AGRO-CULTURE LIQUID FERTILIZERS

Soybean Fertilizer Programs in a Permanent Plot Rotation (14-715)

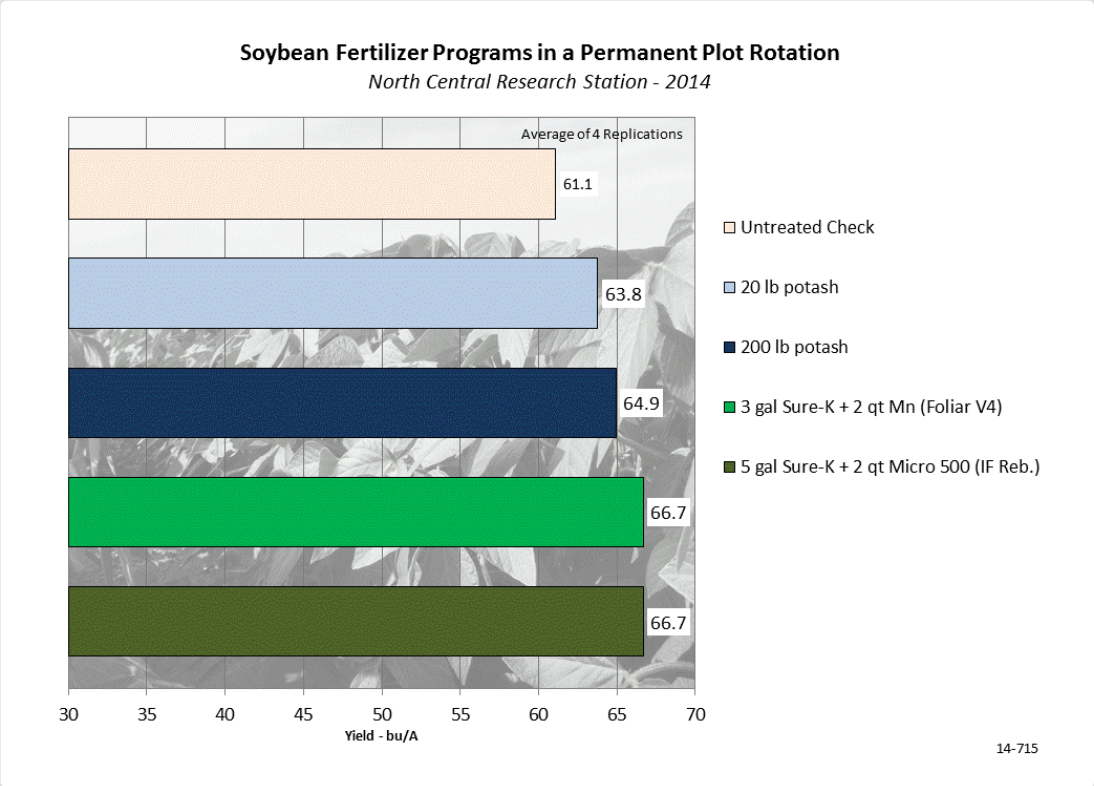
Experiment Info:	
Planted:	5/31/2014
Harvest:	10/11/2014
Yield Goal:	60 bu/A
Target Fert.:	0-0-96
Variety:	22RC62
Population:	144,000
Row Width:	15"
Prev. Crop:	Corn
Plot Size:	15 x 210
Replications:	4
Potash:	10/4/2012

Soil Test Values (ppm):	
pH:	7
CEC:	12.4
%OM:	3.4
Bray P1:	25
Bicarb P:	17
K:	111
S:	5
%K:	2.3
%Mg:	21.4
%Ca:	75.9
%H:	0
Zn:	1.5
Mn:	4
B:	0.7

Objective:

Evaluation of soybean yield in the fourth year of testing long-term fertilizer programs in a permeant rotation.

This year marks the fourth season of the permeant plots comparing fertilizer programs in a long-term corn-soybean rotation. The soybean part of this rotation compares four fertilizer programs: (1) AgroLiquid planter program including 5 gal/A Sure-K and 2 qt/A Micro 500, (2) AgroLiquid foliar program of 3 gal/A Sure-K + 2 qt/A Mn at V4, (3) full rate dry program of 200 lbs/A potash, (4) low rate dry program of 20 lbs/A potash. This low rate fertilizer treatment matches the actual pounds of potassium that the AgroLiquid planter program provides. Potash applications were applied in the fall following soybean harvest to provide potassium for the following years corn and soybeans the year after that. Yield results appear on the table below.



LSD(0.1) 4.4, CV: 5.9%

Conclusions:

- All fertilizer applications increased soybean yield over the untreated check, only the two AgroLiquid treatments resulted in a statistically significant yield increase over the untreated check.
- Both the Agro-Culture Liquid Fertilizers planter and foliar application produced the same soybean yield of 66.7 bu/A. This is similar to what has been observed in the past, that a foliar application of Sure-K produces a similar response to that of a planter application at a higher rate.
- Surprisingly the low rate of potash is still resulting in yields similar to those of the full rate. However is now numerically lower. It is expected that with time this application will be yielding similar to the untreated check.