

Experiment Info:

Planted:	06/06/14
Harvest:	10/31/14
Yield Goal:	50 bu/a
Target Fert.:	0-0-60
Variety:	P95Y70
Population:	40 lb
Row Width:	19" and 38"
Prev. Crop:	soybeans
Plot Size:	6.33' x 25'
Replications:	4

Soil Test Values (ppm):

pH:	6.6
CEC:	10.4
%OM:	1.7
Bray P1:	M3: 37
Bicarb P:	
K:	M3: 92
S:	M3: 7
%K:	2.1
%Mg:	29.3
%Ca:	60.9
%H:	5.9
Zn:	1.1
Mn:	30
B:	1

Objective:

Compare fertilizer programs in both 18" and 38" row spacing of soybeans for effects on yield and stand. Many soybeans are planted in wide rows in the South due to planters set that way for cotton. However there is some movement towards narrower rows. In-furrow AgroLiquid recommendations for soybeans in the more common 30" rows have a maximum recommended rate of 3 gal/A. In 38" rows, the actual amount of fertilizer in contact with the seed would be higher than in 30" rows. So the goal was to evaluate 5 gal/A of Sure-K both in furrow and in a surface band in 38" rows, compared to in-furrow in 19" rows. Kalibrate would not normally be recommended at 5 gal/A in 38" rows, but was applied in 19" rows for assessment. A foliar application of the standard 3 gal/A of Sure-K was included for comparison. The standards were 100 lb/A of 0-0-60 broadcast and incorporated and then no fertilizer. Stand counts were taken to assess injury. The same planter population per row was used in both 19" and 38" row spacing for the comparisons.

		Rate/A	Placement	Yield Bu/A	stand seeds/ft
38" rows					
1	0-0-60	100 lb	preplant incorp.	46.9	7.8
2	Sure-K + Micro 500	5 gal + 1 qt	In furrow	46.4	8.3
3	Sure-K + Micro 500	5 gal + 1 qt	0x2	45.2	8
4	Sure-K + Micro 500	3 gal + 1 qt	foliar R1	48.3	8.3
5	No fertilizer	--	--	41.7	8
19" rows					
6	0-0-60	100 lb	preplant incorp.	45.8	8
7	Sure-K + Micro 500	5 gal + 1 qt	In furrow	50.3	8
8	Kalibrate + Micro 500	5 gal + 1 qt	In furrow	51.2	8.8
9	Sure-K + Micro 500	3 gal + 1 qt	foliar R1	49.4	8.3
10	No fertilizer	--	--	40.3	7.8

LSD(0.05): 4.7; LSD(0.1): 3.9. CV: 9.4%

Conclusions:

- All fertilizer treatments resulted in a soybean yield increase over that of no fertilizer.
- The Liquid fertilizer applications had a higher average yield compared to the dry muriate of potash (0-0-60).
- Average soybean stand was similar for all of the treatments in both row spacing.
- The yield was slightly higher in the narrower row spacing for the in-furrow application of Sure-K + Micro 500.
- Kalibrate applied in furrow in 19" rows did not affect stand and yielded similar to Sure-K at the same rate.