

Experiment Info:

Planted:	6/1
Variety:	NuTech 7240
Population:	53 lbs
Row Spacing:	30"
Previous Crop:	Corn
Plot Size:	4 rows x 30'
Replications:	4
Foliar:	7/15
Harvested:	10/4

Soil Test Values (ppm):

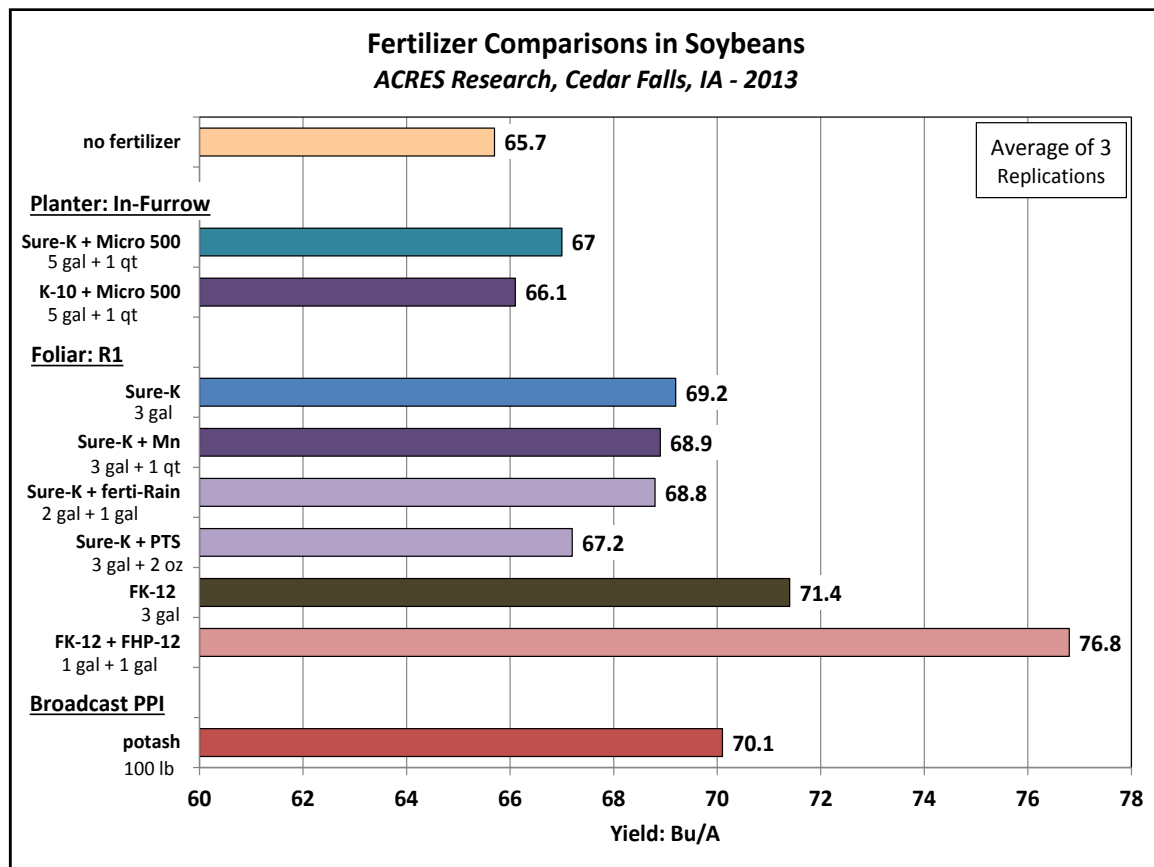
pH:	5.8
CEC:	23.8
% OM:	4.1
Bray P1:	24
K:	155
S:	13
% K:	1.7
% Mg:	16.9
% Ca:	62.5
% H:	18.9

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

Objective:

Compare different fertilizers applied pre-plant, with planter or as foliar for effect on soybean yield.

Soybean fertilization is often a challenge. Can soybeans obtain enough fertilizer left over from the previous corn crop? Can planter-applied fertilizers be effective? Foliar-applied fertilizers have shown promise, but can be inconsistent. Spring applied potash may not have time to break down and feed the crop. An attempt to answer all of these questions was conducted in an experiment at ACRES research farm in Northeastern Iowa. The soil test indicated a decent P level, but the K level was on the low side according to the base saturation level of 1.7%. Different fertilizers were applied either pre-plant broadcast and incorporated (potash), through the planter (Sure-K and experimental product K-10) or foliar applied at the R1 stage, 32 days after planting. Several fertilizers were foliar applied, including some experimental products like FK-12 (mostly potassium) and FHP-12 (mostly phosphorus). The PTS product is Protristim, an organic growth stimulant. Yield results appear in the following chart.



Conclusions:

- All treatments yields were very good for the year, especially being planted late on June 1.
- The planter-applied fertilizers did not have a significant effect on yield.
- Several of the foliar fertilizers did have a yield increase. These yields were comparable to that of the potash application.
- The experimental products FK-12 + FHP-12 as a foliar application resulted in the highest yield by far. The yields of this treatment were highest of all treatments in each of the three replications used in this experiment. This shows promise and will be thoroughly researched in the future.