

MSU Weed Science Research Program

Adjuvant comparisons with different tank-mixtures in dry beans

Trial ID: DB04-12  
Conducted: SVREC

Study Dir.: Sprague, Powell  
Investigator: Christy Sprague

<b>Date Planted:</b>	Jun/07/2012	<b>Row Spacing:</b>	30 IN
<b>Variety:</b>	'Zorro' black beans	<b>No. of Reps:</b>	4
<b>Population:</b>	106,000 seeds/A	<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 finish  
**Fertilizer:** Preplant: 280 lbs/A 17-8-15  
**Crop Code Common Name**  
 1. PHSVX BEAN, DRY

**Application Description**

**Application Timing:** A  
 POST  
**Date Treated:** Jun/28/2012  
**Time Treated:** 10:50 AM  
**% Cloud Cover:** 0  
**Air Temp., Unit:** 83 F  
**% Relative Humidity:** 46  
**Wind Speed/Unit/Dir:** 4 mph NW  
**Soil Temp., Unit:** 76 F  
**Soil/Leaf Surface M:** 5 5  
**Soil Moist (1=w 5=d):** 5

**Crop Stage at Each Application**

**Crop Name:** A  
 PHSVX  
**Height (In.):** 5"  
**Stage (L):** V2- V3

**Weed Stage at Each Application**

**Height (In.):** A  
 -  
**Stage (L):** -

**Application Equipment**

Appl	Sprayer	Speed	Nozzle	Nozzle	Nozzle	Nozzle	Boom			
	Type	MPH	Type	Size	Height	Spacing	Width	GPA	Carrier	PSI
A	Cub	3.8	AirMix	11003	24"	20"	100"	19	water	28

**Comments:** Weed populations were too low in this trial to evaluate for weed control.

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Crop Code	PHSVX	PHSVX	PHSVX	PHSVX	PHSVX
Rating Data Type	injury	injury	injury	injury	moisture
Rating Unit	percent	percent	percent	percent	percent
Rating Date	Jul/01/2012	Jul/05/2012	Jul/11/2012	Jul/25/2012	Sep/27/2012
Trt-Eval Interval	3 DA-A	7 DA-A	13 DA-A	27 DA-A	91 DA-A
ARM Action Codes					
# Subsamples, Dec.	0	0	0	0	1

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code					
1	Raptor	1	L	4	fl oz/a	POST	A	9	7	6	3	13.2
	Basagran	4	L	8	fl oz/a	POST	A					
	Crop oil concentrate		L	1	% v/v	POST	A					
	AMS		WG	2.5	lb/a	POST	A					
2	Raptor	1	L	4	fl oz/a	POST	A	7	4	6	1	10.8
	Basagran	4	L	8	fl oz/a	POST	A					
	Superb		L	0.5	% v/v	POST	A					
	Alliance		L	3	qt/100 gal	POST	A					
3	Raptor	1	L	4	fl oz/a	POST	A	7	5	7	2	14.4
	Basagran	4	L	8	fl oz/a	POST	A					
	Crop oil concentrate		L	1	% v/v	POST	A					
	Alliance		L	3	qt/100 gal	POST	A					
4	Reflex	2	L	1	pt/a	POST	A	6	5	3	0	15.2
	Basagran	4	L	1	pt/a	POST	A					
	Select Max	0.97	L	9	fl oz/a	POST	A					
	Superb		L	0.5	% v/v	POST	A					
5	Reflex	2	L	1	pt/a	POST	A	6	6	3	0	14.9
	Basagran	4	L	1	pt/a	POST	A					
	Select Max	0.97	L	9	fl oz/a	POST	A					
	Crop oil concentrate		L	1	% v/v	POST	A					
6	Raptor	1	L	4	fl oz/a	POST	A	5	2	3	0	14.5
	Basagran	4	L	8	fl oz/a	POST	A					
	ZMB		L	1	qt/a	POST	A					
	Superb		L	0.5	% v/v	POST	A					
	Alliance		L	3	qt/100 gal	POST	A					
7	Reflex	2	L	1	pt/a	POST	A	14	12	7	0	15.0
	Basagran	4	L	1	pt/a	POST	A					
	Select Max	0.97	L	9	fl oz/a	POST	A					
	ZMB		L	1	qt/a	POST	A					
	Superb		L	0.5	% v/v	POST	A					
8	Raptor	1	L	4	fl oz/a	POST	A	1	0	0	0	14.9
	Basagran	4	L	8	fl oz/a	POST	A					
	Reflex	2	L	1	pt/a	POST	A					
	Preference		L	0.25	% v/v	POST	A					
9	Raptor	1	L	4	fl oz/a	POST	A	1	0	0	0	12.9
	Basagran	4	L	8	fl oz/a	POST	A					
	Reflex	2	L	1	pt/a	POST	A					
	ZMB		L	1	qt/a	POST	A					
	Preference		L	0.25	% v/v	POST	A					
10	Raptor	1	L	4	fl oz/a	POST	A	0	0	0	0	14.1
	Basagran	4	L	8	fl oz/a	POST	A					
	Reflex	2	L	1	pt/a	POST	A					
	ZMB		L	1	qt/a	POST	A					
	Max-In S		L	1	qt/a	POST	A					
11	Untreated							0	0	0	0	15.1
LSD (P=.05)								2.1	1.9	2.8	1.0	3.77
CV								29.58	36.68	61.82	140.55	18.51

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/27/2012  
 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	Raptor	1	L	4	fl oz/a	POST	A	31.7
	Basagran	4	L	8	fl oz/a	POST	A	
	Crop oil concentrate		L	1	% v/v	POST	A	
	AMS		WG	2.5	lb/a	POST	A	
2	Raptor	1	L	4	fl oz/a	POST	A	33.2
	Basagran	4	L	8	fl oz/a	POST	A	
	Superb		L	0.5	% v/v	POST	A	
	Alliance		L	3	qt/100 gal	POST	A	
3	Raptor	1	L	4	fl oz/a	POST	A	34.5
	Basagran	4	L	8	fl oz/a	POST	A	
	Crop oil concentrate		L	1	% v/v	POST	A	
	Alliance		L	3	qt/100 gal	POST	A	
4	Reflex	2	L	1	pt/a	POST	A	32.7
	Basagran	4	L	1	pt/a	POST	A	
	Select Max	0.97	L	9	fl oz/a	POST	A	
	Superb		L	0.5	% v/v	POST	A	
5	Reflex	2	L	1	pt/a	POST	A	32.0
	Basagran	4	L	1	pt/a	POST	A	
	Select Max	0.97	L	9	fl oz/a	POST	A	
	Crop oil concentrate		L	1	% v/v	POST	A	
6	Raptor	1	L	4	fl oz/a	POST	A	32.4
	Basagran	4	L	8	fl oz/a	POST	A	
	ZMB		L	1	qt/a	POST	A	
	Superb		L	0.5	% v/v	POST	A	
	Alliance		L	3	qt/100 gal	POST	A	
7	Reflex	2	L	1	pt/a	POST	A	31.6
	Basagran	4	L	1	pt/a	POST	A	
	Select Max	0.97	L	9	fl oz/a	POST	A	
	ZMB		L	1	qt/a	POST	A	
	Superb		L	0.5	% v/v	POST	A	
8	Raptor	1	L	4	fl oz/a	POST	A	34.6
	Basagran	4	L	8	fl oz/a	POST	A	
	Reflex	2	L	1	pt/a	POST	A	
	Preference		L	0.25	% v/v	POST	A	
9	Raptor	1	L	4	fl oz/a	POST	A	34.1
	Basagran	4	L	8	fl oz/a	POST	A	
	Reflex	2	L	1	pt/a	POST	A	
	ZMB		L	1	qt/a	POST	A	
	Preference		L	0.25	% v/v	POST	A	
10	Raptor	1	L	4	fl oz/a	POST	A	33.6
	Basagran	4	L	8	fl oz/a	POST	A	
	Reflex	2	L	1	pt/a	POST	A	
	ZMB		L	1	qt/a	POST	A	
	Max-In S		L	1	qt/a	POST	A	
11	Untreated							34.1
LSD (P=.05)								3.78
CV								7.89

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