

Experiment Info:

Planted: 10/19/2018 Harvest: 7/24/2019 100 bu/A Yield Goal: Target Fert .: 120-88-85 P25R40 Variety: Population: 2 million Row Width: 7.5" Prev. Crop: Soybeans Plot Size: 15 X 290 Replications: 4

Soil Test Values (ppm):				
pH:	7			
CEC:	7.4			
%OM:	1.7			
Bray P1:	19			
Bicarb P:	10			
K:	73			
S:	4			
%K:	2.5			
%Mg:	23.6			
%Ca:	73			
%H:				
Zn:	1.2			
Mn:	6			
B:	.3			

Objective:

To evaluate the carryover effect of biological products from a previous crop.

Soft Red Winter Wheat was planted, on a minimum tilled soil, after a late soybean harvest in 2018 with all treatments receiving a variation (as shown in the chart below) of 4 gal/A AgroLiquid phosphorus + 4 gal/A AgroLiquid potassium + 2 qt/A Micro 500. The previous soybean crop was 15" row spacing with in-furrow planter fertility applications as shown on the chart, to the left of the wheat applications. All plots were treated the same with 10 gal/A of 28% UAN + eNhance streamed @ greenup and another 22 gal/A of 28% UAN + eNhance streamed at Feekes 4; and a fungicide spray at flowering on. The PrimAgro products, containing organically derived biological components, used in both crops are highlighted in blue, in the chart below.

2018 Soybean spring planti			applications	Winter Wheat Fall planting applications	Yield bu/A
L	PrimAgro P	PrimAgro K	Micro 500	Pro-Germinator Kalibrate Micro 500	81.7
L	Pro-Germinator	PrimAgro K	Micro 500	Pro-Germinator Kalibrate Micro 500	79
L	PrimAgro P	Kalibrate	Micro 500	PrimAgro P PrimAgro K Micro 500	78.6
L	Pro-Germinator	Kalibrate	Micro 500	Pro-Germinator Kalibrate Micro 500	76.9
L	1.5 gal/A	1.5 gal/A	2 qts/A	4 gal/A 4 gal/A 2 qts/A	-

LSD(0.2)3.9, CV:6.3% Conclusions:

• An observation of wheat rows planted over the previous soybean row where applications had been made showed a slightly taller and greener plant regardless of the products that had been previously applied.

• The soybean treatment that used PrimAgro P and PrimAgro K products resulted in a higher wheat yield that was a significant 4.8 bu/A better than the treatment of AgroLiquid core products used in the 2018 soybeans.

• All treatments that had a previous crop application of PrimAgro products in the preceding year had a higher yield than the standard AgroLiquid core product use.

• Microbial respiration or soil health scores were not evaluated on this experiment in 2019.