

Soybean Fertilizer Programs in a Permanent Plot Rotation (15-714)

Experiment Info:

Planted:	5/21/2015
Harvest:	10/20/2015
Yield Goal:	60 bu/A
Target Fert.:	0-58-82
Variety:	14RD62
Population:	159,000
Row Width:	15"
Prev. Crop:	Corn
Plot Size:	15 x 210
Replications:	4
FOL (V4)	7/2/2015

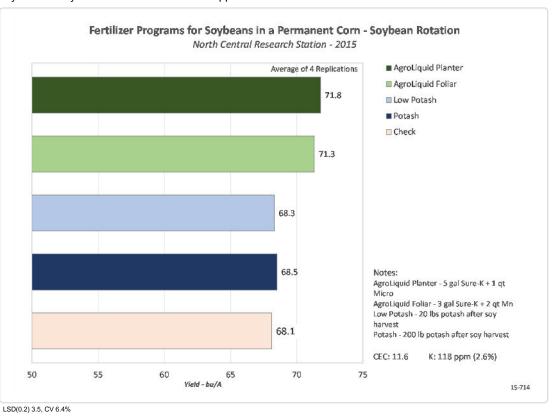
Soil Test Values (ppm):

pH:	6.1
CEC:	11.6
%OM:	2.5
Bray P1:	13
Bicarb P:	-
K:	118
S:	9
%K:	2.6
%Mg:	17.4
%Ca:	65.8
%H:	13.8
Zn:	1.3
Mn:	8
B:	0.4

Objective:

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

This year marks the fifth season of the permanent 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.



Conclusions:

- After five years of testing, the AgroLiquid programs continue to yield higher than the conventional fertilizer programs.
- The AgroLiquid planter treatment yielded slightly higher than the foliar application, however not statistically different. Because a higher rate of Sure-K was used with the planter program, these two programs were economically similar.
- The conventional programs continue to yield similar to the untreated check treatment.