

Dry bean desiccation comparison using Defol

Trial ID: DB03-23 Study Dir.: Sprague, Stiles
 Conducted: SVREC Investigator: Christy Sprague

Planting Date: Jun-14-2023 **Row Spacing:** 30 IN
Variety: 'Zenith' black bean **No. of Reps:** 4
Population: 109000 seeds/A **% OM:** 2.8
Soil Type: CL clay loam **pH:** 7.5
Plot Size: 10 X 35 FT **Study Design:** Randomized Complete Block (RCB)

Tillage/Previous Crops: Fall chisel plow; Spring field cultivated 2X
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: PRE
Date Treated: Sep-13-2023
Time Treated: 2:50 PM
% Cloud Cover: 80
Air Temp., Unit: 66 F
% Relative Humidity: 67
Wind Speed/Unit/Dir: 4 MPH NW
Soil Temp, Unit: 62 F
Leaf Moist/Dew Presence (Y/N): N
Soil Moist: 2

Crop Stage at Each Application

A
Crop 1 Name: PHSVX
Height: 16 "
Stage: R9

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	4 MPH	AIXR	11002	36.0 "	20.0 "	100.0 "	10 GAL/AC	WATER	30 PSI

Comments:

Weed control of the plot was accomplished with Raptor (4 fl oz/A) + Basagran (20 fl oz/A) + Outlook (10 fl oz/A) + COC (1% v/v) + AMS (2.5 lb/A) applied on July 11, 2023. The desiccant treatments were applied when 70% of the pods had mature color.

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 Protocol ID: DB03-23 Location: SVREC Trial Year: 2023
 Project ID: Project ID 2: Project ID 3:
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Rating Date	Sep-16-2023	Sep-16-2023	Sep-16-2023	Sep-20-2023	Sep-20-2023	Sep-20-2023
Rating Type	leaf desicc	pod desicc	stem desicc	leaf desicc	pod desicc	stem desicc
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100
Crop Type, Code	C, PHSVX	C, PHSVX	C, PHSVX	C, PHSVX	C, PHSVX	C, PHSVX
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	Appl Unit	Appl Code	Appl Timing	Sep-16-2023 leaf desicc	Sep-16-2023 pod desicc	Sep-16-2023 stem desicc	Sep-20-2023 leaf desicc	Sep-20-2023 pod desicc	Sep-20-2023 stem desicc
1	Untreated					51	78	71	67	83	84
2	Sharpen	1 fl oz/a	A	PREHARV		72	90	85	95	99	98
	Hot MES	16 fl oz/a	A	PREHARV							
	AMS-All	2.5 % v/v	A	PREHARV							
3	Sharpen	2 fl oz/a	A	PREHARV		78	91	89	100	100	100
	Hot MES	16 fl oz/a	A	PREHARV							
	AMS-All	2.5 % v/v	A	PREHARV							
4	Defol 5	2.4 qt/a	A	PREHARV		80	89	87	97	93	98
	Hot MES	16 fl oz/a	A	PREHARV							
5	Defol 5	4.8 qt/a	A	PREHARV		88	94	87	99	97	99
	Hot MES	16 fl oz/a	A	PREHARV							
6	Defol 5	2.4 qt/a	A	PREHARV		87	93	90	100	100	100
	Sharpen	1 fl oz/a	A	PREHARV							
	Hot MES	16 fl oz/a	A	PREHARV							
	AMS-All	2.5 % v/v	A	PREHARV							
7	Gramoxone 3SL	21 fl oz/a	A	PREHARV		83	90	87	97	97	97
	Surf-AC 910	0.25 % v/v	A	PREHARV							
8	Defol 5	2.4 qt/a	A	PREHARV		87	91	89	98	99	99
	Gramoxone 3SL	21 fl oz/a	A	PREHARV							
	Hot MES	16 fl oz/a	A	PREHARV							
9	Sharpen	1 fl oz/a	A	PREHARV		83	90	87	99	100	100
	Gramoxone 3SL	21 fl oz/a	A	PREHARV							
	Hot MES	16 fl oz/a	A	PREHARV							
	AMS-All	2.5 % v/v	A	PREHARV							
	LSD P=.05					7.4	3.0	6.0	3.0	2.6	2.6
	Standard Deviation					5.1	2.1	4.1	2.0	1.8	1.8
	CV					6.43	2.3	4.82	2.16	1.84	1.82

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Rating Date	Sep-23-2023	Sep-23-2023	Sep-23-2023	Sep-27-2023	Sep-27-2023
Rating Type	leaf desicc	pod desicc	stem desicc	moisture	yield
Rating Unit/Min/Max	%, 0, 100	%, 0, 100	%, 0, 100	%, 0, 100	cwt/A, -, -
Crop Type, Code	C, PHSVX	C, PHSVX	C, PHSVX	C, PSHVX	C, PSHVX
Trt-Eval Interval	10 DA-A	10 DA-A	10 DA-A	14 DA-A	14 DA-A
Number of Decimals	0	0	0	1	1

Trt No.	Treatment Name	Rate	Appl Unit	Appl Code	Appl Timing					
1	Untreated					92	96	94	24.2	27.0
2	Sharpen	1 fl oz/a	A	PREHARV		100	100	100	22.1	25.9
	Hot MES	16 fl oz/a	A	PREHARV						
	AMS-All	2.5 % v/v	A	PREHARV						
3	Sharpen	2 fl oz/a	A	PREHARV		100	100	100	22.1	26.8
	Hot MES	16 fl oz/a	A	PREHARV						
	AMS-All	2.5 % v/v	A	PREHARV						
4	Defol 5	2.4 qt/a	A	PREHARV		100	99	100	22.0	28.2
	Hot MES	16 fl oz/a	A	PREHARV						
5	Defol 5	4.8 qt/a	A	PREHARV		100	100	100	22.1	24.6
	Hot MES	16 fl oz/a	A	PREHARV						
6	Defol 5	2.4 qt/a	A	PREHARV		100	100	100	22.2	25.3
	Sharpen	1 fl oz/a	A	PREHARV						
	Hot MES	16 fl oz/a	A	PREHARV						
	AMS-All	2.5 % v/v	A	PREHARV						
7	Gramoxone 3SL	21 fl oz/a	A	PREHARV		100	99	100	22.0	27.4
	Surf-AC 910	0.25 % v/v	A	PREHARV						
8	Defol 5	2.4 qt/a	A	PREHARV		100	99	100	22.4	25.2
	Gramoxone 3SL	21 fl oz/a	A	PREHARV						
	Hot MES	16 fl oz/a	A	PREHARV						
9	Sharpen	1 fl oz/a	A	PREHARV		100	100	99	22.0	24.8
	Gramoxone 3SL	21 fl oz/a	A	PREHARV						
	Hot MES	16 fl oz/a	A	PREHARV						
	AMS-All	2.5 % v/v	A	PREHARV						
	LSD P=.05					1.8	1.3	2.2	0.92	3.87
	Standard Deviation					1.3	0.9	1.5	0.63	2.65
	CV					1.27	0.92	1.5	2.83	10.14