



Corn Yield Response to Foliar Fertilizer Application (15-312)

Experiment Info:

Planted:	5/6/2015
Harvest:	10/26/2015
Yield Goal:	200 bu/A
Target Fert.:	220-9-132
Variety:	DKC 46-36 RIB
Population:	34,400
Row Width:	30"
Prev. Crop:	Wheat
Plot Size:	15 x 400
Replications:	2
LBC (PRE)	5/15/2015
SD (V5)	6/5/2015
FOL (V8)	7/2/2015
FOL (VT)	7/21/2015

Soil Test Values (ppm):

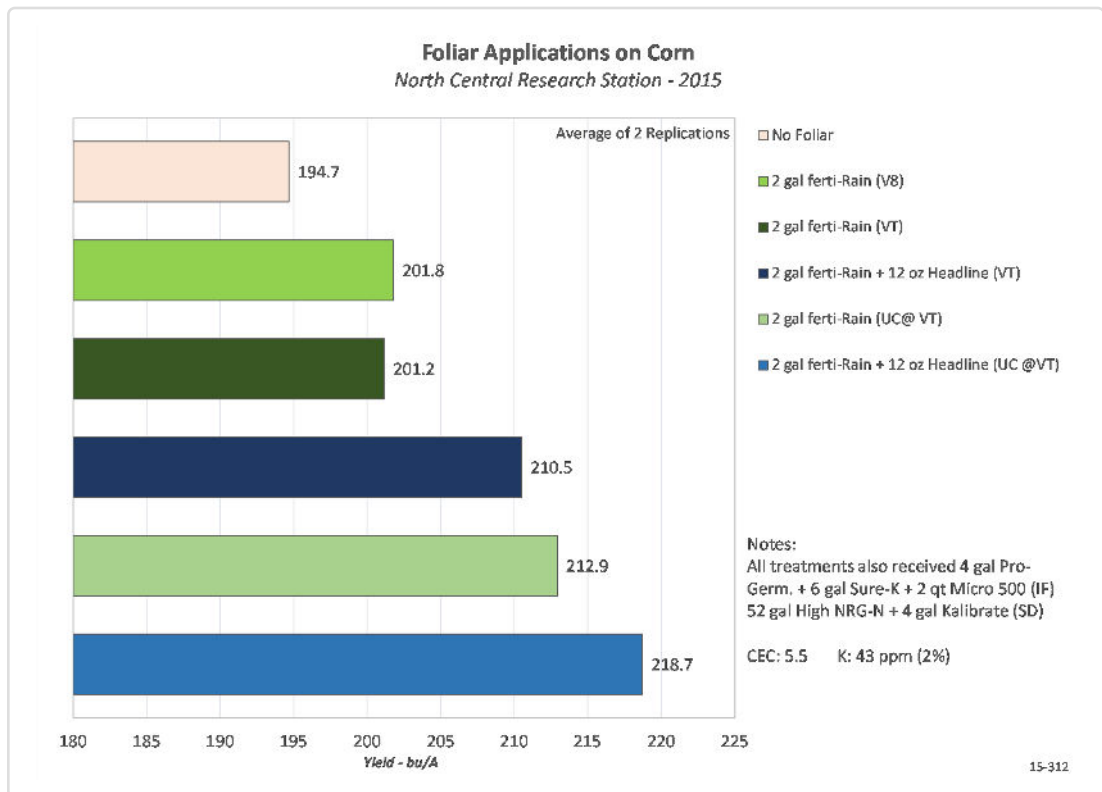
pH:	7
CEC:	5.5
%OM:	1.5
Bray P1:	28
Bicarb P:	7
K:	43
S:	12
%K:	2.0
%Mg:	17.0
%Ca:	79.8
%H:	0
Zn:	1.0
Mn:	3
B:	0.3

Objective:

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

Corn crops typically receive a well-balanced fertility program through soil applications, where little response is seen with additional foliar fertilizer applications. However, in some situations, such as years with high nutrient loss or above average environmental conditions, yield increases have been observed with foliar applications on corn.

This experiment evaluated two timings of a foliar application of 2 gal/A ferti-Rain. The first was applied at V8 corn and the second at VT. The later applications also compared the addition of Headline fungicide applied at 12 oz/A. Additionally, the late applications compared foliar methods of application for foliar applications. First, the more traditional method using a TurboTeeJet nozzle, would provide coverage over the top of the plants. This was compared to newer technology from 360 Yield Center, the Undercover (UC). This application, placed the spray inside of the corn canopy. All applications were made at a total spray volume of 10 gal/A. Yield results appear on the chart below.



Conclusions:

- All foliar applications increased corn yield over the no foliar application treatment.
- There was no difference in timing of ferti-Rain, both the V8 and VT application increased yield about 7 bu/A.
- The addition of Headline further increased corn yield by 9 bu/A when applied with Turbo TeeJet nozzles.
- Use of 360 Yield Center's UNDERCOVER technology provided higher yields in both treatments when compared to applications made with Turbo TeeJet nozzles.
- Highest yield was achieved with a complete program of fertilizer and fungicide using the UNDERCOVER, with a 24 bu/A yield increase over the no foliar treatment.