



Corn Fertilizer Rate Comparison (17-711)

Experiment Info:

Planted:	5/17/2017
Harvest:	10/21/2017
Yield Goal:	175 bu/A
Target Fert.:	176-60-46
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):

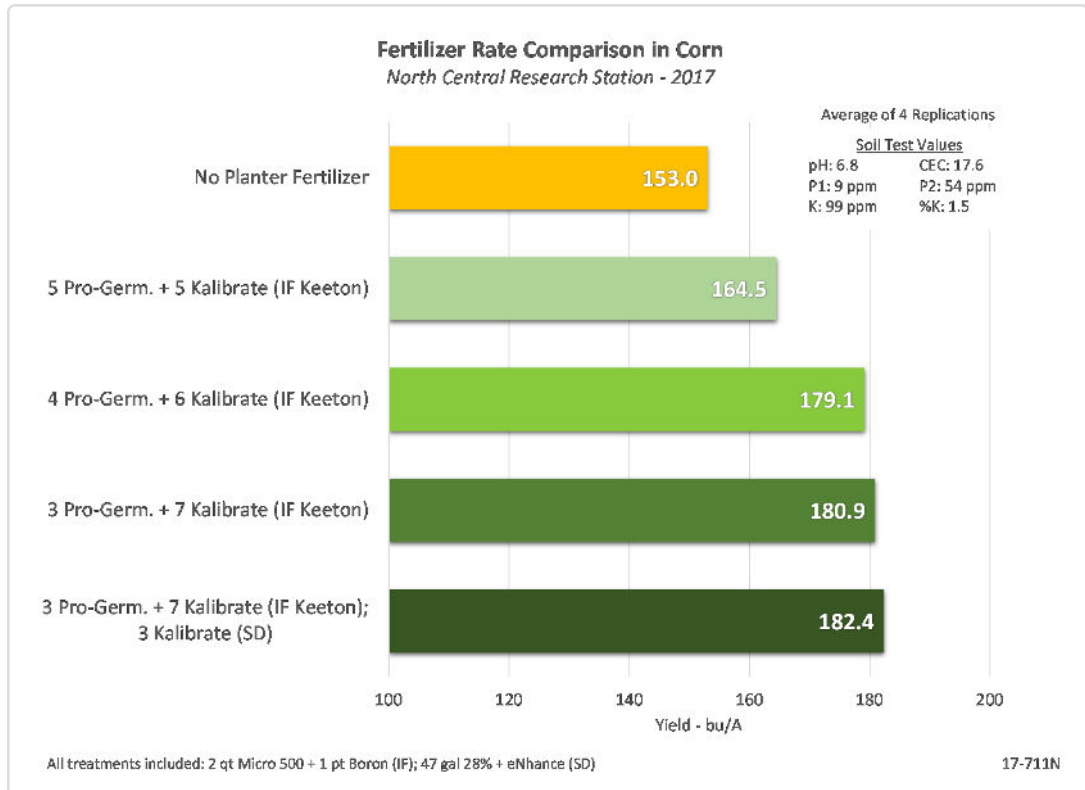
pH:	6.8
CEC:	17.6
%OM:	5.0
Bray P1:	9
Bicarb P:	-
K:	99
S:	20
%K:	1.4
%Mg:	15.5
%Ca:	82.5
%H:	-
Zn:	1.0
Mn:	2
B:	0.6

Objective:

To determine the proper fertilizer recommendation for corn based on a soil test.

AgroLiquid's products can be applied in-furrow on corn in most soil conditions up to a rate of 10 gal/A. Sometimes when working with soils with lower testing levels of phosphorus and potassium, it becomes a challenge trying to determine the correct nutrient ratio. This experiment had a low P1 level of 9 ppm and 99 ppm potassium. Stating with in the safe rate of 10 gal/A three ratios of Pro-Germinator and Kalibrate were compared. A volume of 10 gal/A or Pro-Germinator + Kalibrate was applied at the following rates (1) 5 + 5 gal/A (2) 4 + 6 ga/A and (3) 3 + 7 ga/A. All treatments also contained Micro 500 at 2 qt/A. A fourth treatment consisted of treatment (3) followed by 3 gal/A Kalibrate added to the sidedress application.

Yield results appear on the chart below.



LSD(0.1)21.6 CV:12.3%

Conclusions:

- All treatments increased corn yield over the nitrogen only check.
- In this trial it appears that the limiting factor was potassium, as yield generally increased with the increasing Kalibrate rate.
- The fertilizer program containing 5 gal/A each of Pro-Germinator and Kalibrate, yielded about 15 bu/A lower than the other ratios.
- No differences was seen between the 4 + 6 and 3 + 7 ratios of Pro-Germinator to Kalibrate.
- Adding more Kalibrate at sidedress only had a slight yield effect, but was not economical.