

MSU Weed Science Research Program

Preharvest desiccants in dry edible beans

Trial ID: DB07-12  
Conducted: SVREC

Study Dir.: Sprague, Powell  
Investigator: Christy Sprague

<b>Date Planted:</b>	Jun/13/2012	<b>Row Spacing:</b>	20 IN
<b>Variety:</b>	'Zorro' Black Bean	<b>No. of Reps:</b>	4
<b>Population:</b>	106,000 seeds/acre	<b>% OM:</b>	3.4
<b>Soil Type:</b>	Clay Loam	<b>pH:</b>	7.0
<b>Plot Size:</b>	10 X 30 FT	<b>Design:</b>	RANDOMIZED COMPLETE BLOCK

**Tillage:** Fall chisel plow, spring soil finnish  
**Fertilizer:** Preplant: 280 lbs/A of 17-8-15

<b>Crop Code</b>	<b>Common Name</b>
1. PHSVX	BEAN, DRY

**Application Description**

<b>Application Timing:</b>	A POST
<b>Date Treated:</b>	Sep/05/2012
<b>Time Treated:</b>	2:00 PM
<b>% Cloud Cover:</b>	100
<b>Air Temp., Unit:</b>	83 F
<b>% Relative Humidity:</b>	62
<b>Wind Speed/Unit/Dir:</b>	7 mph E
<b>Soil Temp., Unit:</b>	75 F
<b>Soil/Leaf Surface M:</b>	1 5
<b>Soil Moist (1=w 5=d):</b>	2

**Crop Stage at Each Application**

<b>Crop Name:</b>	A PHSVX
<b>Height (In.):</b>	mature
<b>Stage (L):</b>	30%yellow

**Application Equipment**

<b>Appl</b>	<b>Sprayer</b>	<b>Speed</b>	<b>Nozzle</b>	<b>Nozzle</b>	<b>Nozzle</b>	<b>Nozzle</b>	<b>Boom</b>	<b>GPA</b>	<b>Carrier</b>	<b>PSI</b>
A	Cub	3.8	AIXR	11003	29"	20"	100"	19	Water	28

**Comments:** Study was weed free. At application, black bean leaves were 30% yellow, pods were 75% yellow.

On 9/19/12, 14 days after treatment, the bean plants in the untreated check (trt#6) averaged 25% yellow/green leaves.

## MSU Weed Science Research Program

Preharvest desiccants in dry edible beans

Trial ID: DB07-12                      Study Dir.: Sprague, Powell  
 Conducted: SVREC                      Investigator: Christy Sprague

Crop Code	PHSVX	PHSVX	PHSVX	PHSVX
Rating Data Type	DESICC	DESICC	DESICC	moisture
Rating Unit	percent	percent	percent	percent
Rating Date	Sep/08/2012	Sep/11/2012	Sep/19/2012	Sep/25/2012
Trt-Eval Interval	3 DA-A	6 DA-A	14 DA-A	20 DA-A
ARM Action Codes				
# Subsamples, Dec.				1

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Grow Stg	Appl Code	PHSVX DESICC percent	PHSVX DESICC percent	PHSVX DESICC percent	PHSVX moisture percent
1	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	PREHARV A		42.0	60.8	99.0	12.2
			WG	17	lb/100 gal	PREHARV A					
2	Gramoxone Inteon Activator 90	2	L	2	pt/a	PREHARV A		86.5	92.8	99.0	12.5
			L	0.25	% v/v	PREHARV A					
3	Valor MSO	51	WG	1.5	oz/a	PREHARV A		58.8	77.8	99.0	13.0
			L	1	qt/a	PREHARV A					
4	Sharpen MSO	2.85	L	1	fl oz/a	PREHARV A		62.5	84.8	99.0	12.2
			L	1	% v/v	PREHARV A					
			WG	17	lb/100 gal	PREHARV A					
5	Aim MSO	2	L	2	fl oz/a	PREHARV A		47.5	52.5	88.8	13.0
			L	1	% v/v	PREHARV A					
6	Untreated							0.0	0.0	0.0	14.5
7	Valor MSO	51	WG	1.5	oz/a	PREHARV A		67.0	86.8	99.0	12.9
			L	1	fl oz/a	PREHARV A					
			L	1	% v/v	PREHARV A					
			WG	17	lb/100 gal	PREHARV A					
8	Gramoxone Inteon MSO	2	L	1	pt/a	PREHARV A		85.8	98.3	99.0	12.9
			L	1	fl oz/a	PREHARV A					
			L	1	% v/v	PREHARV A					
			WG	17	lb/100 gal	PREHARV A					
9	Liberty AMS	2.34	L	22	fl oz/a	PREHARV A		45.0	71.3	99.0	13.2
			WG	17	lb/100 gal	PREHARV A					
10	Reglone Activator 90	2	L	1.5	pt/a	PREHARV A		89.8	96.8	99.0	12.7
			L	0.25	% v/v	PREHARV A					
LSD (P=.05)								7.21	7.01	1.15	0.95
CV								8.5	6.7	0.9	5.08

Means followed by same letter do not significantly differ (P=.05, LSD)

## MSU Weed Science Research Program

Crop Code PHSVX  
 Rating Data Type yield  
 Rating Unit cwt/acre  
 Rating Date Sep/25/2012  
 Trt-Eval Interval at 18% M  
 ARM Action Codes TY1  
 # Subsamples, Dec. 1

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Grow Stg	Appl Code	
1	Roundup PowerMax AMS	4.5	SL	22	fl oz/a	PREHARV A		27.3
			WG	17	lb/100 gal	PREHARV A		
2	Gramoxone Inteon Activator 90	2	L	2	pt/a	PREHARV A		22.4
			L	0.25	% v/v	PREHARV A		
3	Valor MSO	51	WG	1.5	oz/a	PREHARV A		24.9
			L	1	qt/a	PREHARV A		
4	Sharpen MSO	2.85	L	1	fl oz/a	PREHARV A		19.2
			L	1	% v/v	PREHARV A		
			WG	17	lb/100 gal	PREHARV A		
5	Aim MSO	2	L	2	fl oz/a	PREHARV A		27.7
			L	1	% v/v	PREHARV A		
6	Untreated							31.7
7	Valor MSO	51	WG	1.5	oz/a	PREHARV A		19.5
			L	1	fl oz/a	PREHARV A		
			L	1	% v/v	PREHARV A		
			WG	17	lb/100 gal	PREHARV A		
8	Gramoxone Inteon Sharpen	2	L	1	pt/a	PREHARV A		20.8
		2.85	L	1	fl oz/a	PREHARV A		
			L	1	% v/v	PREHARV A		
			WG	17	lb/100 gal	PREHARV A		
9	Liberty AMS	2.34	L	22	fl oz/a	PREHARV A		26.6
			WG	17	lb/100 gal	PREHARV A		
10	Reglone Activator 90	2	L	1.5	pt/a	PREHARV A		22.3
			L	0.25	% v/v	PREHARV A		
LSD (P=.05)								3.58
CV								10.18

Means followed by same letter do not significantly differ (P=.05, LSD)