

Experiment Info:	
Planted:	5/2
Variety:	Phy565WRF
Population:	40,000
Row Spacing:	38"
Previous Crop:	Soybeans
Plot Size:	4 rows x 30'
Replications:	4
PPI.:	5/21
Sidedress:	6/28
Foliar:	8/15
Harvest:	10/10

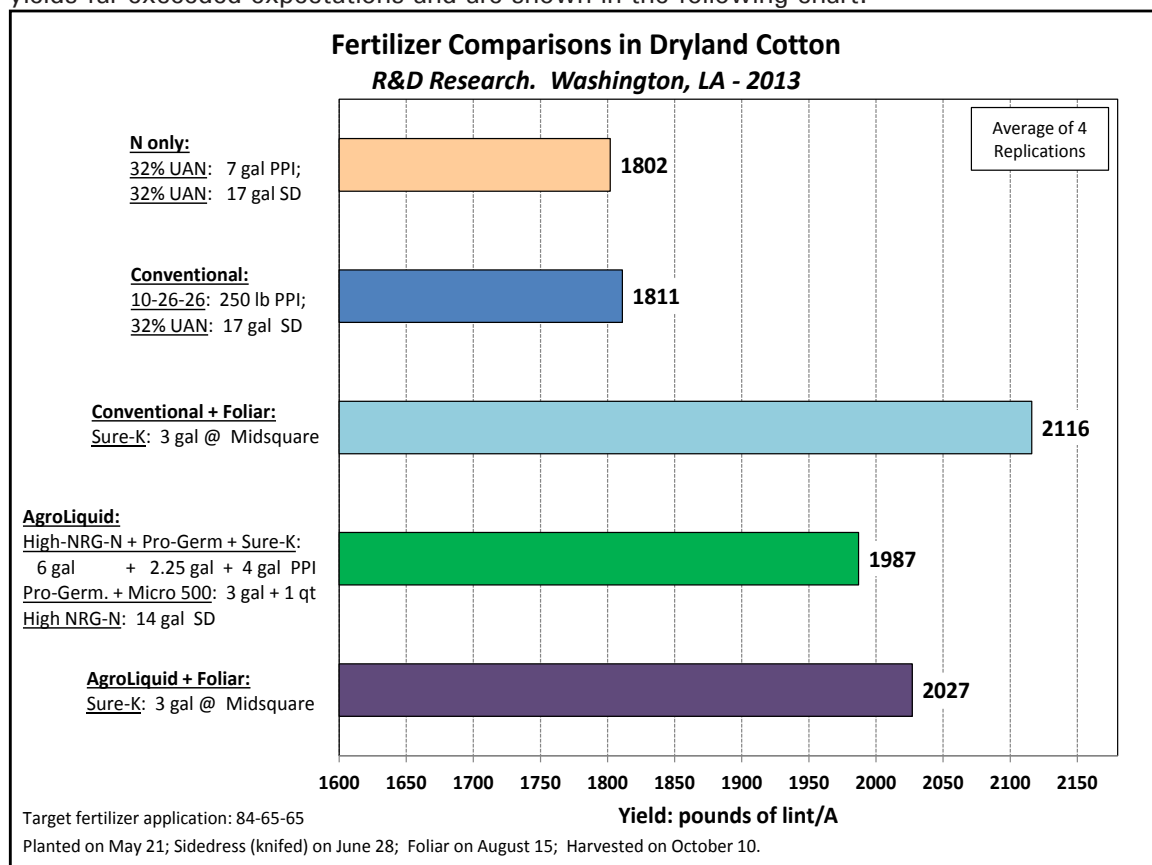
Soil Test Values (ppm):	
pH:	6.6
CEC:	10.4
% OM:	1.7
Bray P1:	37
K:	92
S:	7
% K:	2.1
% Mg:	29.3
% Ca:	60.9
% H:	6
% Na:	1.8
Zn:	1.1
Mn:	30
B:	1

Yield Goal:	3 bale
Target Fertilizer Rate:	84-65-65

Objective:

Compare conventional fertilizer program to AgroLiquid program for effects on cotton yield.

Cotton responds well to fertilizer inputs, particularly under a favorable growing season, as was the case here in East Central Louisiana in 2013. One challenge for the use of liquid fertilizers is the fact that cotton can be sensitive to fertilizers placed with the seed. As such, AgroLiquid recommends no more than 3 gal/A of P and K fertilizer be placed in the seed furrow at planting. Without the ability for 2x2 planter placement, it appears that needed fertilizer in excess of 3 gal/A would need to be broadcast. But can this compare to higher rates of conventional fertilizer? This experiment compared a pre-plant broadcast application of conventional dry fertilizer (10-26-26) and sidedress of 32% UAN to a pre-plant broadcast application of High NRG-N + Pro-Germinator + Sure-K; Pro-Germinator + Micro 500 in furrow and then the balance of High NRG-N applied at sidedress. There were additional treatments that evaluated the effects of these same treatments followed by a foliar application of Sure-K at the mid-square stage of growth (prior to flower). The yields far exceeded expectations and are shown in the following chart.



Conclusions:

- Of the non-foliar treatments, the AgroLiquid far out-yielded the conventional program which did not differ from the N-only treatment. The broadcast portion was effective.
- The foliar application of Sure-K resulted in a large yield increase of the conventional program. This is likely due to the poor performance of the dry fertilizer as seen by the lack of yield difference vs. the N-only treatment. The foliar provided some needed plant potassium.
- The foliar application of Sure-K resulted in only a slight yield increase of the AgroLiquid treatment. This has been observed previously in other crops where foliar applications aren't as effective where sufficient nutrition is already present. (There is no statistical difference between the yields of the two foliar treatments.)