

The effect of perharvest herbicide treatments on weed control in dry beans

Trial ID: DB02-16
 Conducted: Shiawassee County

Study Dir.: Sprague, Powell, Stiles
 Investigator: Christy Sprague

Planting Date: _____ **Row Spacing:** 20 IN
Variety: Zenith **No. of Reps:** 4
Population: _____ **% OM:** _____
Soil Type: _____ **pH:** _____
Plot Size: 10 X 30 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: _____
Fertilizer: _____

Crop and Weed Description			
Weed	Code	Common Name	Scientific Name
1	CHEAL	lambquarters, common	Chenopodium album
2	AMAPO	amaranth, Powell	Amaranthus powellii
Crop	Code	Common Name	
1	PHSVX	Black bean	

Application Description

A
Application Timing: PREHARVEST
Date Treated: Sep-9-2016
Time Treated: 12:30 PM
% Cloud Cover: 70
Air Temp., Unit: 80 F
% Relative Humidity: 62
Wind Speed/Unit/Dir: 3 MPH SW
Soil Temp, Unit: 75 F
Leaf Moist/Dew Presence (Y/N): 3
Soil Moist: 3

Crop Stage at Each Application

A
Crop 1 Name: PHSVX
Height: _____
Stage: 50% yell

Weed Stage at Each Application

A
Weed 1 Name: CHEAL
Height: 48-60 " (54)
Stage: _____
Weed 2 Name: AMAPO
Height: 48-60 " (54)
Stage: _____

Application Equipment										
Appl	Sprayer Type	Ground Speed	Nozzle Type	Nozzle Size	Nozzle Height	Nozzle Spacing	Boom Width	Spray Volume	Carrier	Operation Pressure
A	CUB	3.9 MPH	AIXR	11003	56 "	20 "	100 "	19 GAL/AC	WATER	30 PSI

Comments: At application black beans had 50% yellow leaves and pods.

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Pest Code		CHEAL	AMAPO		CHEAL	AMAPO
Crop Code	PHSVX			PHSVX		
Rating Date	Sep-12-2016	Sep-12-2016	Sep-12-2016	Sep-16-2016	Sep-16-2016	Sep-16-2016
Rating Type	desiccation	control	control	desiccation	control	control
Rating Unit	percent	percent	percent	percent	percent	percent
Trt-Eval Interval	3 DA-A	3 DA-A	3 DA-A	7 DA-A	7 DA-A	7 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate Unit	Appl Code						
1	Sharpen	1 fl oz/a	A	78	0	15	88	0	78
1	MSO	1 % v/v	A						
1	AMS	17 lb/100 gal	A						
2	Gramoxone SL	2 pt/a	A	78	76	81	83	90	93
2	Surfactant	0.25 % v/v	A						
3	Valor	1.5 oz/a	A	72	0	8	84	0	60
3	MSO	1 % v/v	A						
4	Roundup PowerMax	22 fl oz/a	A	48	0	7	90	13	55
4	AMS	17 lb/100 gal	A						
5	Untreated			30	0	0	40	0	0
6	Aim	2 fl oz/a	A	63	3	45	65	3	50
6	MSO	1 % v/v	A						
7	Sharpen	2 fl oz/a	A	76	5	31	92	10	79
7	MSO	1 % v/v	A						
7	AMS	17 lb/100 gal	A						
8	Sharpen	1 fl oz/a	A	77	0	10	95	10	73
8	Roundup PowerMax	22 fl oz/a	A						
8	MSO	1 % v/v	A						
8	AMS	17 lb/100 gal	A						
9	Sharpen	1 fl oz/a	A	84	75	79	89	93	95
9	Gramoxone SL	2 pt/a	A						
9	MSO	1 % v/v	A						
9	AMS	17 lb/100 gal	A						
10	Valor	1.5 oz/a	A	75	5	15	90	36	71
10	Roundup PowerMax	22 fl oz/a	A						
10	MSO	1 % v/v	A						
10	AMS	17 lb/100 gal	A						
11	Valor	1.5 oz/a	A	80	71	80	85	91	90
11	Gramoxone SL	2 pt/a	A						
11	MSO	1 % v/v	A						
11	AMS	17 lb/100 gal	A						
12	Aim	2 fl oz/a	A	70	0	11	90	25	70
12	Roundup PowerMax	22 fl oz/a	A						
12	MSO	1 % v/v	A						
12	AMS	17 lb/100 gal	A						

Missing data estimates are included in columns: Average=1,2,3,4,5,6,7,8,9

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Rating Type	desiccation	control	control	desiccation	control	control
Rating Unit	percent	percent	percent	percent	percent	percent
Trt-Eval Interval	3 DA-A	3 DA-A	3 DA-A	7 DA-A	7 DA-A	7 DA-A
Number of Decimals	0	0	0	0	0	0

Trt No.	Treatment Name	Rate Unit	Appl Code						
13	Aim	2 fl oz/a	A	73	70	79	86	83	91
13	Gramoxone SL	2 pt/a	A						
13	MSO	1 % v/v	A						
13	AMS	17 lb/100 gal	A						
14	Gramoxone SL	2 pt/a	A	71	75	79	73	90	94
14	MSO	1 % v/v	A						
15	Aim	1 fl oz/a	A	69	4	25	75	5	60
15	MSO	1 % v/v	A						
16	Aim	1 fl oz/a	A	70	0	10	90	53	75
16	Roundup PowerMax	22 fl oz/a	A						
16	MSO	1 % v/v	A						
16	AMS	17 lb/100 gal	A						
	LSD P=.05			13.5	6.0	14.4	13.0	17.7	12.0
	Standard Deviation			9.5	4.2	10.1	9.1	12.4	8.4
	CV			13.57	17.53	28.09	11.1	32.94	11.82

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Rating Unit	percent	percent	percent
Trt-Eval Interval	14 DA-A	14 DA-A	14 DA-A
Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code			
1	Sharpen	1 fl oz/a	A		86	0	97
1	MSO	1 % v/v	A				
1	AMS	17 lb/100 gal	A				
2	Gramoxone SL	2 pt/a	A		87	100	100
2	Surfactant	0.25 % v/v	A				
3	Valor	1.5 oz/a	A		93	0	77
3	MSO	1 % v/v	A				
4	Roundup PowerMax	22 fl oz/a	A		95	94	95
4	AMS	17 lb/100 gal	A				
5	Untreated				44	0	0
6	Aim	2 fl oz/a	A		67	3	55
6	MSO	1 % v/v	A				
7	Sharpen	2 fl oz/a	A		96	3	94
7	MSO	1 % v/v	A				
7	AMS	17 lb/100 gal	A				
8	Sharpen	1 fl oz/a	A		95	90	100
8	Roundup PowerMax	22 fl oz/a	A				
8	MSO	1 % v/v	A				
8	AMS	17 lb/100 gal	A				
9	Sharpen	1 fl oz/a	A		93	95	99
9	Gramoxone SL	2 pt/a	A				
9	MSO	1 % v/v	A				
9	AMS	17 lb/100 gal	A				
10	Valor	1.5 oz/a	A		94	95	96
10	Roundup PowerMax	22 fl oz/a	A				
10	MSO	1 % v/v	A				
10	AMS	17 lb/100 gal	A				
11	Valor	1.5 oz/a	A		91	94	95
11	Gramoxone SL	2 pt/a	A				
11	MSO	1 % v/v	A				
11	AMS	17 lb/100 gal	A				
12	Aim	2 fl oz/a	A		96	95	99
12	Roundup PowerMax	22 fl oz/a	A				
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Number of Decimals	0	0	0

Trt No.	Treatment Name	Rate Unit	Appl Code			
13	Aim	2 fl oz/a	A	91	91	100
13	Gramoxone SL	2 pt/a	A			
13	MSO	1 % v/v	A			
13	AMS	17 lb/100 gal	A			
14	Gramoxone SL	2 pt/a	A	75	100	100
14	MSO	1 % v/v	A			
15	Aim	1 fl oz/a	A	75	5	87
15	MSO	1 % v/v	A			
16	Aim	1 fl oz/a	A	98	98	92
16	Roundup PowerMax	22 fl oz/a	A			
16	MSO	1 % v/v	A			
16	AMS	17 lb/100 gal	A			
	LSD P=.05			9.2	8.3	10.8
	Standard Deviation			6.4	5.8	7.5
	CV			7.47	9.65	8.71