

## Experiment Info:

Planted:	5/17
Variety:	Stine 22RC62
Population:	155,000
Row Spacing:	15″
Previous Crop:	Corn
Plot Size:	15' X 210'
Replications:	4
Potash:	Fall 2011
Foliar:	7/2
Harvested:	10/11

Soil Test Values (ppm):		
pH:	6.1	
CEC:	11.6	
% <b>OM</b> :	2.5	
Bray P1:	13	
К:	118	
S:	9	
% <b>K</b> :	1.3	
% Mg:	17.4	
% Ca:	65.8	
% <b>H</b> :	13.8	
% Na:	0.4	
Zn:	1.3	
Mn:	8	
B:	0.4	

Yield Goal:	60 bu
Target Fertilizer Rate:	0-0-82

## Objective:

To compare fertilizer programs for effects on soybean yield in a long-term continuous corn/soybean rotation.

This year marks the third year in a long-term study comparing fertilizer programs in a corn/soybean rotation. Each fertilizer program remains "permanent" within the plot area and from year to year. This allows for evaluation of fertilizer effects from each program and the impact each has on soil test levels.

For the soybean part of this experiment there are four main fertility programs being compared to meet the yield goal of 60 bu/A: two Agro-Culture Liquid Fertilizers programs and two conventional programs. The first AgroLiquid program applied according to the soil test was 5 gal/A Sure-K with 1 qt/A Micro 500 applied in-furrow with Rebounder seed firmer with split fertilizer applicators. The second program was a foliar application 3 gal/A Sure-K with 1 qt/A MicroLink Manganese applied at the V4 stage of growth. Conventional programs were two rates of muriate of potash (0-0-62) applied in the fall following the previous soybean harvest in 2011. Two programs are being compared, the standard program according to soil test was applied at a rate of 200 lbs/A. A second program rate of 20 lbs/A was applied to match actual pounds of potassium provided by the Sure-K application. Yield results appear on the following chart.



## Conclusions:

- All fertilizer programs increased soybean yield over that of the untreated check.
- The planter applied AgroLiquid program exceeded the yield goal with an average yield of 66.2 bu/A.
- Similar yield was achieved with both rates of potash, yielding 63 bu/A. It is expected that as this experiment continues, yield with the low rate of potash will not be sustainable.
- Highest yield was obtained with a foliar application of Sure-K and Manganese, which was significantly higher than any other treatment.

## www.agroliquid.com /research-results