

Valor and Gangster Spring Burndown in No-till Soybean.

Project Code: 06-2B-E40 Location: Belleville Research Center  
Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA  
Trial Status: Final Updated: 7-6-06Objective:  
Evaluate Valor and Gangster programs for burndown prior to planting no-till soybean.

Weed Code	Common Name	Scientific Name
1.	ERICA horseweed	Conyza canadensis (L.) Crong.
2.	RANAB buttercup, smallflower	Ranunculus abortivus L.
3.	VERPG speedwell, purslane	Veronica peregrina L.
4.	ALLVI garlic, wild	Allium vineale L.
5.	CERVU chickweed, mouseear	Cerastium vulgatum L.
6.	SETFA foxtail, giant	Setaria faberi Herrm.
7.	AMBEL ragweed, common	Ambrosia artemisiifolia L.
8.	AMATA waterhemp, common	Amaranthus rudis Sauer

Crop 1:	GLXMA soybean	Variety:	Asgrow 4403 RR
Planting Method:	Seeded	Planting Date:	5-22-06
Rate:	75 lb/A	Depth:	1.0 IN
Row Spacing:	30 IN		

Plot Width, Unit:	10 FT	Plot Length, Unit:	28 FT	Reps:	3
Tillage Type:	No-Till	Study Design:	Randomized complete block		
Previous Crop, Year:	ZEAMX, 2005				
Field Prep./Maintenance:	N 0 LB/A, P205 0 LB/A, K20 100 LB/A				

Soil Name:	Weir	% OM:	1.6	pH:	6.1	CEC:	8
Texture:	Silt loam	Fert. Level:	P1: 91 LB/A, K: 410 LB/A				

## APPLICATION DESCRIPTION

	A	B
Application Date:	5-4-06	6-8-06
Time of Day:	15:30	11:00
Application Method:	Spray	Spray
Application Timing:	EPP15	8-10"UTC
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	70 F	86 F
% Relative Humidity:	56	48
Wind Velocity, Unit:	3-5 MPH	3-5 MPH
Soil Moisture:	ABONOR	NORMAL

## CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GLXMA NA	GLXMA VC
Height, Unit:	NA NA	3-4 IN

## WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code:	ERICA	
Stage (leaves):	14-16	
Height (inches):	5-6	
Density:	Low	
Weed 2 Code:	RANAB	
Stage (leaves):	10-12	
Height (inches):	8-10	
Density:	Low	
Weed 3 Code:	VERPG	
Stage (leaves):	3-4	
Height (inches):	10-12	
Density:	Medium	
Weed 4 Code:	ALLVI	
Stage (leaves):	3-4	
Height (inches):	10-12	
Density:	Medium	
Weed 6 Code:		SETFA
Stage (leaves):		2-4
Height (inches):		0-3
Density:		Medium
Weed 7 Code:	AMBEL	
Stage (leaves):	4-6	
Height (inches):	4-5	
Density:	Low	
Weed 8 Code:		AMATA
Stage (leaves):		0-4
Height (inches):		2-8
Density:		High

## APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	8002	8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

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Weed Code	ERICA	ERICA	RANAB	RANAB	VERPG	VERPG
Crop Code	Control	Control	Control	Control	Control	Control
Rating Data Type	Percent	Percent	Percent	Percent	Percent	Percent
Rating Unit	5-11-06	5-25-06	5-11-06	5-25-06	5-11-06	5-25-06
Rating Date	7 DA-A	21 DA-A	7 DA-A	21 DA-A	7 DA-A	21 DA-A
Trt-Eval Interval						

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	ERICA 5-11-06 7 DA-A	ERICA 5-25-06 21 DA-A	RANAB 5-11-06 7 DA-A	RANAB 5-25-06 21 DA-A	VERPG 5-11-06 7 DA-A	VERPG 5-25-06 21 DA-A
1	NONTREATED									0	0	0	0	0	0
2	CANOPY	75	WG	0.164	lb ai/a	3.5	oz/a	EPP15	A	57	91	50	99	50	96
2	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A						
2	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A						
2	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B						
2	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B						
3	VALOR	51	WG	0.056	lb ai/a	1.75	oz/a	EPP15	A	70	99	77	99	77	99
3	CLASSIC	25	WG	0.0205	lb ai/a	1.31	oz/a	EPP15	A						
3	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	EPP15	A						
3	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	EPP15	A						
3	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B						
3	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B						
4	GANGSTER (MULTI-PACK)							EPP15	A	70	99	90	99	90	99
4	->GANGSTER V	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A						
4	->GANGSTER FR	84	WG	0.0157	lb ai/a	0.3	oz/a	EPP15	A						
4	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	EPP15	A						
4	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	EPP15	A						
4	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B						
4	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B						
5	VALOR	51	WG	0.056	lb ai/a	1.75	oz/a	EPP15	A	63	87	90	99	90	99
5	CANOPY EX	29.5	WG			1	oz/a	EPP15	A						
5	->CLASSIC	25	WG	0.0142	lb ai/a			EPP15	A						
5	->EXPRESS	75	WG	0.0042	lb ai/a			EPP15	A						
5	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A						
5	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A						
5	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B						
5	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B						
6	VALOR	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A	63	85	63	99	63	99
6	SCEPTER	70	WG	0.0656	lb ai/a	1.5	oz/a	EPP15	A						
6	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A						
6	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A						
6	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B						
6	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B						
7	VALOR	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A	73	91	90	99	90	99
7	CANOPY	75	WG	0.094	lb ai/a	2	oz/a	EPP15	A						
7	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A						
7	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A						
7	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B						
7	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B						
8	VALOR	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A	80	97	90	99	90	99
8	CANOPY	75	WG	0.07	lb ai/a	1.5	oz/a	EPP15	A						
8	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A						
8	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A						
8	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B						
8	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B						
LSD (P=.05)										13.3	5.7	19.5	0.0	19.5	3.2
Replicate F										0.505	0.083	1.615	0.000	1.615	1.000
Replicate Prob(F)										0.6140	0.9208	0.2338	1.0000	0.2338	0.3927
Treatment F										32.732	313.847	24.149	0.000	24.149	1080.572
Treatment Prob(F)										0.0001	0.0001	0.0001	1.0000	0.0001	0.0001

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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	ALLVI	ALLVI	CERVU	CERVU	SETFA	AMBEL	AMATA
						Control	Control	Control	Control	Control	Control	Control
						Percent	Percent	Percent	Percent	Percent	Percent	Percent
						5-11-06	5-25-06	5-11-06	5-25-06	6-29-06	6-29-06	6-29-06
						7 DA-A	21 DA-A	7 DA-A	21 DA-A	56 DA-A	56 DA-A	56 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code							
1	NONTREATED									0	0	0	0	0	0	0
2	CANOPY	75	WG	0.164	lb ai/a	3.5	oz/a	EPP15	A	0	43	87	98	98	99	95
2	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A							
2	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A							
2	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B							
2	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B							
3	VALOR	51	WG	0.056	lb ai/a	1.75	oz/a	EPP15	A	73	73	87	99	98	99	93
3	CLASSIC	25	WG	0.0205	lb ai/a	1.31	oz/a	EPP15	A							
3	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	EPP15	A							
3	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	EPP15	A							
3	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B							
3	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B							
4	GANGSTER (MULTI-PACK)							EPP15	A	53	83	90	96	98	99	90
4	->GANGSTER V	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A							
4	->GANGSTER FR	84	WG	0.0157	lb ai/a	0.3	oz/a	EPP15	A							
4	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	EPP15	A							
4	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	EPP15	A							
4	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B							
4	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B							
5	VALOR	51	WG	0.056	lb ai/a	1.75	oz/a	EPP15	A	80	82	90	99	98	99	93
5	CANOPY EX	29.5	WG			1	oz/a	EPP15	A							
5	->CLASSIC	25	WG	0.0142	lb ai/a			EPP15	A							
5	->EXPRESS	75	WG	0.0042	lb ai/a			EPP15	A							
5	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A							
5	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A							
5	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B							
5	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B							
6	VALOR	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A	75	88	63	99	98	99	93
6	SCEPTER	70	WG	0.0656	lb ai/a	1.5	oz/a	EPP15	A							
6	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A							
6	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A							
6	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B							
6	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B							
7	VALOR	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A	80	83	90	99	98	99	91
7	CANOPY	75	WG	0.094	lb ai/a	2	oz/a	EPP15	A							
7	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A							
7	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A							
7	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B							
7	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B							
8	VALOR	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A	70	70	90	99	98	99	92
8	CANOPY	75	WG	0.07	lb ai/a	1.5	oz/a	EPP15	A							
8	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A							
8	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A							
8	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B							
8	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B							
LSD (P=.05)										35.0	22.2	14.6	3.3	0.5	0.0	5.0
Replicate F										0.167	0.301	1.690	2.333	4.200	0.000	0.060
Replicate Prob(F)										0.8481	0.7448	0.2201	0.1335	0.0373	1.0000	0.9418
Treatment F										8.845	16.734	43.026	1036.964	40455.402	0.000	385.120
Treatment Prob(F)										0.0003	0.0001	0.0001	0.0001	0.0001	1.0000	0.0001

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Project Code: 06-2B-E40 Location: Belleville Research Center  
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Weed Code		GLXMA	GLXMA
Crop Code		Injury	Injury
Rating Data Type		Percent	Percent
Rating Unit		6-5-06	6-19-06
Rating Date		14 DAP	28 DAP
Trt-Eval Interval			

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code		
1	NONTREATED									0	0
2	CANOPY	75	WG	0.164	lb ai/a	3.5	oz/a	EPP15	A	0	0
2	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A		
2	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A		
2	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B		
2	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B		
3	VALOR	51	WG	0.056	lb ai/a	1.75	oz/a	EPP15	A	0	0
3	CLASSIC	25	WG	0.0205	lb ai/a	1.31	oz/a	EPP15	A		
3	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	EPP15	A		
3	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	EPP15	A		
3	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B		
3	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B		
4	GANGSTER (MULTI-PACK)							EPP15	A	0	0
4	->GANGSTER V	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A		
4	->GANGSTER FR	84	WG	0.0157	lb ai/a	0.3	oz/a	EPP15	A		
4	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	EPP15	A		
4	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	EPP15	A		
4	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B		
4	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B		
5	VALOR	51	WG	0.056	lb ai/a	1.75	oz/a	EPP15	A	0	0
5	CANOPY EX	29.5	WG			1	oz/a	EPP15	A		
5	->CLASSIC	25	WG	0.0142	lb ai/a			EPP15	A		
5	->EXPRESS	75	WG	0.0042	lb ai/a			EPP15	A		
5	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A		
5	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A		
5	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B		
5	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B		
6	VALOR	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A	0	0
6	SCEPTER	70	WG	0.0656	lb ai/a	1.5	oz/a	EPP15	A		
6	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A		
6	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A		
6	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B		
6	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B		
7	VALOR	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A	0	0
7	CANOPY	75	WG	0.094	lb ai/a	2	oz/a	EPP15	A		
7	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A		
7	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A		
7	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B		
7	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B		
8	VALOR	51	WG	0.048	lb ai/a	1.5	oz/a	EPP15	A	0	0
8	CANOPY	75	WG	0.07	lb ai/a	1.5	oz/a	EPP15	A		
8	2,4-D LV4	3.8	EC	0.95	lb ae/a	1	qt/a	EPP15	A		
8	PRIME OIL COC	100	LIQ	1.0	pt/a	1	pt/a	EPP15	A		
8	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	8-10"UTC	B		
8	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	8-10"UTC	B		
LSD (P=.05)										0.0	0.0
Replicate F										0.000	0.000
Replicate Prob(F)										1.0000	1.0000
Treatment F										0.000	0.000
Treatment Prob(F)										1.0000	1.0000

Trial Comments

1. Protocol: Valent.
2. Ratings: CI 14 + 28 DAP; WC 7, 21 + 56 DA EPP15 application.
3. POST timing, 8-10"UTC = 8 to 10 inch weeds in the untreated check.
4. DA-A = Days after EPP15 application. DAP = Days after planting.
5. Not harvested.