

Ohio State University Horticulture and Crop Science

ABILITY OF VALOR, VALOR XLT, GANGSTER, AND V-10233 TO CONTROL WEEDS PRE EMERGENCE

Title No. 2:

Trial ID: 10PRES2 Protocol ID: 10PRES2
 Location: Western Branch F-8 Study Director: Bryan Reeb
 Project ID: 10PRES2 Investigator: Dr. Mark M. Loux
 Sponsor Contact: ERIC OTT, VALENT

General Trial Information

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Trial Location

Latitude of LL Corner °: 39.86008 N
Longitude of LL Corner °: 83.67012 W
Altitude of LL Corner, Unit: 1081.00 FT

Personnel

Study Director: Bryan Reeb
Investigator: Dr. Mark M. Loux

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: AG3803 **Description:** RR
BBCH Scale: BSOY **Planting Date:** May-6-2010
Planting Method: SEEDED seeded **Rate, Unit:** 196000 S/A
Depth, Unit: 0.75 IN
Row Spacing, Unit: 15 IN
Seed Bed: MEDIUM medium
Soil Moisture: GOOD good **Emergence Date:** May-18-2010

Pest Description

Pest 1 Type: W **Code:** SETFA Setaria faberi
Common Name: Giant foxtail

Pest 2 Type: W **Code:** CHEAL Chenopodium album
Common Name: Common lambsquarters

Pest 3 Type: W **Code:** AMBTR Ambrosia trifida
Common Name: Giant ragweed

Pest 4 Type: W **Code:** AMBEL Ambrosia artemisiifolia
Common Name: Common ragweed

Pest 5 Type: W **Code:** AMARE Amaranthus retroflexus
Common Name: Redroot pigweed

Site and Design

Plot Width, Unit: 6.67 FT
Plot Length, Unit: 30 FT
Plot Area, Unit: 200.1 FT²
Replications: 3 **Study Design:** RACOB L Randomized Complete Block (RCB)

Soil Description

Description Name: F-8 East
% OM: 2.4 **Texture:** SICL silty clay loam
pH: 6.2 **Soil Name:** Kokomo
CEC: 16 **Fert. Level:** G good
Soil Drainage: G good

No.	Date	Amount	Unit	Type	Type Description
1.	May-8-2010	0.5	IN	SPWACA	sprinkler - water cannon/traveling gun

Application Description

A

Application Date: May-6-2010
Time of Day: 12:00 PM
Application Method: SPRAY
Application Timing: PRE
Application Placement: BROFOL
Air Temperature, Unit: 62 F
% Relative Humidity: 58
Wind Velocity, Unit: 2.7 MPH
Wind Direction: SW
Dew Presence (Y/N): N no
Soil Temperature, Unit: 60 F
Soil Moisture: GOOD
% Cloud Cover: 2
Next Rain Occurred On: May-8-2010

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: GLXMA BSOY

Pest Stage At Each Application

A

Pest 1 Code, Type, Scale: SETFA W
Density, Unit: 53.2 M2
Pest 2 Code, Type, Scale: CHEAL W
Density, Unit: 12 M2
Pest 3 Code, Type, Scale: AMBTR W
Density, Unit: 4 M2
Pest 4 Code, Type, Scale: AMBEL W
Density, Unit: 2.4 M2
Pest 5 Code, Type, Scale: AMARE W
Density, Unit: 1.2 M2

Application Equipment

A

Appl. Equipment: Backpack
Equipment Type: SPRBAC
Operating Pressure, Unit: 52 PSI
Nozzle Type: DG
Nozzle Size: 8002
Nozzle Spacing, Unit: 18 IN
Boom Length, Unit: 6.67 FT
Boom Height, Unit: 18 IN
Ground Speed, Unit: 3 MPH
Carrier: WATER
Spray Volume, Unit: 20 gal/ac
Mix Size, Unit: 0.33 gallons
Propellant: COMCO2

Ohio State University Horticulture and Crop Science

ABILITY OF VALOR, VALOR XLT, GANGSTER, AND V-10233 TO CONTROL WEEDS PRE EMERGENCE

Title No. 2:

Trial ID: 10PRES2

Location: Western Branch F-8

Project ID: 10PRES2

Protocol ID: 10PRES2

Study Director: Bryan Reeb

Investigator: Dr. Mark M. Loux

Sponsor Contact: ERIC OTT, VALENT

Pest Type	W Weed	W Weed	W Weed	W Weed							
Pest Code	SETFA	AMBTR	ABUTH	POLPY							
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Abutilon theop>	Polygonum pens>							
Pest Name	Giant foxtail	Giant ragweed	Velvetleaf	Pennsylvania s>							
Crop Code	GLXMA										
BBCH Scale	BSOY										
Crop Scientific Name	Glycine max										
Crop Name	Soybean										
Rating Date	May-27-2010	May-27-2010	May-27-2010	May-27-2010							
Rating Type	PHYGEN	CONTROL	CONTROL	CONTROL							
Rating Unit	%	%	%	%							
Number of Subsamples	1	1	1	1							
Days After First/Last Applic.	21 21	21 21	21 21	21 21							
Trt-Eval Interval	21 DA-A	21 DA-A	21 DA-A	21 DA-A							
Plant-Eval Interval	21 DP-1	21 DP-1	21 DP-1	21 DP-1							
Days After Emergence	9 DE-1	9 DE-1	9 DE-1	9 DE-1							
Number of Decimals	0	0	0	0							
Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Unit	Appl Code	1	2	3	4	5
1	UTC						0	0	0	0	0
2	Valor SX	51 %AW/W		2 oz/a		A	0	75	27	100	100
3	Valor XLT @ 3.0oz						0	90	86	100	100
3	Valor SX	51 %AW/W		1.76 oz/a		A					
3	Classic	25 %AW/W		1.24 oz/a		A					
4	Gangster @ 2.4oz						0	83	80	100	100
4	Firstrate	84 %AW/W		0.4 oz/a		A					
4	Valor SX	51 %AW/W		2 oz/a		A					
5	V-10233	76 %AW/W		3 oz/a		A	1	98	53	100	100
6	Authority Assit	4 LB/GAL		5 oz/a		A	0	72	47	100	100
7	Prefix	5.29 LBA/GAL		1 qt/a		A	0	100	67	98	99
8	Authority First	70 %AW/W		3.2 oz/a		A	0	47	27	90	80
9	V-10233	76 %AW/W		3.75 oz/a		A	3	100	57	100	100
10	OpTill	68 %AW/W		2 oz/a		A	0	83	69	100	100
11	V-10206	85 %AW/W		1 oz/a		A	2	97	85	100	100
11	Valor XLT @ 3.0oz										
11	Valor SX	51 %AW/W		1.76 oz/a		A					
11	Classic	25 %AW/W		1.24 oz/a		A					
12	Prowl H2O	3.8 LBA/GAL		2.5 pt/a		A	0	79	33	83	99
13	Valor SX	51 %AW/W		2 oz/a		A	2	100	76	100	100
13	V-10206	85 %AW/W		1 oz/a		A					
14	Canopy	75 %AW/W		3.5 oz/a		A	2	67	60	99	100
15	V-10233	76 %AW/W		2.5 oz/a		A	0	96	58	100	100
16	V-10206	85 %AW/W		2.5 oz/a		A	2	100	43	100	83
	LSD (P=.05)						2.3	14.3	25.1	13.1	14.5
	Standard Deviation						1.4	8.6	15.1	7.9	8.7
	CV						175.32	10.65	27.81	8.54	9.49
	Bartlett's X2						1.942	12.047	16.105	14.068	18.461
	P(Bartlett's X2)						0.857	0.282	0.307	0.003*	0.001*
	Replicate F						3.433	0.483	1.508	0.326	0.123
	Replicate Prob(F)						0.0454	0.6218	0.2376	0.7245	0.8846
	Treatment F						2.159	28.258	7.548	30.293	25.263
	Treatment Prob(F)						0.0355	0.0001	0.0001	0.0001	0.0001

Pest Type	W Weed	W Weed	W Weed	W Weed							
Pest Code	AMARE	SETFA	AMBTR	AMBEL							
Pest Scientific Name	Amaranthus ret>	Setaria faberi	Ambrosia trifi>	Ambrosia artem>							
Pest Name	Redroot pigweed	Giant foxtail	Giant ragweed	Common ragweed							
Crop Code	GLXMA										
BBCH Scale	BSOY										
Crop Scientific Name	Glycine max										
Crop Name	Soybean										
Rating Date	May-27-2010	Jun-10-2010	Jun-10-2010	Jun-10-2010							
Rating Type	CONTROL	PHYGEN	CONTROL	CONTROL							
Rating Unit	%	%	%	%							
Number of Subsamples	1	1	1	1							
Days After First/Last Applic.	21 21	35 35	35 35	35 35							
Trt-Eval Interval	21 DA-A	35 DA-A	35 DA-A	35 DA-A							
Plant-Eval Interval	21 DP-1	35 DP-1	35 DP-1	35 DP-1							
Days After Emergence	9 DE-1	23 DE-	23 DE-	23 DE-							
Number of Decimals	0	0	0	0							
Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Unit	Appl Code	6	7	8	9	10
1	UTC						0	0	0	0	0
2	Valor SX	51 %AW/W		2 oz/a		A	100	0	50	0	52
3	Valor XLT @ 3.0oz						100	1	70	73	100
3	Valor SX	51 %AW/W		1.76 oz/a		A					
3	Classic	25 %AW/W		1.24 oz/a		A					
4	Gangster @ 2.4oz						100	0	67	67	87
4	Firstrate	84 %AW/W		0.4 oz/a		A					
4	Valor SX	51 %AW/W		2 oz/a		A					
5	V-10233	76 %AW/W		3 oz/a		A	100	0	91	33	100
6	Authority Assit	4 LB/GAL		5 oz/a		A	100	0	67	20	10
7	Prefix	5.29 LBA/GAL		1 qt/a		A	100	0	87	47	83
8	Authority First	70 %AW/W		3.2 oz/a		A	95	0	30	0	0
9	V-10233	76 %AW/W		3.75 oz/a		A	100	0	87	40	30
10	OpTill	68 %AW/W		2 oz/a		A	100	0	73	43	45
11	V-10206	85 %AW/W		1 oz/a		A	100	3	77	80	100
11	Valor XLT @ 3.0oz										
11	Valor SX	51 %AW/W		1.76 oz/a		A					
11	Classic	25 %AW/W		1.24 oz/a		A					
12	Prowl H2O	3.8 LBA/GAL		2.5 pt/a		A	93	0	73	3	0
13	Valor SX	51 %AW/W		2 oz/a		A	100	0	84	47	80
13	V-10206	85 %AW/W		1 oz/a		A					
14	Canopy	75 %AW/W		3.5 oz/a		A	100	0	30	57	100
15	V-10233	76 %AW/W		2.5 oz/a		A	100	0	79	35	43
16	V-10206	85 %AW/W		2.5 oz/a		A	100	0	95	7	2
	LSD (P=.05)						5.2	0.7	12.4	25.4	40.9
	Standard Deviation						3.1	0.4	7.4	15.2	24.3
	CV						3.38	173.21	11.22	44.13	46.76
	Bartlett's X2						1.243	0.0	9.63	9.821	5.579
	P(Bartlett's X2)						0.265	.	0.648	0.632	0.59
	Replicate F						1.000	1.000	0.291	0.873	1.309
	Replicate Prob(F)						0.3798	0.3798	0.7494	0.4281	0.2879
	Treatment F						187.758	9.600	37.203	9.534	8.493
	Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001	0.0001

Pest Type	W Weed	W Weed	W Weed	W Weed							
Pest Code	CHEAL	AMARE	ABUTH	POLPY							
Pest Scientific Name	Chenopodium al-	Amaranthus ret>	Abutilon theop>	Polygonum pens>							
Pest Name	Common lambsqu>	Redroot pigweed	Velvetleaf	Pennsylvania s>							
Crop Code					GLXMA						
BBCH Scale					BSOY						
Crop Scientific Name					Glycine max						
Crop Name					Soybean						
Rating Date	Jun-10-2010	Jun-10-2010	Jun-10-2010	Jun-10-2010	Jun-18-2010						
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL						
Rating Unit	%	%	%	%	%						
Number of Subsamples	1	1	1	1	1						
Days After First/Last Applic.	35 35	35 35	35 35	35 35	43 43						
Trt-Eval Interval	35 DA-A	35 DA-A	35 DA-A	35 DA-A	43 DA-A						
Plant-Eval Interval	35 DP-1	35 DP-1	35 DP-1	35 DP-1	43 DP-1						
Days After Emergence	23 DE-	23 DE-	23 DE-	23 DE-	31 DE-						
Number of Decimals	0	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Unit	Appl Code	11	12	13	14	15
1	UTC						0	0	0	0	0
2	Valor SX	51 %AW/W		2 oz/a		A	80	63	100	43	0
3	Valor XLT @ 3.0oz						100	100	100	100	2
3	Valor SX	51 %AW/W		1.76 oz/a		A					
3	Classic	25 %AW/W		1.24 oz/a		A					
4	Gangster @ 2.4oz						100	93	100	95	0
4	Firstrate	84 %AW/W		0.4 oz/a		A					
4	Valor SX	51 %AW/W		2 oz/a		A					
5	V-10233	76 %AW/W		3 oz/a		A	93	100	100	87	1
6	Authority Assit	4 LB/GAL		5 oz/a		A	100	100	100	93	0
7	Prefix	5.29 LBA/GAL		1 qt/a		A	68	70	57	33	0
8	Authority First	70 %AW/W		3.2 oz/a		A	50	60	67	33	0
9	V-10233	76 %AW/W		3.75 oz/a		A	100	100	57	73	1
10	OpTill	68 %AW/W		2 oz/a		A	100	100	100	400	0
11	V-10206	85 %AW/W		1 oz/a		A	100	100	100	95	2
11	Valor XLT @ 3.0oz										
11	Valor SX	51 %AW/W		1.76 oz/a		A					
11	Classic	25 %AW/W		1.24 oz/a		A					
12	Prowl H2O	3.8 LBA/GAL		2.5 pt/a		A	93	83	57	33	0
13	Valor SX	51 %AW/W		2 oz/a		A	97	97	53	100	2
13	V-10206	85 %AW/W		1 oz/a		A					
14	Canopy	75 %AW/W		3.5 oz/a		A	100	100	95	100	2
15	V-10233	76 %AW/W		2.5 oz/a		A	100	93	73	70	0
16	V-10206	85 %AW/W		2.5 oz/a		A	57	97	93	30	0
LSD (P=.05)							20.1	18.6	13.0	222.6	2.2
Standard Deviation							12.0	11.2	7.8	133.3	1.3
CV							14.4	13.16	9.99	153.88	207.66
Bartlett's X2							6.067	11.109	7.019	91.165	0.97
P(Bartlett's X2)							0.416	0.134	0.427	0.001*	0.965
Replicate F							2.525	1.875	1.200	0.862	0.568
Replicate Prob(F)							0.0970	0.1709	0.3157	0.4328	0.5729
Treatment F							15.998	16.927	39.635	1.356	1.445
Treatment Prob(F)							0.0001	0.0001	0.0001	0.2335	0.1900

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	SETFA	AMBTR	AMBEL	CHEAL	AMARE					
Pest Scientific Name	Setaria faberi	Ambrosia trifi>	Ambrosia artem>	Chenopodium al>	Amaranthus ret>					
Pest Name	Giant foxtail	Giant ragweed	Common ragweed	Common lambsqu>	Redroot pigweed					
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Rating Date	Jun-18-2010	Jun-18-2010	Jun-18-2010	Jun-18-2010	Jun-18-2010					
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1					
Days After First/Last Applic.	43 43	43 43	43 43	43 43	43 43					
Trt-Eval Interval	43 DA-A	43 DA-A	43 DA-A	43 DA-A	43 DA-A					
Plant-Eval Interval	43 DP-1	43 DP-1	43 DP-1	43 DP-1	43 DP-1					
Days After Emergence	31 DE-	31 DE-	31 DE-	31 DE-	31 DE-					
Number of Decimals	0	0	0	0	0					
Trt Treatment No. Name	Form Conc	Form Unit	Other Rate	Other Rate	Appl Unit Code	16	17	18	19	20
1 UTC						0	3	0	0	0
2 Valor SX	51 %AW/W		2 oz/a		A	53	17	76	87	67
3 Valor XLT @ 3.0oz						73	75	90	100	100
3 Valor SX	51 %AW/W		1.76 oz/a		A					
3 Classic	25 %AW/W		1.24 oz/a		A					
4 Gangster @ 2.4oz						52	72	87	100	100
4 Firstrate	84 %AW/W		0.4 oz/a		A					
4 Valor SX	51 %AW/W		2 oz/a		A					
5 V-10233	76 %AW/W		3 oz/a		A	90	47	96	81	100
6 Authority Assit	4 LB/GAL		5 oz/a		A	70	20	23	96	100
7 Prefix	5.29 LBA/GAL		1 qt/a		A	83	55	80	63	100
8 Authority First	70 %AW/W		3.2 oz/a		A	40	0	20	73	63
9 V-10233	76 %AW/W		3.75 oz/a		A	90	33	63	100	100
10 OpTill	68 %AW/W		2 oz/a		A	82	52	60	100	100
11 V-10206	85 %AW/W		1 oz/a		A	85	65	96	100	100
11 Valor XLT @ 3.0oz										
11 Valor SX	51 %AW/W		1.76 oz/a		A					
11 Classic	25 %AW/W		1.24 oz/a		A					
12 Prowl H2O	3.8 LBA/GAL		2.5 pt/a		A	68	13	10	100	63
13 Valor SX	51 %AW/W		2 oz/a		A	88	57	67	100	100
13 V-10206	85 %AW/W		1 oz/a		A					
14 Canopy	75 %AW/W		3.5 oz/a		A	33	57	96	100	100
15 V-10233	76 %AW/W		2.5 oz/a		A	83	30	83	100	100
16 V-10206	85 %AW/W		2.5 oz/a		A	97	27	8	83	97
LSD (P=.05)						17.5	28.7	33.8	22.7	14.2
Standard Deviation						10.5	17.2	20.1	13.6	8.5
CV						15.4	44.36	33.69	15.69	9.81
Bartlett's X2						19.095	17.412	2.339	0.478	7.395
P(Bartlett's X2)						0.161	0.235	0.993	0.976	0.06
Replicate F						0.119	1.522	7.222	5.518	0.602
Replicate Prob(F)						0.8885	0.2347	0.0033	0.0095	0.5540
Treatment F						18.732	5.867	9.150	10.838	30.438
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001	0.0001

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed						
Pest Code	ABUTH	POLPY	SETFA	AMBTR	AMBEL						
Pest Scientific Name	Abutilon theop>	Polygonum pens>	Setaria faberi	Ambrosia trifi>	Ambrosia artem>						
Pest Name	Velvetleaf	Pennsylvania s>	Giant foxtail	Giant ragweed	Common ragweed						
Crop Code											
BBCH Scale											
Crop Scientific Name											
Crop Name											
Rating Date	Jun-18-2010	Jun-18-2010	Jun-25-2010	Jun-25-2010	Jun-25-2010						
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL						
Rating Unit	%	%	%	%	%						
Number of Subsamples	1	1	1	1	1						
Days After First/Last Applic.	43 43	43 43	50 50	50 50	50 50						
Trt-Eval Interval	43 DA-A	43 DA-A	50 DA-A	50 DA-A	50 DA-A						
Plant-Eval Interval	43 DP-1	43 DP-1	50 DP-1	50 DP-1	50 DP-1						
Days After Emergence	31 DE-	31 DE-	38 DE-	38 DE-	38 DE-						
Number of Decimals	0	0	0	0	0						
Trt No.	Treatment Name	Form Conc	Form Unit	Other Rate	Other Unit	Appl Code	21	22	23	24	25
1	UTC						0	0	0	0	0
2	Valor SX	51 %AW/W		2 oz/a		A	100	45	50	10	66
3	Valor XLT @ 3.0oz						100	100	70	67	87
3	Valor SX	51 %AW/W		1.76 oz/a		A					
3	Classic	25 %AW/W		1.24 oz/a		A					
4	Gangster @ 2.4oz						100	100	63	70	80
4	Firstrate	84 %AW/W		0.4 oz/a		A					
4	Valor SX	51 %AW/W		2 oz/a		A					
5	V-10233	76 %AW/W		3 oz/a		A	87	80	92	27	100
6	Authority Assit	4 LB/GAL		5 oz/a		A	97	100	72	27	27
7	Prefix	5.29 LBA/GAL		1 qt/a		A	57	47	95	47	73
8	Authority First	70 %AW/W		3.2 oz/a		A	63	40	50	10	17
9	V-10233	76 %AW/W		3.75 oz/a		A	80	67	93	27	73
10	OpTill	68 %AW/W		2 oz/a		A	97	100	85	38	53
11	V-10206	85 %AW/W		1 oz/a		A	100	100	85	65	100
11	Valor XLT @ 3.0oz										
11	Valor SX	51 %AW/W		1.76 oz/a		A					
11	Classic	25 %AW/W		1.24 oz/a		A					
12	Prowl H2O	3.8 LBA/GAL		2.5 pt/a		A	60	80	67	10	33
13	Valor SX	51 %AW/W		2 oz/a		A	70	80	85	48	90
13	V-10206	85 %AW/W		1 oz/a		A					
14	Canopy	75 %AW/W		3.5 oz/a		A	100	100	50	52	100
15	V-10233	76 %AW/W		2.5 oz/a		A	90	45	80	33	87
16	V-10206	85 %AW/W		2.5 oz/a		A	97	27	86	13	5
	LSD (P=.05)						19.5	33.6	17.4	31.4	37.4
	Standard Deviation						11.7	19.7	10.4	18.8	22.3
	CV						14.4	28.37	14.86	55.48	36.06
	Bartlett's X2						6.266	3.188	14.026	12.044	6.945
	P(Bartlett's X2)						0.509	0.867	0.172	0.603	0.731
	Replicate F						5.694	0.694	1.084	2.981	4.499
	Replicate Prob(F)						0.0084	0.5120	0.3512	0.0659	0.0206
	Treatment F						15.695	7.833	16.230	4.222	7.282
	Treatment Prob(F)						0.0001	0.0001	0.0001	0.0004	0.0001

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed					
Pest Code	CHEAL	AMARE	ABUTH	POLPY	SETFA					
Pest Scientific Name	Chenopodium al-	Amaranthus ret>	Abutilon theop>	Polygonum pens>	Setaria faberi					
Pest Name	Common lambsqu>	Redroot pigweed	Velvetleaf	Pennsylvania s>	Giant foxtail					
Crop Code										
BBCH Scale										
Crop Scientific Name										
Crop Name										
Rating Date	Jun-25-2010	Jun-25-2010	Jun-25-2010	Jun-25-2010	Jul-1-2010					
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL					
Rating Unit	%	%	%	%	%					
Number of Subsamples	1	1	1	1	1					
Days After First/Last Applic.	50 50	50 50	50 50	50 50	56 56					
Trt-Eval Interval	50 DA-A	50 DA-A	50 DA-A	50 DA-A	56 DA-A					
Plant-Eval Interval	50 DP-1	50 DP-1	50 DP-1	50 DP-1	56 DP-1					
Days After Emergence	38 DE-	38 DE-	38 DE-	38 DE-	44 DE-					
Number of Decimals	0	0	0	0	0					
Trt Treatment No. Name	Form Conc	Form Unit	Other Rate	Other Rate	Appl Unit Code	26	27	28	29	30
1 UTC						0	0	0	0	0
2 Valor SX	51 %AW/W		2 oz/a		A	100	100	100	44	63
3 Valor XLT @ 3.0oz						100	100	100	100	68
3 Valor SX	51 %AW/W		1.76 oz/a		A					
3 Classic	25 %AW/W		1.24 oz/a		A					
4 Gangster @ 2.4oz						100	100	100	100	57
4 Firstrate	84 %AW/W		0.4 oz/a		A					
4 Valor SX	51 %AW/W		2 oz/a		A					
5 V-10233	76 %AW/W		3 oz/a		A	87	100	77	99	90
6 Authority Assit	4 LB/GAL		5 oz/a		A	100	100	96	99	63
7 Prefix	5.29 LBA/GAL		1 qt/a		A	73	83	60	50	96
8 Authority First	70 %AW/W		3.2 oz/a		A	77	80	67	27	37
9 V-10233	76 %AW/W		3.75 oz/a		A	100	100	83	87	92
10 OpTill	68 %AW/W		2 oz/a		A	100	100	96	81	85
11 V-10206	85 %AW/W		1 oz/a		A	100	100	100	100	83
11 Valor XLT @ 3.0oz										
11 Valor SX	51 %AW/W		1.76 oz/a		A					
11 Classic	25 %AW/W		1.24 oz/a		A					
12 Prowl H2O	3.8 LBA/GAL		2.5 pt/a		A	100	53	57	57	67
13 Valor SX	51 %AW/W		2 oz/a		A	100	100	67	77	80
13 V-10206	85 %AW/W		1 oz/a		A					
14 Canopy	75 %AW/W		3.5 oz/a		A	100	100	100	99	37
15 V-10233	76 %AW/W		2.5 oz/a		A	100	100	83	83	80
16 V-10206	85 %AW/W		2.5 oz/a		A	83	97	100	47	99
LSD (P=.05)						18.9	18.3	26.2	37.0	20.1
Standard Deviation						11.4	11.0	15.6	21.9	12.0
CV						12.79	12.44	19.4	30.53	17.54
Bartlett's X2						0.231	3.857	6.75	7.454	21.981
P(Bartlett's X2)						0.973	0.277	0.24	0.489	0.079
Replicate F						3.103	1.571	3.891	0.284	1.101
Replicate Prob(F)						0.0596	0.2245	0.0333	0.7556	0.3457
Treatment F						15.030	17.712	8.765	5.984	14.347
Treatment Prob(F)						0.0001	0.0001	0.0001	0.0001	0.0001

Pest Type	W Weed	W Weed	W Weed	W Weed	W Weed			
Pest Code	AMBTR	AMBEL	CHEAL	AMARE	ABUTH			
Pest Scientific Name	Ambrosia trifi>	Ambrosia artem>	Chenopodium al>	Amaranthus ret>	Abutilon theop>			
Pest Name	Giant ragweed	Common ragweed	Common lambsqu>	Redroot pigweed	Velvetleaf			
Crop Code								
BBCH Scale								
Crop Scientific Name								
Crop Name								
Rating Date	Jul-1-2010	Jul-1-2010	Jul-1-2010	Jul-1-2010	Jul-1-2010			
Rating Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Unit	%	%	%	%	%			
Number of Subsamples	1	1	1	1	1			
Days After First/Last Applic.	56 56	56 56	56 56	56 56	56 56			
Trt-Eval Interval	56 DA-A	56 DA-A	56 DA-A	56 DA-A	56 DA-A			
Plant-Eval Interval	56 DP-1	56 DP-1	56 DP-1	56 DP-1	56 DP-1			
Days After Emergence	44 DE-	44 DE-	44 DE-	44 DE-	44 DE-			
Number of Decimals	0	0	0	0	0			
Trt Treatment	Form Form	Other Other	Appl					
No. Name	Conc Unit	Rate Rate	Unit Code	31	32	33	34	35
1 UTC				0	0	0	0	0
2 Valor SX	51 %AW/W	2 oz/a	A	10	87	100	100	100
3 Valor XLT @ 3.0oz				60	90	100	100	100
3 Valor SX	51 %AW/W	1.76 oz/a	A					
3 Classic	25 %AW/W	1.24 oz/a	A					
4 Gangster @ 2.4oz				50	87	100	100	100
4 Firstrate	84 %AW/W	0.4 oz/a	A					
4 Valor SX	51 %AW/W	2 oz/a	A					
5 V-10233	76 %AW/W	3 oz/a	A	20	100	93	100	100
6 Authority Assit	4 LB/GAL	5 oz/a	A	17	43	100	100	100
7 Prefix	5.29 LBA/GAL	1 qt/a	A	33	80	87	100	67
8 Authority First	70 %AW/W	3.2 oz/a	A	3	40	87	87	70
9 V-10233	76 %AW/W	3.75 oz/a	A	3	80	100	100	83
10 OpTill	68 %AW/W	2 oz/a	A	30	70	100	100	100
11 V-10206	85 %AW/W	1 oz/a	A	60	100	100	100	100
11 Valor XLT @ 3.0oz								
11 Valor SX	51 %AW/W	1.76 oz/a	A					
11 Classic	25 %AW/W	1.24 oz/a	A					
12 Prowl H2O	3.8 LBA/GAL	2.5 pt/a	A	10	47	100	85	87
13 Valor SX	51 %AW/W	2 oz/a	A	27	95	100	100	73
13 V-10206	85 %AW/W	1 oz/a	A					
14 Canopy	75 %AW/W	3.5 oz/a	A	27	100	100	100	100
15 V-10233	76 %AW/W	2.5 oz/a	A	17	93	100	100	97
16 V-10206	85 %AW/W	2.5 oz/a	A	7	2	93	97	100
LSD (P=.05)				24.7	24.3	9.0	5.6	16.2
Standard Deviation				14.8	14.5	5.4	3.4	9.7
CV				63.47	20.86	5.89	3.66	11.29
Bartlett's X2				11.679	9.244	0.0	1.66	5.787
P(Bartlett's X2)				0.632	0.509	.	0.436	0.328
Replicate F				2.175	2.265	3.462	1.985	2.673
Replicate Prob(F)				0.1311	0.1226	0.0444	0.1551	0.0854
Treatment F				5.148	15.832	63.827	165.363	21.359
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001

Ohio State University Horticulture and Crop Science

ABILITY OF VALOR, VALOR XLT, GANGSTER, AND V-10233 TO CONTROL WEEDS PRE EMERGENCE

Title No. 2:

Trial ID: 10PRES2 Protocol ID: 10PRES2
Location: Western Branch F-8 Study Director: Bryan Reeb
Project ID: 10PRES2 Investigator: Dr. Mark M. Loux
Sponsor Contact: ERIC OTT, VALENT

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

SETFA, Setaria faberi, = US
AMBTR, Ambrosia trifida, = US
ABUTH, Abutilon theophrasti, = US
POLPY, Polygonum pensylvanicum, = US
AMARE, Amaranthus retroflexus, = US
AMBEL, Ambrosia artemisiifolia, = US
CHEAL, Chenopodium album, = US

Crop Code

GLXMA, BSOY, Glycine max, = US

Rating Type

PHYGEN = phytotoxicity - general / injury

Rating Unit

% = percent

Plant-Eval Interval

21 DP-1 = 1 May-6-2010
35 DP-1 = 1 May-6-2010
43 DP-1 = 1 May-6-2010
50 DP-1 = 1 May-6-2010
56 DP-1 = 1 May-6-2010