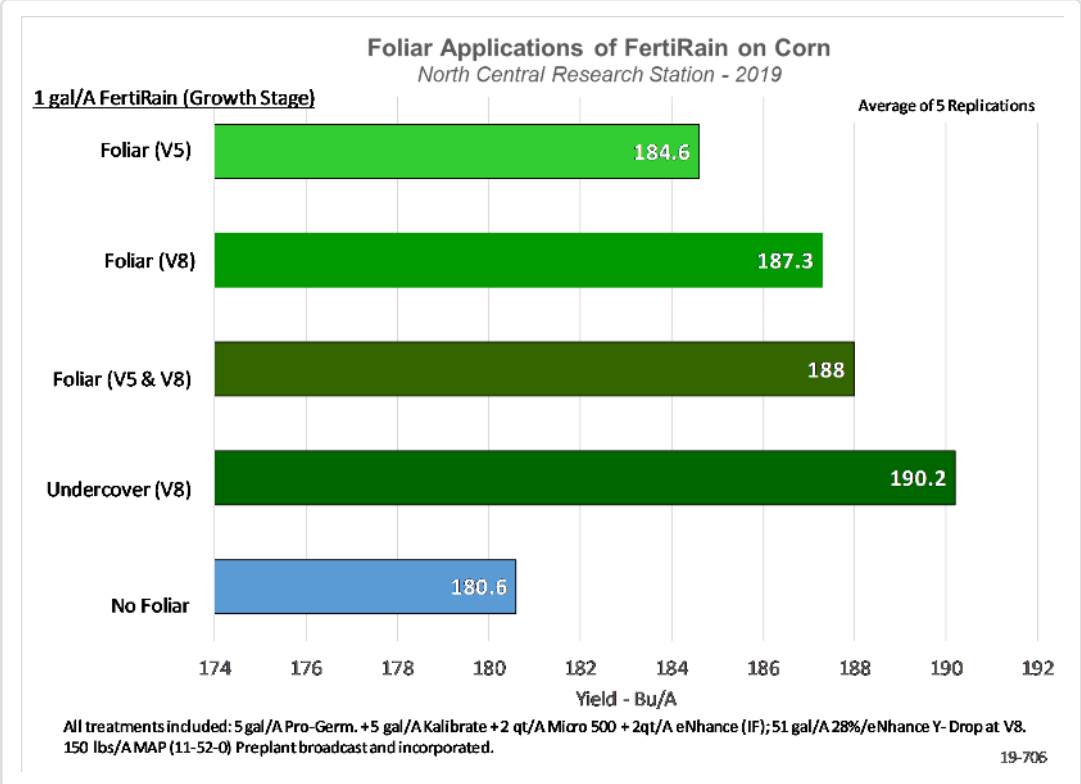
Experiment Info:	
Planted:	5/27/2019
Harvest:	11/7/2019
Yield Goal:	175 bu/A
Target Fert.:	193-100-62
Variety:	P9608 AM
Population:	32,000
Row Width:	30"
Prev. Crop:	Soybeans
Plot Size:	15 x 265
Replications:	5

Soil Test Values (ppm):	
pH:	6.8
CEC:	11.3
%OM:	2
Bray P1:	7
Bicarb P:	
K:	106
S:	5
%K:	2.4
%Mg:	21.9
%Ca:	75.3
%H:	
Zn:	1.2
Mn:	7
B:	.3

Objective:

To evaluate foliar applications of FertiRain applied at different growth stages, number of applications and method of application for effect on yield of corn.

FeriRain is a multi-nutrient product designed to be foliar applied on virtually any crop. It can be applied along with fungus and pest control products to provide some plant nutrition at the same time. The application rate was only 1 gallon per acre to check for yield response to lower than typical rate (such as 3 gal/A). Foliar applications were at either growth stage V5, V8 or both. Foliar application was either broadcast (10 gal/A with Guardian 02 Air Tip) or with the 360 Undercover (360 Yield Center). The corn was planted much later than normal (May 27) due to the excess spring rain and also received a late application of in-season nitrogen (Y-Drop) on July 18. So this should provide a good test for effects of foliar applications.



LSD(0.05): 6.4; CV:5.9%

Conclusions:

- There was a significant yield increase with applications at the V8 growth stage of corn compared to the No Foliar treatment, likely due to the increased leaf area at that time.
- The highest yield was with the Undercover application which has been shown to substantially increase plant coverage with the applied product. Previous work at the NCRS has shown this as well.
- There was no advantage to two applications of FertiRain where a single application at the later stage yielded just as well.
- In data not shown, the 1 gallon applications did not increase tissue test nutrient levels.