



Permanent Plots - Soybeans (19-714)

Experiment Info:

Planted:	6/19/2019
Harvest:	11/24/2019
Yield Goal:	60 bu/A
Target Fert.:	0-73-115
Variety:	19GA02
Population:	145,500
Row Width:	15"
Prev. Crop:	Corn
Plot Size:	15 x 300
Replications:	4

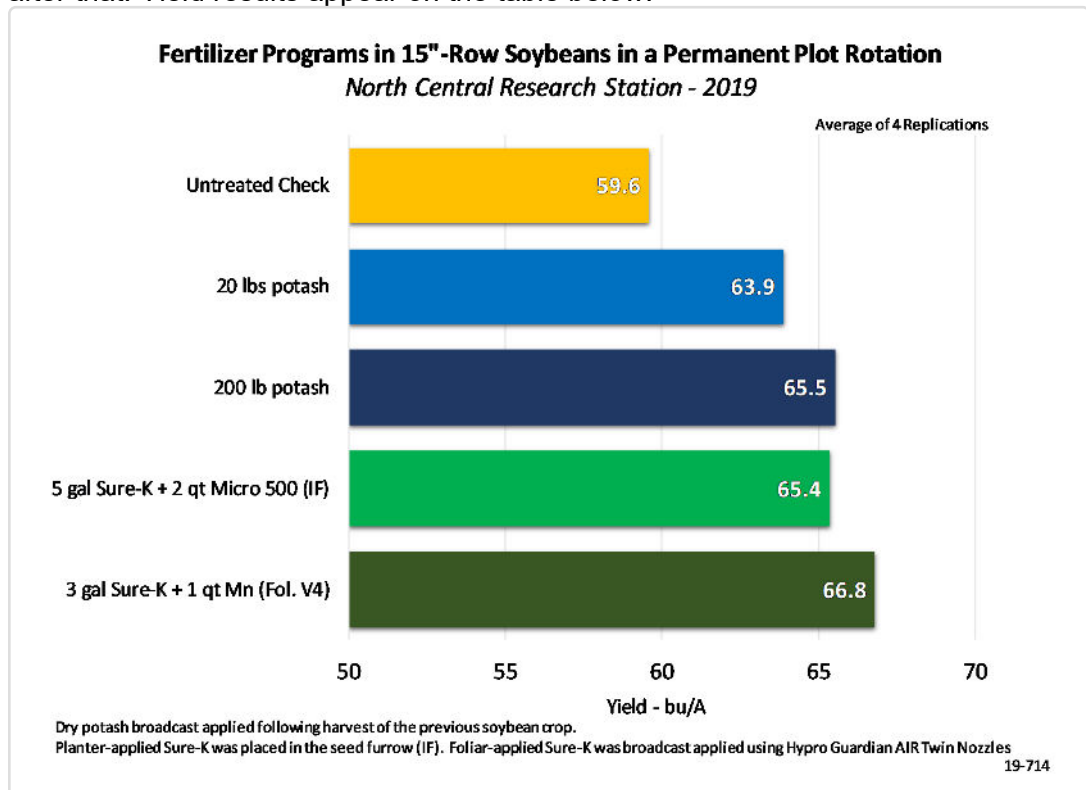
Soil Test Values (ppm):

pH:	6.1
CEC:	10.5
%OM:	2.4
Bray P1:	10
Bicarb P:	
K:	94
S:	4
%K:	2.3
%Mg:	16.7
%Ca:	66
%H:	14.7
Zn:	1.2
Mn:	6
B:	.5

Objective:

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

This year marks the ninth 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 of 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 muriate of potash, (4) low rate dry program of 20 lbs/A muriate of 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 the previous soybean harvest to provide potassium for the following years corn and soybeans the year after that. Yield results appear on the table below.



LSD(0.2) = 4.2; CV = 8.3%

Conclusions:

- All of the fertilizer treatments produced a significant yield increase over that of the check. But there were no significant differences between fertilizer treatments.
- The highest yield was from the foliar application of Sure-K + Manganese.
- The low-rate potash application surprisingly has yielded well in this experiment as well as in the previous years. (See summary report). However the corn in rotation has yielded much lower than other treatments and the reduced potassium would likely be a factor.