

Experiment Info:

Planted:	6/3
Variety:	Stine 19RA02
Population:	140,000
Row Spacing:	30"
Previous Crop:	Wheat
Plot Size:	15'x290/310'
Replications:	4
Foliar 1:	7/19
Foliar 2:	7/31
Harvested:	10/3

Soil Test Values (ppm):

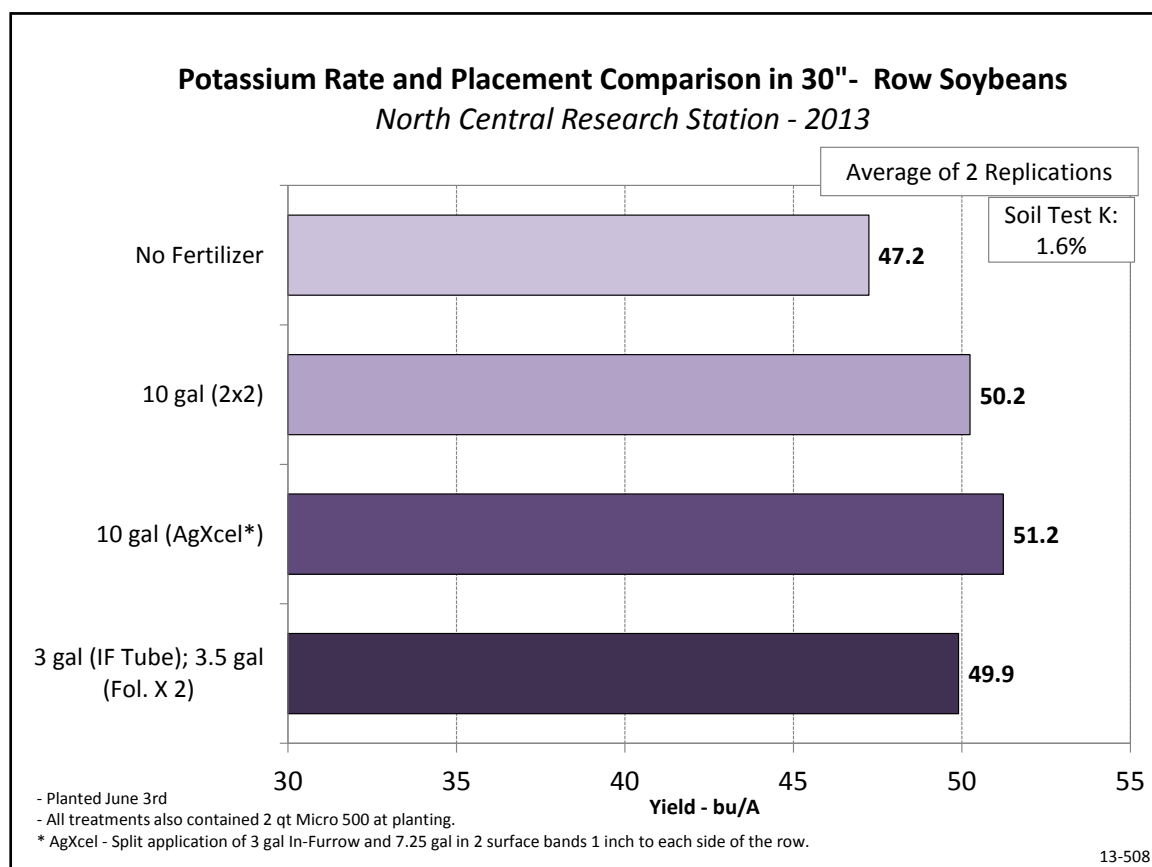
pH:	7.4
CEC:	7.7
% OM:	1.6
Bicarb P:	21
K:	47
S:	8
% K:	1.6
% Mg:	21.5
% Ca:	75.8
% H:	0
% Na:	1.1
Zn:	1
Mn:	6
B:	0.5

Yield Goal:	60 bu
Target Fertilizer Rate:	0-0-169

Objective:

To compare rate and placement options for potassium needs for 30" row Soybeans.

Placing nutrients in a band close to the seed has always been an efficient use of applied nutrients. When nutrient recommendations exceed in-furrow placement limits then other options are needed. Other options may include 2x2 or part of the total in-furrow and the remainder foliar applied. AgroLiquid has partnered with AgXcel to build a new experimental option to place part of the total nutrients needed in-furrow and the remainder placed behind the planter press wheels on top of the soil and one inch to either side of the seed (0x1). The "AgXcel" treatment placed 3 gal/A in-furrow (maximum allowed rate for 30" rows) and the remaining 7 gal/A on the soil surface. The AgXcel equipment uses orifices to split the nutrient stream into the two different required rates.



LSD (0.2): 3.7 CV: 9.8%

Conclusions:

- Drier than normal growing conditions limited yield.
- All three placement comparisons resulted in similar yields.
- The 2x2 placement is a very safe way to band apply large amount of nutrients with the planter in 30" rows.
- Sure-K placed on the soil surface with the AgXcel option showed a slight non-significant yield increase over 2x2 and in-furrow with foliar placement.
- Future work with AgXcel could provide a new option for planter nutrient placement.