

Potassium Source Comparison on 30"-row Soybeans (15-503)

Experiment Info:

Planted:	5/18/2015
Harvest:	10/14/2015
Yield Goal:	60 bu/A
Target Fert.:	0-0-175
Variety:	22RD00
Population:	160,000
Row Width:	30"
Prev. Crop:	Corn
Plot Size:	15 x 290
Replications:	4
YD (R1)	7/27/2015
SD (R1)	7/27/2015

Soil Test Values (ppm): 7.3 pH: CEC: 9.1 %OM: 1.7 Bray P1: 28 Bicarb P: 15 49 K: S: 12 %K: 1.4 %Mg: 23.2 %Ca: 73.8 %H: 0 1 Zn: 4 Mn: B: 0.4

Objective:

To compare potassium source and application timing on 30"-row soybeans.

Potassium management is important part of a soybean fertility program. AgroLiqiud offers two potassium sources with the main difference being that Kalibrate contains 6% sulfur. Additionally, with new application technologies on the market such as Y-Drop and Undercover, in-season applications offer new options for fertilizer treatments. This experiment was established on a location that has low potassium level and a moderate sulfur level, so both Sure-K and Kalibrate were tested. A total application rate of 7 gal/A was used for each product and two application programs were utilized. The first program was 7 gal applied 2x2 at planting. In the program, the application be split between 3 gal/A applied 2x2 and the remaining 4 gal/A applied with Y-DROP, the new application technology for 360 Yield Center. This tool places a band of fertilizer down each side of the soybean row and was done when the soybean began to flower.

Yield results appear on the chart below.



Conclusions:

- In both methods of application, Kalibrate slightly out yielded Sure-K, however, there was not statistical difference. This soil was medium to low in sulfur, so there was likely no benefit to using Kalibrate.
- There was not statistical difference between the two methods of application. Therefore, depending on what works best for the farming operation, there are many choices on how to apply potassium to a soybean crop.