



# Potassium Comparisons on Strip Till Corn ( 15-1218 )

## Experiment Info:

Planted:	4/30/2015
Harvest:	10/6/2015
Yield Goal:	200 bu/A
Target Fert.:	220-109-251
Variety:	DKC 49-72 RIB
Population:	30,700
Row Width:	30"
Prev. Crop:	Corn
Plot Size:	15 x 630
Replications:	3
ST (Fall 8)	11/10/2015
LBC (PRE)	5/1/2015
SD (V5)	5/29/2015

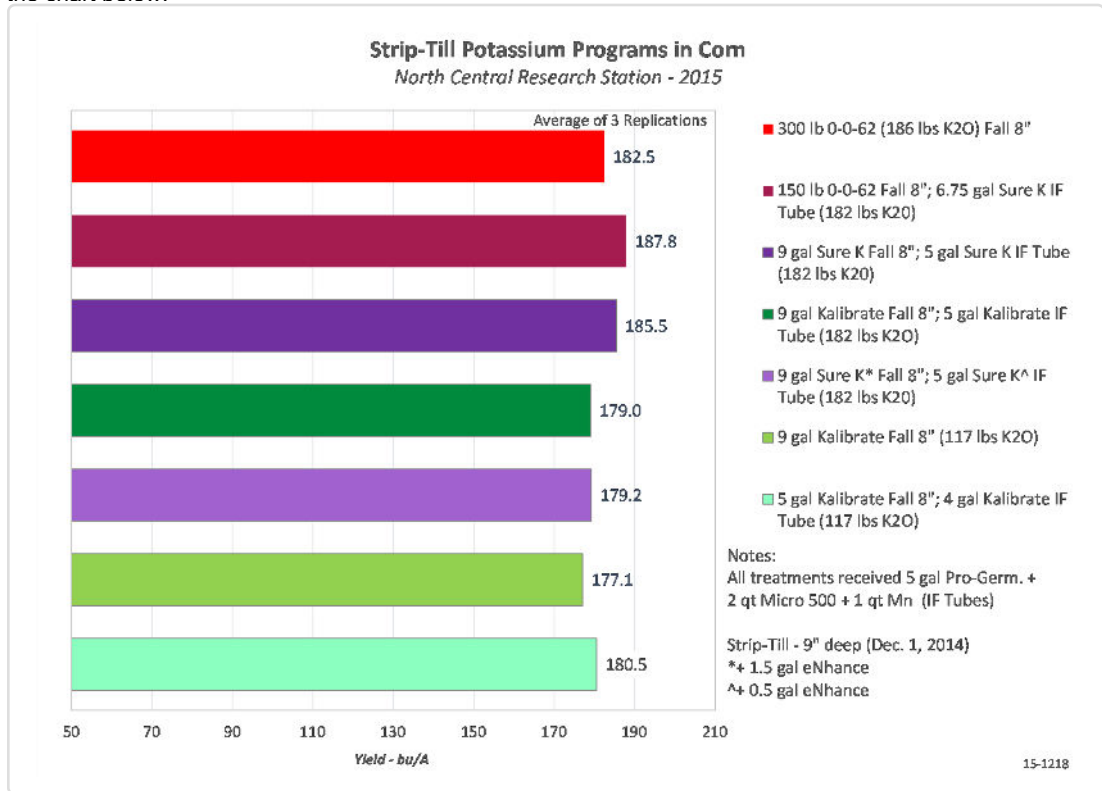
## Soil Test Values (ppm):

pH:	7.2
CEC:	19.5
%OM:	12
Bray P1:	8
Bicarb P:	6
K:	34
S:	16
%K:	.4
%Mg:	17.1
%Ca:	82.2
%H:	
Zn:	1.2
Mn:	2
B:	.5

## Objective:

To compare AgroLiquid Sure-K and Kalibrate potassium sources to 0-0-62 dry potash when banded in the fall with strip tillage.

This experiment was established with an Orthman 1tRIPr in the fall in previous corn stalk residue. Potash applications were applied using a Gandy metering system to deliver the dry product to each row shank for placement at an 8" depth in the tilled strip. Fall applications of Sure-K and Kalibrate were metered through an AgXcel GX2 electric pump system mounted on the Orthman toolbar. The chosen depth of fall placement for the liquid products was the same 8" depth as the dry products. The 14 total gallons of Sure-K or Kalibrate applied would match the total pounds of dry K<sub>2</sub>O applied. Planter applications of Sure-K or Kalibrate were applied in-furrow with a Totally Tubular system. A lower rate of Kalibrate was tested in the last two treatments for comparisons. All treatments received 5 gal/A Pro-Germinator + 2 qt/A Micro 500 + 1 qt Mn in-furrow at planting. These last two treatments did show some signs of potassium deficiency and disease during the growing season. Yields appear in the chart below.



## Conclusions:

- Split application of potash in the strip and Sure-K utilizing the planter in-furrow application provided the greatest yield benefit. A non-significant amount for this test of 5.3 bu/A advantage over the dry only program.
- Reduced rates showed potassium deficiency during the growing season, however yields were similar to the full rates applied.
- The lower rates of AgroLiquid Sure-K and Kalibrate provide application efficiencies.
- A split application of 9 gal/A Sure-K in the fall strip till and 5 gal/A Sure-K with the planter provided a 3 bu/A increase over the full potash fall application.