

## MSU Weed Science Research Program

Valor as a Harvest-Aid in Dry Edible Beans

Trial ID: DB02-07  
Conducted: B1-4 CampusStudy Dir.: Sprague, Powell  
Investigator: Christy Sprague

<b>Date Planted:</b> 6/13/07	<b>Row Spacing:</b> 30 IN
<b>Variety:</b> Jaguar Black	<b>No. of Reps:</b> 4
<b>Population:</b> 6.1 Seeds/Foot	<b>% OM:</b> 1.5
<b>Soil Type:</b> Sandy Loam	<b>pH:</b> 6.2
<b>Plot Size:</b> 10 X 30 FT	<b>Design:</b> RANDOMIZED COMPLETE BLOCK

**Tillage:** Fall Chisel Plow, Spring Soil Finish X2, Previous Crop Soybeans  
**Fertilizer:** 160# Of 19-19-19 Applied With Planter

## Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1.	ABUTH	VELVETLEAF	ABUTILON THEOPHRASTI MEDIK.
2.	ANGR	mainly foxtail species	SETARIA SP.
Crop	Code	Common Name	
1.	PHSVX	BEAN, DRY	

## Application Description

**A**

**Application Timing:** PreHarv A  
**Date Treated:** 9/4/07  
**Time Treated:** 2:00 pm  
**% Cloud Cover:** 25  
**Air Temp., Unit:** 82 F  
**% Relative Humidity:** 53  
**Wind Speed/Unit/Dir:** 2 mph NW  
**Soil Temp., Unit:** 72 F  
**Soil/Leaf Surface M:** 5 5  
**Soil Moist (1=w 5=d):** 3

## Crop Stage at Each Application

**A**

**Crop Name:** PHSVX  
**Height (In.):** 15"  
**Stage (L):** 50% brown

## Weed Stage at Each Application

**A**

**Weed 1 Name:** ABUTH  
**Height (In.):** 20-30"  
**Stage (L):** many  
**Weed 2 Name:** ANGR  
**Height (In.):** 20-40"  
**Stage (L):** many

## Weed Density (plants/sq. ft.)

	1	2	3	4	5	6
<b>Date:</b>	7/10/07	7/10/07	7/10/07	7/10/07	7/10/07	7/10/07
<b>Weed Name:</b>	CHEAL	ABUTH	ANGR	AMARE	AMBEL	SOLPT
<b>Density:</b>	< 1	< 1	2	0	0	0

## 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	33"	20"	100"	19	Water	27

**Comments:** 6/13/07- Dual Magnum (1pt) + Permit (0.67oz) Applied Preemergence For General Weed Control

DESICC = Desiccation of dry bean and weeds.



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9/4/07- Desiccation application, bean pods aprox. 50% brown. Annual grass species included Giant Foxtail, Barnyardgrass, and Crabgrass.

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Weed Code		ABUTH		ANGR		ABUTH		ANGR						
Crop Code		PHSVX		PHSVX		PHSVX		PHSVX						
Rating Data Type		DESICC	DESICC	DESICC	DESICC	DESICC	DESICC	DESICC	DESICC					
Rating Unit		percent	percent	percent	percent	percent	percent	percent	percent					
Rating Date		9/7/07	9/7/07	9/7/07	9/11/07	9/11/07	9/11/07	9/11/07	9/19/07					
Trt-Eval Interval		3 DA-A	3 DA-A	3 DA-A	7 DA-A	7 DA-A	7 DA-A	15 DA-A						
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code							
1	Untreated							25	0	0	29	0	0	53
2	Valor	51	WG	1.5	oz/a	PREHARV	A	71	86	20	86	93	48	91
2	Crop oil concentrate		L	1	% v/v	PREHARV	A							
3	Gramoxone Inteon	2	SL	2	pt/a	PREHARV	A	78	91	90	84	95	95	89
3	Activator 90 (NIS)		L	0.25	% v/v	PREHARV	A							
4	Aim	1.9	EW	2	oz/a	PREHARV	A	71	95	0	78	98	0	90
4	Crop oil concentrate		L	1	% v/v	PREHARV	A							
5	Roundup WeatherMax	4.5	SL	22	fl oz/a	PREHARV	A	44	29	14	56	29	58	99
5	AMS		WG	17	lb/100 gal	PREHARV	A							
LSD (P=.05)								7.9	5.3	11.7	6.5	5.3	11.5	7.3
Standard Deviation								5.1	3.4	7.6	4.2	3.4	7.4	4.7
CV								8.91	5.72	30.75	6.37	5.44	18.63	5.6

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Weed Code	ABUTH	ANGR		
Crop Code			PHSVX	PHSVX
Rating Data Type	DESICC	DESICC	moisture	yield
Rating Unit	percent	percent	percent	bu/acre
Rating Date	9/19/07	9/19/07	10/12/07	10/12/07
Trt-Eval Interval	15 DA-A	15 DA-A	38 DA-A	at 18% M

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Grow Stg	Appl Code	ABUTH	ANGR	PHSVX moisture	PHSVX yield
1	Untreated							0	0	20.0	22.0
2	Valor	51	WG	1.5	oz/a	PREHARV	A	97	50	20.2	19.2
2	Crop oil concentrate		L	1	% v/v	PREHARV	A				
3	Gramoxone Inteon	2	SL	2	pt/a	PREHARV	A	99	98	20.7	19.0
3	Activator 90 (NIS)		L	0.25	% v/v	PREHARV	A				
4	Aim	1.9	EW	2	oz/a	PREHARV	A	99	0	20.1	19.9
4	Crop oil concentrate		L	1	% v/v	PREHARV	A				
5	Roundup WeatherMax	4.5	SL	22	fl oz/a	PREHARV	A	96	99	20.5	19.4
5	AMS		WG	17	lb/100 gal	PREHARV	A				
LSD (P=.05)								4.2	7.9	0.46	2.07
Standard Deviation								2.7	5.1	0.30	1.34
CV								3.49	10.35	1.47	6.74