

Dry bean desiccation comparison using Defol

Trial ID: DB04-24 Study Dir.: Sprague, Stiles
 Conducted: SVREC Investigator: Christy Sprague

Planting Date: Jun-17-2024 **Row Spacing:** 30 IN
Variety: 'Zenith' black bean **No. of Reps:** 4
Population: 109000 seeds/A **% OM:** 2.5
Soil Type: CL clay loam **pH:** 7.9
Plot Size: 10 X 35 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops:
Fertilizer:

Crop and Weed Description

Weed	Code	Common Name	Scientific Name
1			
Crop	Code	Common Name	
1	PHSVX	dry bean	

Application Description

A
Application Timing: PREHARV
Date Treated: Sep-4-2024
Time Treated: 5:00 PM
% Cloud Cover: 0
Air Temp., Unit: 78 F
% Relative Humidity: 41
Wind Speed/Unit/Dir: 5 MPH SSE
Soil Temp, Unit: 80 F
Leaf Moist/Dew Presence (Y/N): N
Soil Moist: 5

Crop Stage at Each Application

A
Crop 1 Name: PHSVX
Height: 20 "
Stage: 70% YP- (60% YL)

Weed Stage at Each Application

A
Weed 1 Name:
Height:
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	3.8 MPH	AIXR	110015	36.0 "	20.0 "	100.0 "	10 GAL/AC	WATER	32 PSI

Comments: Desiccation treatments were applied when dry beans were at 70% of pods yellow and 60% of leaves yellow.

Michigan State University

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Protocol ID: DB04-24 Location: SVREC Trial Year: 2024

Study Director: Sprague, Stiles Sponsor Contact:

Investigator: Christy Sprague

Rating Date	Sep-6-2024	Sep-6-2024	Sep-6-2024	Sep-10-2024	Sep-10-2024	Sep-12-2024	Sep-12-2024
Required	OVERALL	POD	STEM	OVERALL	POD	OVERALL	
Rating Type	desiccation	desiccation	desiccation	desiccation	desiccation	desiccation	moisture
Rating Unit	%	%	%	%	%	%	%
Crop Type, Code	C, PHSVX	C, PHSVX	C, PHSVX	C, PHSVX	C, PHSVX	C, PHSVX	C, PSHVX
Trt-Eval Interval	2 DA-A	2 DA-A	2 DA-A	6 DA-A	6 DA-A	8 DA-A	8 DA-A
Number of Decimals	0	0	0	0	0	0	1

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing							
1	Untreated					76	76	75	78	93	97	17.0
2	Sharpen	1 fl oz/a	A	PREHARV		83	83	84	100	100	100	16.5
	Hot MES	16 fl oz/a	A	PREHARV								
	AMS-Xtra	2.5 % v/v	A	PREHARV								
3	Sharpen	2 fl oz/a	A	PREHARV		84	84	83	98	100	100	16.0
	Hot MES	16 fl oz/a	A	PREHARV								
	AMS-Xtra	2.5 % v/v	A	PREHARV								
4	Defol 5	2.4 qt/a	A	PREHARV		82	80	80	99	98	100	17.0
	Hot MES	16 fl oz/a	A	PREHARV								
5	Defol 5	4.8 qt/a	A	PREHARV		79	78	79	99	98	100	17.3
	Hot MES	16 fl oz/a	A	PREHARV								
6	Defol 5	2.4 qt/a	A	PREHARV		87	85	82	100	100	100	15.1
	Sharpen	1 fl oz/a	A	PREHARV								
	Hot MES	16 fl oz/a	A	PREHARV								
	AMS-Xtra	2.5 % v/v	A	PREHARV								
7	Gramoxone 3SL	21 fl oz/a	A	PREHARV		86	85	84	96	99	100	16.1
	Surf-AC 910	0.25 % v/v	A	PREHARV								
8	Defol 5	2.4 qt/a	A	PREHARV		85	84	85	100	100	100	16.3
	Gramoxone 3SL	21 fl oz/a	A	PREHARV								
	Hot MES	16 fl oz/a	A	PREHARV								
9	Sharpen	1 fl oz/a	A	PREHARV		86	85	83	100	100	100	15.5
	Gramoxone 3SL	21 fl oz/a	A	PREHARV								
	Hot MES	16 fl oz/a	A	PREHARV								
	AMS-Xtra	2.5 % v/v	A	PREHARV								
	LSD P=.05					3.4	3.2	2.7	3.2	3.4	0.2	0.92
	Standard Deviation					2.3	2.2	1.9	2.2	2.3	0.2	0.63
	CV					2.82	2.66	2.3	2.3	2.38	0.17	3.87

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Protocol ID: DB04-24 Location: SVREC Trial Year: 2024

Study Director: Sprague, Stiles Sponsor Contact:

Investigator: Christy Sprague

Rating Date	Sep-12-2024
Required	
Rating Type	yield
Rating Unit	cwt/A
Crop Type, Code	C, PSHVX
Trt-Eval Interval	8 DA-A
Number of Decimals	1

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing	
1	Untreated					18.3
2	Sharpen	1 fl oz/a	A	PREHARV		20.2
	Hot MES	16 fl oz/a	A	PREHARV		
	AMS-Xtra	2.5 % v/v	A	PREHARV		
3	Sharpen	2 fl oz/a	A	PREHARV		20.0
	Hot MES	16 fl oz/a	A	PREHARV		
	AMS-Xtra	2.5 % v/v	A	PREHARV		
4	Defol 5	2.4 qt/a	A	PREHARV		20.3
	Hot MES	16 fl oz/a	A	PREHARV		
5	Defol 5	4.8 qt/a	A	PREHARV		21.4
	Hot MES	16 fl oz/a	A	PREHARV		
6	Defol 5	2.4 qt/a	A	PREHARV		17.9
	Sharpen	1 fl oz/a	A	PREHARV		
	Hot MES	16 fl oz/a	A	PREHARV		
	AMS-Xtra	2.5 % v/v	A	PREHARV		
7	Gramoxone 3SL	21 fl oz/a	A	PREHARV		17.5
	Surf-AC 910	0.25 % v/v	A	PREHARV		
8	Defol 5	2.4 qt/a	A	PREHARV		19.7
	Gramoxone 3SL	21 fl oz/a	A	PREHARV		
	Hot MES	16 fl oz/a	A	PREHARV		
9	Sharpen	1 fl oz/a	A	PREHARV		19.7
	Gramoxone 3SL	21 fl oz/a	A	PREHARV		
	Hot MES	16 fl oz/a	A	PREHARV		
	AMS-Xtra	2.5 % v/v	A	PREHARV		
	LSD P=.05					3.60
	Standard Deviation					2.47
	CV					12.68