

**Experiment Info:**

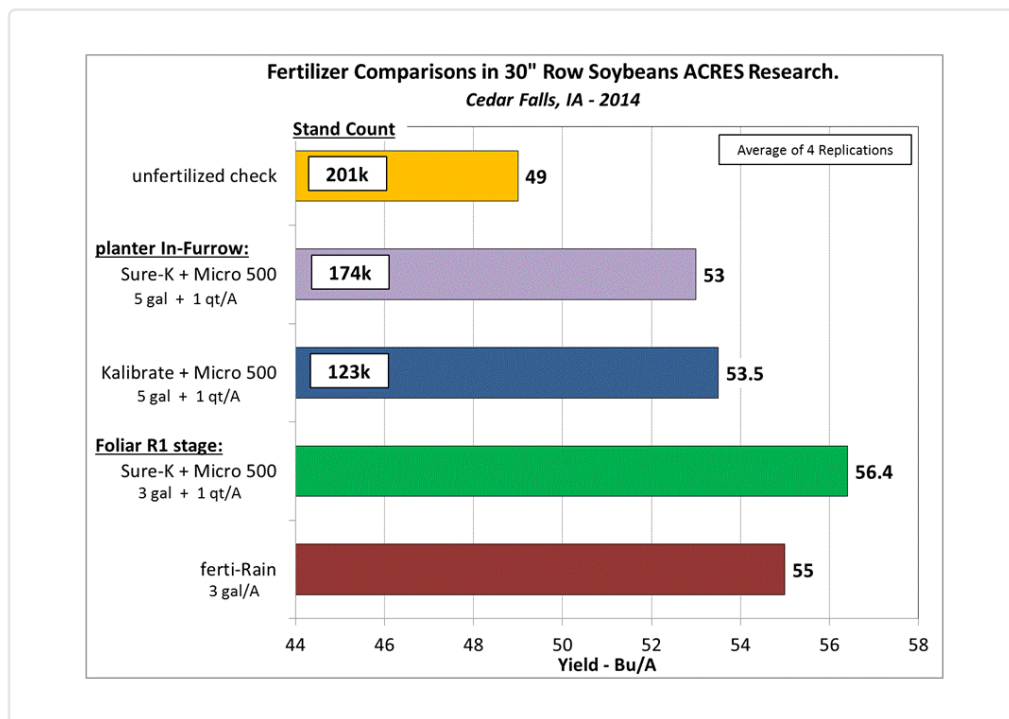
Planted:	05/20/14
Harvest:	10/10/14
Yield Goal:	60 bu/a
Target Fert.:	0-0-60
Variety:	NuTech7249
Population:	200k
Row Width:	30"
Prev. Crop:	corn
Plot Size:	15' x 40'
Replications:	4

**Soil Test Values (ppm):**

pH:	5.8
CEC:	23.8
%OM:	4.1
Bray P1:	24
Bicarb P:	
K:	155
S:	13
%K:	1.7
%Mg:	16.9
%Ca:	62.5
%H:	18.9
Zn:	
Mn:	
B:	

**Objective:**

Compare planter and foliar applied fertilizers for effect on yield and stand of soybeans in 30 inch row spacing. For several years, soybean research conducted at this Northeastern Iowa location have shown positive yield results with foliar fertilization, even exceeding that of higher rates that were planter-applied. This year evaluated the new potassium fertilizer Kalibrate applied in-furrow compared to Sure-K both planter and foliar applied. The foliar fertilizer ferti-Rain was also compared. Foliar applications were made at the R1, or early flowering stage of growth. Soybean stand counts were collected at the R2 stage of growth on the untreated check and planter-applied fertilizer treatments. It was assumed that the stand counts of the foliar only treatments would be the same as the untreated check treatment. Yield and stand count data appear in the following chart.



LSD(0.1):3.2; LSD(0.2): 2.4. CV: 6.3%

**Conclusions:**

- All fertilizer treatments resulted in a higher yield than that of the unfertilized check.
- The foliar applications yielded higher than the planter applications, consistent with previous results.
- Both in-furrow treatments of 5 gal/A reduced soybean stand, and more so with the sulfur-containing Kalibrate.
- The maximum recommended rate for in-furrow applications in 30" rows is 3 gal/A, and in hindsight, this rate should have been included. But it was thought that the heavy soil (CEC=23.8) would allow for the higher rate. Soybeans are known to compensate for reduced stand to some degree, but stand reduction is not a desired outcome. If higher rates in 30" rows are recommended by soil test, foliar treatments are advised.