

Microbial Solutions LLC Research 2021

Of: 1
 Year: 2021 Crop: Corn State: Missouri County: Cass DSM: n/a Plot No. n/a
 Date Planted: 6/7/2021 Seeds/acre: 30,000 Date Harvested: 10/21/2021 Sales Rep: n/a SR #: n/a
 Cooperator: Brian Kurz (Renegade Research LLC) Location Address: 28613 S. St. Rt. T Garden City, MO 64747 Cooperator Phone: 573-550-4115
 Contact Name: Jim Lightsey Cooperator City: Garden City State: MO Zip: 64747

Plot Type	Soil pH	Water Management	Irrigation Type	Tillage Type	Soil Type	Fertilizer (lb/acre)
<input checked="" type="checkbox"/> Trial Only	<input type="checkbox"/> High (> 7.8)	<input type="checkbox"/> Irrigated	<input type="checkbox"/> Drip	<input checked="" type="checkbox"/> Full Tillage	<input type="checkbox"/> Coarse	Nitrogen: <u>0</u>
<input type="checkbox"/> Trial vs Competitor	<input type="checkbox"/> Low (< 5.5)	<input type="checkbox"/> Limited	<input type="checkbox"/> Overhead	<input type="checkbox"/> No-Till	<input type="checkbox"/> Fine	Phosphorous <u>60.5</u>
<input type="checkbox"/> Yield Monitor	<input checked="" type="checkbox"/> Neutral (5.6-7.7)	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Surface	<input type="checkbox"/> Zone Tillage	<input checked="" type="checkbox"/> Medium	Potassium <u>60.5</u>
<input type="checkbox"/> Single Entry Check					<input type="checkbox"/> Peat	
<input type="checkbox"/> Damaged						
Previous Crop: Soybeans		GPS Lat: <u>38.5974</u>		Long: <u>-94.2465</u>		

Pre Herbicide	Pre Herbicide	Post Herbicide	Insecticide	Insect Pest	Agronomic Field Conditions				
					None	Low	Moderate	Severe	
None	Roundup/2-4-D/Sharpen	Degree Xtra, Atrazine, Mesotrione	N/A		Water Damage			X	
					Precipitation			X	
					Stand Issues		X		
					Disease		X		
					SCN	X			

Signature: *Brian Kurz*

RELEASE STATEMENT: My signature is authorization to use this material and my name and any yield comparisons data which might be printed by the Company.
 Renegade Research LLC

Comments: With a better understanding now of how the products perform and how they are designed to work. I recommend building a research study around fertilizer reduction and placement style. Soil contact vs. injected into the soil. I firmly believe these products can reduce fertilizer use and increase total farm ROI.

Bushel per Acre = (100 - % Moisture) x (110.465) x lbs. Grain ÷ Row Length (in feet) ÷ Row Width (in inches) ÷ Number of Rows

Strip #	Brand	Test Avg.	Treatment	Yield	% Moisture	Lbs Grain	Length (feet)	Row Width (inches)	# of Rows	Test Weight	Method		
											Infurrow	Drops	Foliar
1	Microbial Solutions	146.51	Check	138.4	15.5	50.7	57	30	2	60			
2	Microbial Solutions			143.1	15.8	49.84	54	30	2	59.4			
3	Microbial Solutions			191.4	15	64.81	53	30	2	60.1			
4	Microbial Solutions			113.2	15.6	53.2	73	30	2	58.7			
1	Microbial Solutions	150.18	32 oz. of TM-90	128.0	15.5	46.9	57	30	2	60.9			X
2	Microbial Solutions			179.3	15.2	62.03	54	30	2	60.8			X
3	Microbial Solutions			190.2	14.5	64.03	53	30	2	61.4			X
4	Microbial Solutions			103.2	16.5	49	73	30	2	57.7			X
1	Microbial Solutions	174.18	64 oz. of TM-90	218.5	15.2	79.78	57	30	2	60.7			X
2	Microbial Solutions			205.1	14.3	70.2	54	30	2	60.4			X
3	Microbial Solutions			177.5	14.9	60.04	53	30	2	60			X
4	Microbial Solutions			95.6	16.5	45.4	73	30	2	57.1			X
1	Microbial Solutions	202.51	32 oz of Humic-Ag	218.8	14.7	79.43	57	30	2	60.8			X
2	Microbial Solutions			212.0	14.7	72.91	54	30	2	61			X
3	Microbial Solutions			217.2	14.2	72.86	53	30	2	60.4			X
4	Microbial Solutions			162.0	15.5	76.02	73	30	2	59.1			X
1	Microbial Solutions	184.50	64 oz. of Humic-Ag	196.6	14.4	71.12	57	30	2	60.8			X
2	Microbial Solutions			202.0	14.7	69.45	54	30	2	60.1			X
3	Microbial Solutions			187.1	13.8	62.48	53	30	2	61.3			X
4	Microbial Solutions			152.3	15.1	71.13	73	30	2	59.7			X
1	Microbial Solutions	166.68	32 oz. of NLAg	202.7	14.3	73.23	57	30	2	61.2			X
2	Microbial Solutions			174.8	13.9	59.54	54	30	2	60.3			X
3	Microbial Solutions			172.9	14.4	58.15	53	30	2	59.8			X
4	Microbial Solutions			116.3	15.4	54.52	73	30	2	57.7			X
1	Microbial Solutions	157.80	64 oz. of NLAg	176.7	14.3	63.85	57	30	2	60			X
2	Microbial Solutions			178.6	14.3	61.14	54	30	2	60.3			X
3	Microbial Solutions			188.2	14	63.01	53	30	2	61.1			X
4	Microbial Solutions			87.6	16.7	41.68	73	30	2	58.3			X
1	Microbial Solutions	138.23	Check	147.0	14.8	53.4	57	30	2	59.9			
2	Microbial Solutions			162.1	14.6	55.67	54	30	2	59.7			
3	Microbial Solutions			155.5	14.6	52.41	53	30	2	59.2			
4	Microbial Solutions			88.4	16.6	42.02	73	30	2	57.4			