

Weed control with Dimetric Charged in no-till soybean

Trial ID: NTS01-19 Study Dir.: Sprague, Powell, Stiles
 Conducted: Campus, C-13 Investigator: Christy Sprague

Planting Date: Jun-3-2019 **Row Spacing:** 30 IN
Variety: Asgrow AG26X8 **No. of Reps:** 4
Population: 156000 seeds/A **% OM:** 3.2
Soil Type: CL clay loam **pH:** 6.9
Plot Size: 10 X 30 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: Standing corn stalks
Fertilizer:

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1	STEME	chickweed, common	Stellaria media
2	TAROF	dandelion	Taraxacum officinale
3	ERICA	horseweed	Conyza canadensis
4	CHEAL	lambsquarters, common	Chenopodium album
5	AMBEL	ragweed, common	Ambrosia artemisiifolia
Crop	Code	Common Name	
1	GLXMA	Soybean	

Application Description

Application Timing: A PRE
Date Treated: May-24-2019
Time Treated: 2:15 PM
% Cloud Cover: 100
Air Temp., Unit: 62 F
% Relative Humidity: 76
Wind Speed/Unit/Dir: 1 mph E
Soil Temp, Unit: 60 F
Leaf Moist/Dew Presence (Y/N): 3
Soil Moist: 3

Crop Stage at Each Application

A
Crop 1 Name: GLXMA
Height:
Stage:

Weed Stage at Each Application

A
Weed 1 Name: STEME
Height: 2-3 " (2.5)
Stage: many
Weed 2 Name: TAROF
Height: 4-6 " (5)
Stage: 10-20L
Weed 3 Name: ERICA
Height: 1-6 " (3.5)
Stage: 2-18L
Weed 4 Name: CHEAL
Height: 1-3 " (2)
Stage: 4-6L
Weed 5 Name: AMBEL
Height: 1-3 " (2)
Stage: 4-6L

Weed Density

	1	2	3	4	5
Date:	May-24-2019	May-24-2019	May-24-2019	May-24-2019	May-24-2019
Weed Name:	STEME	TAROF	ERICA	CHEAL	AMBEL
Density:	10 ft2	1 ft2	1 ft2	6 ft2	1 ft2

Application Equipment

Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	Spray Volume	Carrier	Operation Pressure
A	CUB	3.8 mph	AIXR	11003	24 "	20 "	100 "	19 GPA	WATER	30 psi

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Pest Code					STEME	ERICA	CHEAL	AMBEL	STEME	
Crop Type, Code					May-31-2019	May-31-2019	May-31-2019	May-31-2019	Jun-7-2019	
Rating Date					control	control	control	control	control	
Rating Type					percent	percent	percent	percent	percent	
Rating Unit					7 DA-A	7 DA-A	7 DA-A	7 DA-A	14 DA-A	
Trt-Eval Interval					0	0	0	0	0	
Number of Decimals					0	0	0	0	0	
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Appl Timing	Appl Code				
1	Untreated						0	0	0	0
2	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A		89	54	98	98
2	Class Act NG		L	2.5 % v/v	PREPLANT A					100
3	Dimetric Charged	3.67	L	12 fl oz/a	PREPLANT A		99	86	100	100
3	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A					
3	Class Act NG		L	2.5 % v/v	PREPLANT A					
4	Dimetric Charged	3.67	L	15 fl oz/a	PREPLANT A		100	95	100	100
4	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A					
4	Class Act NG		L	2.5 % v/v	PREPLANT A					
5	Dimetric Charged	3.67	L	18 fl oz/a	PREPLANT A		97	99	100	100
5	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A					
5	Class Act NG		L	2.5 % v/v	PREPLANT A					
6	Dimetric Charged	3.67	L	12 fl oz/a	PREPLANT A		97	100	100	100
6	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A					
6	Class Act NG		L	2.5 % v/v	PREPLANT A					
6	Strikelock		L	8 fl oz/a	PREPLANT A					
7	Dimetric Charged	3.67	L	15 fl oz/a	PREPLANT A		98	100	100	100
7	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A					
7	Class Act NG		L	2.5 % v/v	PREPLANT A					
7	Strikelock		L	8 fl oz/a	PREPLANT A					
8	Dimetric Charged	3.67	L	18 fl oz/a	PREPLANT A		99	91	100	100
8	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A					
8	Class Act NG		L	2.5 % v/v	PREPLANT A					
8	Strikelock		L	8 fl oz/a	PREPLANT A					
LSD P=.05							4.6	25.7	2.6	2.6
Standard Deviation							3.1	17.5	1.8	1.8
CV							3.67	22.36	2.03	2.03

Could not calculate LSD (% mean diff) for columns 5,9,10,27 because error mean square = 0.

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Pest Code	TAROF	ERICA	CHEAL	AMBEL	STEME
Crop Type, Code					
Rating Date	Jun-7-2019	Jun-7-2019	Jun-7-2019	Jun-7-2019	Jun-14-2019
Rating Type	control	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A	14 DA-A	21 DA-A
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code					
1	Untreated							0	0	0	0	0
2	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A		89	68	99	100	100
2	Class Act NG		L	2.5 % v/v		PREPLANT A						
3	Dimetric Charged	3.67	L	12 fl oz/a		PREPLANT A		97	99	100	100	100
3	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
3	Class Act NG		L	2.5 % v/v		PREPLANT A						
4	Dimetric Charged	3.67	L	15 fl oz/a		PREPLANT A		98	100	100	100	100
4	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
4	Class Act NG		L	2.5 % v/v		PREPLANT A						
5	Dimetric Charged	3.67	L	18 fl oz/a		PREPLANT A		99	100	100	100	100
5	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
5	Class Act NG		L	2.5 % v/v		PREPLANT A						
6	Dimetric Charged	3.67	L	12 fl oz/a		PREPLANT A		98	100	100	100	100
6	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
6	Class Act NG		L	2.5 % v/v		PREPLANT A						
6	Strikelock		L	8 fl oz/a		PREPLANT A						
7	Dimetric Charged	3.67	L	15 fl oz/a		PREPLANT A		98	100	100	100	100
7	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
7	Class Act NG		L	2.5 % v/v		PREPLANT A						
7	Strikelock		L	8 fl oz/a		PREPLANT A						
8	Dimetric Charged	3.67	L	18 fl oz/a		PREPLANT A		100	100	100	100	100
8	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
8	Class Act NG		L	2.5 % v/v		PREPLANT A						
8	Strikelock		L	8 fl oz/a		PREPLANT A						
	LSD P=.05							4.7	11.6	0.8	.	.
	Standard Deviation							3.2	7.9	0.5	0.0	0.0
	CV							3.75	9.49	0.61	0.0	0.0

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Pest Code		TAROF	ERICA	CHEAL	AMBEL	GLXMA					
Crop Type, Code		Jun-14-2019	Jun-14-2019	Jun-14-2019	Jun-14-2019	Jun-21-2019					
Rating Date		control	control	control	control	injury					
Rating Type		percent	percent	percent	percent	percent					
Rating Unit		21 DA-A	21 DA-A	21 DA-A	21 DA-A	28 DA-A					
Trt-Eval Interval		0	0	0	0	0					
Number of Decimals											
Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate Unit	Appl Timing	Appl Code					
1	Untreated						0	0	0	0	0
2	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A		86	73	97	96	0
2	Class Act NG		L	2.5 % v/v	PREPLANT A						
3	Dimetric Charged	3.67	L	12 fl oz/a	PREPLANT A		86	100	100	99	2
3	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A						
3	Class Act NG		L	2.5 % v/v	PREPLANT A						
4	Dimetric Charged	3.67	L	15 fl oz/a	PREPLANT A		98	100	100	100	0
4	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A						
4	Class Act NG		L	2.5 % v/v	PREPLANT A						
5	Dimetric Charged	3.67	L	18 fl oz/a	PREPLANT A		98	100	100	100	1
5	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A						
5	Class Act NG		L	2.5 % v/v	PREPLANT A						
6	Dimetric Charged	3.67	L	12 fl oz/a	PREPLANT A		93	100	100	100	1
6	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A						
6	Class Act NG		L	2.5 % v/v	PREPLANT A						
6	Strikelock		L	8 fl oz/a	PREPLANT A						
7	Dimetric Charged	3.67	L	15 fl oz/a	PREPLANT A		94	100	100	100	0
7	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A						
7	Class Act NG		L	2.5 % v/v	PREPLANT A						
7	Strikelock		L	8 fl oz/a	PREPLANT A						
8	Dimetric Charged	3.67	L	18 fl oz/a	PREPLANT A		97	99	100	100	1
8	Roundup PowerMax	4.5	SL	32 fl oz/a	PREPLANT A						
8	Class Act NG		L	2.5 % v/v	PREPLANT A						
8	Strikelock		L	8 fl oz/a	PREPLANT A						
LSD P=.05							7.7	10.4	2.5	2.6	1.6
Standard Deviation							5.2	7.1	1.7	1.8	1.1
CV							6.38	8.43	1.91	2.04	227.62

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Pest Code					STEME	TAROF	ERICA	CHEAL	AMBEL	
Crop Type, Code					Jun-21-2019	Jun-21-2019	Jun-21-2019	Jun-21-2019	Jun-21-2019	
Rating Date					control	control	control	control	control	
Rating Type					percent	percent	percent	percent	percent	
Rating Unit					28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	
Trt-Eval Interval					0	0	0	0	0	
Number of Decimals					0	0	0	0	0	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code			
1	Untreated							0	0	0
2	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A		98	93	73
2	Class Act NG		L	2.5 % v/v		PREPLANT A				93
3	Dimetric Charged	3.67	L	12 fl oz/a		PREPLANT A		100	83	96
3	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				100
3	Class Act NG		L	2.5 % v/v		PREPLANT A				99
4	Dimetric Charged	3.67	L	15 fl oz/a		PREPLANT A		100	89	99
4	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				100
4	Class Act NG		L	2.5 % v/v		PREPLANT A				98
5	Dimetric Charged	3.67	L	18 fl oz/a		PREPLANT A		100	91	100
5	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				100
5	Class Act NG		L	2.5 % v/v		PREPLANT A				98
6	Dimetric Charged	3.67	L	12 fl oz/a		PREPLANT A		100	87	100
6	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				100
6	Class Act NG		L	2.5 % v/v		PREPLANT A				97
6	Strikelock		L	8 fl oz/a		PREPLANT A				
7	Dimetric Charged	3.67	L	15 fl oz/a		PREPLANT A		100	85	100
7	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				100
7	Class Act NG		L	2.5 % v/v		PREPLANT A				
7	Strikelock		L	8 fl oz/a		PREPLANT A				
8	Dimetric Charged	3.67	L	18 fl oz/a		PREPLANT A		100	92	100
8	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				100
8	Class Act NG		L	2.5 % v/v		PREPLANT A				99
8	Strikelock		L	8 fl oz/a		PREPLANT A				
LSD P=.05								1.5	11.5	6.7
Standard Deviation								1.0	7.9	4.5
CV								1.17	10.16	5.42
										2.6
										1.8
										4.05

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Pest Code					ANGR	CHEAL	AMBEL	TAROF	ERICA		
Crop Type, Code					GLXMA						
Rating Date					Jul-5-2019	Jul-5-2019	Jul-5-2019	Jul-5-2019	Jul-5-2019		
Rating Type					injury	control	control	control	control		
Rating Unit					percent	percent	percent	percent	percent		
Trt-Eval Interval					42 DA-A	42 DA-A	42 DA-A	42 DA-A	42 DA-A		
Number of Decimals					0	0	0	0	0		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code				
1	Untreated							0	0	0	0
2	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A		0	0	33	43
2	Class Act NG		L	2.5 % v/v		PREPLANT A				48	13
3	Dimetric Charged	3.67	L	12 fl oz/a		PREPLANT A		0	92	100	89
3	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				66	93
3	Class Act NG		L	2.5 % v/v		PREPLANT A					
4	Dimetric Charged	3.67	L	15 fl oz/a		PREPLANT A		0	90	100	86
4	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				83	100
4	Class Act NG		L	2.5 % v/v		PREPLANT A					
5	Dimetric Charged	3.67	L	18 fl oz/a		PREPLANT A		2	92	100	95
5	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				85	100
5	Class Act NG		L	2.5 % v/v		PREPLANT A					
6	Dimetric Charged	3.67	L	12 fl oz/a		PREPLANT A		1	91	100	84
6	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				80	100
6	Class Act NG		L	2.5 % v/v		PREPLANT A					
6	Strikelock		L	8 fl oz/a		PREPLANT A					
7	Dimetric Charged	3.67	L	15 fl oz/a		PREPLANT A		1	95	99	100
7	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				83	100
7	Class Act NG		L	2.5 % v/v		PREPLANT A					
7	Strikelock		L	8 fl oz/a		PREPLANT A					
8	Dimetric Charged	3.67	L	18 fl oz/a		PREPLANT A		2	100	100	98
8	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A				74	97
8	Class Act NG		L	2.5 % v/v		PREPLANT A					
8	Strikelock		L	8 fl oz/a		PREPLANT A					
LSD P=.05								2.3	7.1	5.2	11.5
Standard Deviation								1.6	4.8	3.6	7.8
CV								210.32	6.91	4.51	10.52

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Pest Code		ANGR	CHEAL	AMBEL	ERICA
Crop Type, Code	GLXMA				
Rating Date	Jul-12-2019	Jul-12-2019	Jul-12-2019	Jul-12-2019	Jul-12-2019
Rating Type	injury	control	control	control	control
Rating Unit	percent	percent	percent	percent	percent
Trt-Eval Interval	49 DA-A	49 DA-A	49 DA-A	49 DA-A	49 DA-A
Number of Decimals	0	0	0	0	0

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Appl Timing	Appl Code					
1	Untreated							0	0	0	0	0
2	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A		0	15	55	50	30
2	Class Act NG		L	2.5 % v/v		PREPLANT A						
3	Dimetric Charged	3.67	L	12 fl oz/a		PREPLANT A		0	80	100	83	94
3	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
3	Class Act NG		L	2.5 % v/v		PREPLANT A						
4	Dimetric Charged	3.67	L	15 fl oz/a		PREPLANT A		0	84	100	80	100
4	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
4	Class Act NG		L	2.5 % v/v		PREPLANT A						
5	Dimetric Charged	3.67	L	18 fl oz/a		PREPLANT A		0	81	100	88	100
5	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
5	Class Act NG		L	2.5 % v/v		PREPLANT A						
6	Dimetric Charged	3.67	L	12 fl oz/a		PREPLANT A		0	80	100	78	100
6	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
6	Class Act NG		L	2.5 % v/v		PREPLANT A						
6	Strikelock		L	8 fl oz/a		PREPLANT A						
7	Dimetric Charged	3.67	L	15 fl oz/a		PREPLANT A		0	88	100	98	99
7	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
7	Class Act NG		L	2.5 % v/v		PREPLANT A						
7	Strikelock		L	8 fl oz/a		PREPLANT A						
8	Dimetric Charged	3.67	L	18 fl oz/a		PREPLANT A		0	91	100	98	98
8	Roundup PowerMax	4.5	SL	32 fl oz/a		PREPLANT A						
8	Class Act NG		L	2.5 % v/v		PREPLANT A						
8	Strikelock		L	8 fl oz/a		PREPLANT A						
	LSD P=.05							.	9.3	3.0	12.3	4.9
	Standard Deviation							0.0	6.3	2.0	8.3	3.3
	CV							0.0	9.77	2.49	11.65	4.28

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