

Experiment Info 2013:

Planted: 5/3
Variety: DKC53-78
Population: 34,000
Row Spacing: 30"
Previous Crop: Soybeans
Plot Size: 15' x 255'
Replications: 4
Harvested: 10/23

Soil Test Values (ppm):

pH: 6.6
CEC: 10.5
% OM: 2.4
Bray P1: 16
K: 146
S: 10
% K: 3.6
% Mg: 21.1
% Ca: 69.0
%H: 5.6
% Na: 0.7
Zn: 0.8
Mn: 6
B: 0.4

Yield Goal: 175 bu
Target
Fertilizer Rate: 192-60-0

Objective:

To compare summary yields of ferti-Rain foliar applications on Corn.

Each year foliar applications are made to corn at the North Central Research Station to identify potential benefits from these treatments. ferti-Rain is a very well balanced nutritional source from Agro-Culture Liquid Fertilizer that is designed for foliar applications. It contains N, P and K as well as sulfur, iron, manganese and zinc to provide balanced plant nutrition. Foliar applications with ferti-Rain are safe because of its low salt index.

All applications were made with the Hagie high clearance sprayer at 10 gpa, 40-60 psi to provide uniform plant coverage and at temperatures below 80°F. Growth stages varied at time of application between V5 and VT. A summary of the average yields from experiments conducted between 2007 and 2013 appears in the table below.

Summary of Corn Foliar Applications
North Central Research Station

EXP #	Rate/A	Corn Stage	ferti-Rain	No Foliar	Yield Difference
07-105	3 gal	V8	160.1	163.2	(3.1)
08-305	3 gal	V7	234.7	231.7	3.0
09-306	3 gal	V7	214	210.8	3.2
10-305	3 gal	V5	171.8	177.4	(5.6)
10-305	3 gal	VT	193.6	199	(5.4)
11-510	3 gal	V8	131.9	132.9	(1.0)
11-716	2 gal	V7	166.1	164.4	1.7
11-716	2 gal	VT	161.2	164.4	(3.2)
12-702	2 qt	V8	186.8	199.8	(13.0)
13-709	2 gal	V8	148.9	144.7	4.2
		Average:	176.9	178.8	(1.9)

Conclusions:

- For healthy corn, foliar applications of ferti-Rain have not shown consistent results.
- Concentrate on good planter time programs to maintain healthy, well-nourished corn.
- Foliar applications can show a benefit if a deficiency symptom is being corrected or deemed necessary to aid recovery following an adverse weather effect. (Note: do not make a foliar application to corn that is under drought stress.)