

# LSU Northeast Research Station

DOCUMENT THE INCREASED VIGOR SPRING PLANTED CROPS HAVE WHEN PLANTED IN A FIELD  
TREATED WITH VALOR IN THE FALL.

## GENERAL TRIAL INFORMATION

Study Director: VALENT  
Investigator: Donnie Miller  
TRIAL LOCATION: ST JOSEPH, LA  
Crop: cotton, soybean, corn, sorghum  
CROP VARIETIES:  
COTTON=DP164B2RF

SOYBEAN=DP4919RR

CORN=TERRAL 126BR41

GRAIN SORGHUM=DEKALB 5400  
Planting Date: 1/May/2008

## SITE AND DESIGN

Plot Width, Unit: 13.32 FT  
Plot Length, Unit: 25 FT  
Reps: 4  
Study Design: RANDOMIZED COMPLETE BLOCK

## SOIL DESCRIPTION

% Sand: 8            % OM: 0.75  
% Silt: 49           pH: 5.8  
% Clay: 43           CEC: 17.3  
Texture:            SILTY CLAY LOAM

## APPLICATION DESCRIPTION

A

Application Date: 15/Nov/2007  
Time of Day: 11:20 AM  
Application Method: SPRAY  
Application Timing: FALPRE  
Applic. Placement: BROSIO  
Air Temp., Unit: 59 F  
% Relative Humidity: 23  
Wind Velocity, Unit: 9 MPH  
Dew Presence (Y/N): N  
Water Hardness: N  
Soil Temp., Unit: 65 F  
Soil Moisture: MOIST  
% Cloud Cover: 0

## APPLICATION EQUIPMENT

A

Appl. Equipment: CO2 BCPCK  
Operating Pressure: 36 PSI  
Nozzle Type: DG  
Nozzle Size: 11002  
Nozzle Spacing, Unit: 20 IN  
Nozzles/Row: 2  
Ground Speed, Unit: 3.2 MPH  
Carrier: WATER  
Spray Volume, Unit: 15 GPA

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Weed Code			MEDPO	OEOLA	VICSA	DIGSA				
Crop Code							SORVU	ZEAMX	GLXMA	GOSHI
Rating Data Type			CONTROL	CONTROL	CONTROL	CONTROL	AVG CROP HT	AVG CROP HT	AVG CROP HT	AVG CROP HT
Rating Unit			%	%	%	%	CM	CM	CM	CM
Rating Date			1/May/2008	1/May/2008	1/May/2008	1/May/2008	22/May/2008	22/May/2008	22/May/2008	22/May/2008
Trt-Eval Interval			168 DA-A	168 DA-A	168 DA-A	168 DA-A	14 DAE	14 DAE	14 DAE	14 DAE
Trt Treatment	Rate	Appl Code								
No. Name	Unit		1	2	3	4	5	6	7	8
1 ROUNDUP ORIGINAL MAX	11 oz/a	A	21.25 b	32.50 bc	81.25 a	90.00 a	13.19 ab	18.94 a	8.19 a	7.00 a
2,4-D	1 pt/a	A								
NIS	0.25 % v/v	A								
AMMONIUM SULFATE	2.5 lb ai/a	A								
2 VALOR SX	2 oz/a	A	97.50 a	43.75 ab	98.75 a	87.50 a	12.06 bc	16.81 a	8.38 a	6.19 a
ROUNDUP ORIGINAL MAX	11 oz/a	A								
2,4-D	1 pt/a	A								
NIS	0.25 % v/v	A								
AMMONIUM SULFATE	2.5 lb ai/a	A								
3 VALOR SX	3 oz/a	A	100.00 a	67.50 ab	65.00 a	85.00 a	10.69 c	15.50 a	8.19 a	5.13 a
ROUNDUP ORIGINAL MAX	11 oz/a	A								
2,4-D	1 pt/a	A								
NIS	0.25 % v/v	A								
AMMONIUM SULFATE	2.5 lb ai/a	A								
4 VALOR SX	4 oz/a	A	97.50 a	75.00 a	67.50 a	78.75 a	11.81 bc	16.00 a	7.81 a	5.44 a
ROUNDUP ORIGINAL MAX	11 oz/a	A								
2,4-D	1 pt/a	A								
NIS	0.25 % v/v	A								
AMMONIUM SULFATE	2.5 lb ai/a	A								
5 NONTREATED			0.00 c	0.00 c	0.00 b	0.00 b	14.88 a	18.94 a	9.81 a	7.63 a
LSD (P=.05)			8.840	39.093	42.096	21.562	2.410	2.802	1.575	2.771
Standard Deviation			5.737	25.372	27.321	13.994	1.564	1.818	1.022	1.798
CV			9.07	57.99	43.71	20.5	12.49	10.55	12.06	28.66
Grand Mean			63.25	43.75	62.5	68.25	12.53	17.24	8.48	6.28
Bartlett's X2			3.008	8.588	11.838	3.316	3.077	1.915	9.482	6.355
P(Bartlett's X2)			0.222	0.035*	0.008*	0.345	0.545	0.751	0.05	0.174
Replicate F			1.759	0.670	0.761	0.840	1.057	0.172	1.982	0.790
Replicate Prob(F)			0.2083	0.5866	0.5371	0.4975	0.4032	0.9131	0.1705	0.5225
Treatment F			287.430	5.563	7.506	30.089	4.111	3.179	2.300	1.354
Treatment Prob(F)			0.0001	0.0091	0.0029	0.0001	0.0252	0.0535	0.1185	0.3066

Means followed by same letter do not significantly differ (P=.05, LSD)  
Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

# LSU Northeast Research Station

Weed Code				IPOLA	IPOHG	SEBEX	SORHA	ECHCG				
Crop Code									SORVU	ZEAMX	GLXMA	GOSHI
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	INJURY	INJURY	INJURY	INJURY
Rating Unit				%	%	%	%	%	%	%	%	%
Rating Date				22/May/2008	22/May/2008	22/May/2008	22/May/2008	22/May/2008	22/May/2008	22/May/2008	22/May/2008	22/May/2008
Trt-Eval Interval				14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE	14 DAE
Trt Treatment	Rate	Unit	Appl Code									
No. Name	Rate	Unit	Code	9	10	11	12	13	14	15	16	17
1 ROUNDUP ORIGINAL MAX	11 oz/a	A		100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	0.00 a	0.00 a	0.00 a	0.00 a
2,4-D	1 pt/a	A										
NIS	0.25 % v/v	A										
AMMONIUM SULFATE	2.5 lb ai/a	A										
2 VALOR SX	2 oz/a	A		100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	0.00 a	0.00 a	0.00 a	0.00 a
ROUNDUP ORIGINAL MAX	11 oz/a	A										
2,4-D	1 pt/a	A										
NIS	0.25 % v/v	A										
AMMONIUM SULFATE	2.5 lb ai/a	A										
3 VALOR SX	3 oz/a	A		100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	0.00 a	0.00 a	0.00 a	0.00 a
ROUNDUP ORIGINAL MAX	11 oz/a	A										
2,4-D	1 pt/a	A										
NIS	0.25 % v/v	A										
AMMONIUM SULFATE	2.5 lb ai/a	A										
4 VALOR SX	4 oz/a	A		100.00 a	100.00 a	100.00 a	100.00 a	100.00 a	0.00 a	0.00 a	0.00 a	0.00 a
ROUNDUP ORIGINAL MAX	11 oz/a	A										
2,4-D	1 pt/a	A										
NIS	0.25 % v/v	A										
AMMONIUM SULFATE	2.5 lb ai/a	A										
5 NONTREATED				0.00 b	0.00 b	0.00 b	0.00 b	0.00 b	0.00 a	0.00 a	0.00 a	0.00 a
LSD (P=.05)				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Standard Deviation				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CV				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Grand Mean				80.0	80.0	80.0	80.0	80.0	0.0	0.0	0.0	0.0
Bartlett's X2				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
P(Bartlett's X2)				.	.	.	.	.	.	.	.	.
Replicate F				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Replicate Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Treatment F				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Treatment Prob(F)				1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

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Weed Code													
Crop Code													
Rating Data Type													
Rating Unit													
Rating Date													
Trt-Eval Interval													
Trt Treatment													
No. Name	Rate	Unit	Appl Code	18	19	20	21	22	23	24	25	26	
1 ROUNDUP ORIGINAL MAX	11 oz/a	A		39.19 a	51.38 a	18.19 a	20.06 a	97.50 a	100.00 a	91.25 a	100.00 a	88.75 a	
2,4-D	1 pt/a	A											
NIS	0.25 % v/v	A											
AMMONIUM SULFATE	2.5 lb ai/a	A											
2 VALOR SX	2 oz/a	A		40.75 a	52.50 a	19.81 a	20.31 a	95.00 a	95.00 a	77.50 b	91.25 b	87.50 a	
ROUNDUP ORIGINAL MAX	11 oz/a	A											
2,4-D	1 pt/a	A											
NIS	0.25 % v/v	A											
AMMONIUM SULFATE	2.5 lb ai/a	A											
3 VALOR SX	3 oz/a	A		35.00 a	47.56 a	18.25 a	20.88 a	97.50 a	92.50 a	91.25 a	97.50 ab	95.00 a	
ROUNDUP ORIGINAL MAX	11 oz/a	A											
2,4-D	1 pt/a	A											
NIS	0.25 % v/v	A											
AMMONIUM SULFATE	2.5 lb ai/a	A											
4 VALOR SX	4 oz/a	A		32.31 a	51.06 a	17.94 a	20.69 a	97.50 a	93.75 a	85.00 ab	97.50 ab	86.25 a	
ROUNDUP ORIGINAL MAX	11 oz/a	A											
2,4-D	1 pt/a	A											
NIS	0.25 % v/v	A											
AMMONIUM SULFATE	2.5 lb ai/a	A											
5 NONTREATED				44.88 a	62.31 a	20.81 a	22.31 a	0.00 b	0.00 b	0.00 c	0.00 c	0.00 b	
LSD (P=.05)				11.063	17.879	5.053	7.281	3.721	11.599	12.910	7.509	13.02	
Standard Deviation				7.180	11.603	3.280	4.725	2.415	7.528	8.379	4.873	8.45	
CV				18.69	21.91	17.26	22.66	3.12	9.87	12.14	6.31	11.8	
Grand Mean				38.43	52.96	19.0	20.85	77.5	76.25	69.0	77.25	71.	
Bartlett's X2				4.592	10.126	3.57	2.525	0.0	0.01	1.233	3.039	1.59	
P(Bartlett's X2)				0.332	0.038*	0.467	0.64	0.001*	0.995	0.745	0.219	0.66	
Replicate F				1.636	0.595	0.686	0.077	0.286	0.963	0.807	0.474	0.95	
Replicate Prob(F)				0.2331	0.6301	0.5778	0.9711	0.8348	0.4417	0.5138	0.7063	0.444	
Treatment F				1.875	0.913	0.585	0.138	1287.857	128.824	86.591	315.842	90.06	
Treatment Prob(F)				0.1796	0.4874	0.6793	0.9651	0.0001	0.0001	0.0001	0.0001	0.000	

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# LSU Northeast Research Station

Weed Code		SORHA	ECHCG						
Crop Code				SORVU	ZEAMX	GLXMA	GOSHI		
Rating Data Type		CONTROL	CONTROL	INJURY	INJURY	INJURY	INJURY		
Rating Unit		%	%	%	%	%	%		
Rating Date		4/Jun/2008	4/Jun/2008	4/Jun/2008	4/Jun/2008	4/Jun/2008	4/Jun/2008		
Trt-Eval Interval		28 DAE	28 DAE	28 DAE	28 DAE	28 DAE	28 DAE		
Trt Treatment	Rate	Appl							
No. Name	Unit	Code	27	28	29	30	31	32	
1 ROUNDUP ORIGINAL MAX	11 oz/a	A	91.25 a	56.25 b	0.00 a	0.00 a	0.00 a	0.00 a	
2,4-D	1 pt/a	A							
NIS	0.25 % v/v	A							
AMMONIUM SULFATE	2.5 lb ai/a	A							
2 VALOR SX	2 oz/a	A	91.25 a	62.50 ab	0.00 a	0.00 a	0.00 a	0.00 a	
ROUNDUP ORIGINAL MAX	11 oz/a	A							
2,4-D	1 pt/a	A							
NIS	0.25 % v/v	A							
AMMONIUM SULFATE	2.5 lb ai/a	A							
3 VALOR SX	3 oz/a	A	92.50 a	72.50 a	0.00 a	0.00 a	0.00 a	0.00 a	
ROUNDUP ORIGINAL MAX	11 oz/a	A							
2,4-D	1 pt/a	A							
NIS	0.25 % v/v	A							
AMMONIUM SULFATE	2.5 lb ai/a	A							
4 VALOR SX	4 oz/a	A	96.25 a	68.75 ab	0.00 a	0.00 a	0.00 a	0.00 a	
ROUNDUP ORIGINAL MAX	11 oz/a	A							
2,4-D	1 pt/a	A							
NIS	0.25 % v/v	A							
AMMONIUM SULFATE	2.5 lb ai/a	A							
5 NONTREATED			0.00 b	0.00 c	0.00 a	0.00 a	0.00 a	0.00 a	
LSD (P=.05)			6.709	13.251	0.000	0.000	0.000	0.000	
Standard Deviation			4.354	8.600	0.000	0.000	0.000	0.000	
CV			5.86	16.54	0.0	0.0	0.0	0.0	
Grand Mean			74.25	52.0	0.0	0.0	0.0	0.0	
Bartlett's X2			2.191	3.208	0.0	0.0	0.0	0.0	
P(Bartlett's X2)			0.534	0.361	.	.	.	.	
Replicate F			0.945	0.451	0.000	0.000	0.000	0.000	
Replicate Prob(F)			0.4495	0.7215	1.0000	1.0000	1.0000	1.0000	
Treatment F			364.385	47.772	0.000	0.000	0.000	0.000	
Treatment Prob(F)			0.0001	0.0001	1.0000	1.0000	1.0000	1.0000	

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