

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11 Location: Meigs Trial Year: 2018
 Protocol ID: 18S-MGS-Soy-11 Investigator: Dr. Bill Johnson
 Project ID: NA18P2E002 Enlist Soy Pro Study Director: Taylor Campbell
 Sponsor Contact: Corteva-Kevin Johnson

General Trial Information

Study Director: Taylor Campbell
Investigator: Dr. Bill Johnson

Trial Location

City: Lafayette **Country:** USA United States
State/Prov.: Indiana
Postal Code: 47909

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: Taylor Campbell
Organization: Purdue University
Address: 915 W State Street
City+State/Prov: West Lafayette, IN
Postal Code: 47907
Country: USA United States

Investigator: Dr. Bill Johnson
Organization: Purdue University
Address: 915 W State Street
City+State/Prov: West Lafayette, IN
Postal Code: 47907
Country: USA United States

Cooperator/Landowner

Cooperator: Jay Young **Role:** Superintendent
Organization: Purdue University
Address 1: 8343 US 231 S
City: Lafayette **Phone No.:** 765-538-3422
State/Prov: IN **Fax No.:** 765-538-3423
Postal Code: 47909
Country: USA United States **E-mail:** jayyoung@purdue.edu

Crop Description

Crop 1: GLXMA Glycine max Soybean
Variety: 30E17A5/D734H9PB02
Description: Enlist Soybeans

Planting Date: 5/7/2018
Planting Method: PLANTD planted
Planting Equipment: PP plot planter
Emergence Date: 5/12/2018
Planting Rate, Unit: 130000 S/A
Depth, Unit: 1 IN
Row Spacing, Unit: 30 IN
Rows per Plot: 4
Soil Temperature, Unit: 69 F
Soil Moisture: SLIDRY slightly dry

Pest Description

Pest 1 Type: W **Code:** AMATA *Amaranthus tamariscinus*
Common Name: Common waterhemp

Site and Design

Treated Plot Width: 6.67 FT
Treated Plot Length: 25 FT
Treated Plot Area: 166.75 FT2 **Treatments:** 23
Replications: 4
Site Type: FIELD field
Experimental Unit: 1 PLOT plot
Tillage Type: NOTILL no-till
Study Design: RACOB� Randomized Complete Block (RCB)

Soil Description

Description Name: MGS-S5
% Sand: 40.7 **% OM:** 2.3 **Texture:** L loam
% Silt: 38.6 **pH:** 6.5 **Soil Name:** Starks-Fincastle complex
% Clay: 20.7 **CEC:** 14.3 **Fert. Level:** G good

Purdue Weed Science

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	Sponsor Contact: Corteva-Kevin Johnson	

Application Description

	A	B
Application Date:	5/8/2018	6/25/2018
Appl. Start Time:	10:59 AM	9:38 AM
Appl. Stop Time:	11:30 AM	10:29 AM
Application Method:	SPRAY	SPRAY
Application Timing:	PREMCR	POSPOS
Application Placement:	BROADC	BROADC
Applied By:	M. Zimmer	M. Zimmer
Air Temperature, Unit:	74 F	72 F
% Relative Humidity:	40	83
Wind Velocity, Unit:	1 MPH	5 MPH
Wind Direction:	NE	E
Dew Presence (Y/N):	N no	N no
Soil Temperature, Unit:	62 F	72 F
Soil Moisture:	SLIDRY	SLIWET
% Cloud Cover:	30	98

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	GLXMA BSOY	GLXMA BSOY
Stage Scale Used:	BBCH	BBCH
Stage Majority, Percent:	00	15 90
Stage Minimum, Percent:		15 90
Stage Maximum, Percent:		16 10
Average Diameter, Unit:		9 IN
Height, Unit:		22 IN
Height Minimum, Maximum:		20 24

Pest Stage At Each Application

	A	B
Pest 1 Code, Type, Scale:	AMATA W	AMATA W
Stage Majority, Percent:	00	16
Stage Minimum, Percent:		15
Stage Maximum, Percent:		19
Diameter, Unit:		3 IN
Height, Unit:		5 IN
Height Minimum, Maximum:		4 8
Density, Unit:		3 FT2

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Application Equipment

	A	B
Appl. Equipment:	CO2 BACKPACK	CO2 BACKPACK
Equipment Type:	BACCAI	BACCAI
Operation Pressure, Unit:	28 PSI	43 PSI
Nozzle Type:	XR	AIXR
Nozzle Size:	8002	11015
Nozzle Spacing, Unit:	20 IN	20 IN
Nozzles/Row:	4	4
Boom Length, Unit:	6.7 FT	6.7 FT
Boom Height, Unit:	18 IN	25 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC
Mix Size, Unit:	945 mL	945 mL
Propellant:	COMCO2	COMCO2

Date By Notes

4/24/2018 T. Campbell Burndown 32 oz of Roundup Power Max, 1 pt of 2,4-D Shredder (ester formulation), and 2.5% v/v N-Pak AMS @ 10 gpa, 30 psi, 5 mph, and 1102 AIXR nozzle on a 4 wheeler with a 20 ft boom with 20 inch spacings

5/7/2018 T. Campbell Gramoxone sprayed morning of planting at 2 pt/a plus 1% v/v of COC @ 10 gpa, 30 psi, 5 mph, and 1102 AIXR nozzle on a 4 wheeler with a 20 ft boom with 20 inch spacings

5/16/2018 T. Campbell Plot 104 had no emergence, planter drive wheels were not fully engaged, plot was hand planted on May 16

5/16/2018 T. Campbell Moles had fed on plots 308, 408, 508, and 608

6/7/2018 T. Campbell Evening storm brought hail and slight damage occurred at Meigs field site.

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Reps: 4 Appl Code: A Plots: 6.67 by 25 feet
 Spray vol: 15 GAL/AC Mix Size: 945 mL (total for 4 plots; minimum=869.4 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Appl Unit	Code	Amt to Measure	Rep 1	Rep 2	Rep 3	Rep 4
2	SONIC	70 %		WG	4.5 oz/a		A	2.123 g/mx	102	302	405	708
3	SONIC	70 %		WG	4.5 oz/a		A	2.123 g/mx	103	304	410	706
4	SONIC	70 %		WG	4.5 oz/a		A	2.123 g/mx	104	210	412	608
5	SONIC	70 %		WG	4.5 oz/a		A	2.123 g/mx	105	307	508	601
6	SONIC	70 %		WG	4.5 oz/a		A	2.123 g/mx	106	309	512	607
7	SONIC	70 %		WG	4.5 oz/a		A	2.123 g/mx	107	310	510	611
8	SONIC	70 %		WG	4.5 oz/a		A	2.123 g/mx	108	301	413	704
9	SONIC	70 %		WG	4.5 oz/a		A	2.123 g/mx	109	402	407	602
10	SONIC	70 %		WG	4.5 oz/a		A	2.123 g/mx	110	306	501	604
11	SONIC	70 %		WG	4.5 oz/a		A	2.123 g/mx	111	311	505	705
12	TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR	51 % 25 % 75 %		WG WG DF	2 oz/a 1.28 oz/a 4.75 oz/a		A A A A	0.9436 g/mx 0.6039 g/mx 2.241 g/mx	112	403	502	606
13	TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR	51 % 25 % 75 %		WG WG DF	2 oz/a 1.28 oz/a 4.75 oz/a		A A A A	0.9436 g/mx 0.6039 g/mx 2.241 g/mx	113	308	411	703
14	TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR	51 % 25 % 75 %		WG WG DF	2 oz/a 1.28 oz/a 4.75 oz/a		A A A A	0.9436 g/mx 0.6039 g/mx 2.241 g/mx	114	313	511	514
15	TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR	51 % 25 % 75 %		WG WG DF	2 oz/a 1.28 oz/a 4.75 oz/a		A A A A	0.9436 g/mx 0.6039 g/mx 2.241 g/mx	201	404	408	605
16	TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR	51 % 25 % 75 %		WG WG DF	2 oz/a 1.28 oz/a 4.75 oz/a		A A A A	0.9436 g/mx 0.6039 g/mx 2.241 g/mx	202	305	507	609
17	TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR	51 % 25 % 75 %		WG WG DF	2 oz/a 1.28 oz/a 4.75 oz/a		A A A A	0.9436 g/mx 0.6039 g/mx 2.241 g/mx	203	212	406	603
18	TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR	51 % 25 % 75 %		WG WG DF	2 oz/a 1.28 oz/a 4.75 oz/a		A A A A	0.9436 g/mx 0.6039 g/mx 2.241 g/mx	204	213	504	707
19	TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR	51 % 25 % 75 %		WG WG DF	2 oz/a 1.28 oz/a 4.75 oz/a		A A A A	0.9436 g/mx 0.6039 g/mx 2.241 g/mx	205	401	503	612
20	TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR	51 % 25 % 75 %		WG WG DF	2 oz/a 1.28 oz/a 4.75 oz/a		A A A A	0.9436 g/mx 0.6039 g/mx 2.241 g/mx	206	303	513	701
21	TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR	51 % 25 % 75 %		WG WG DF	2 oz/a 1.28 oz/a 4.75 oz/a		A A A A	0.9436 g/mx 0.6039 g/mx 2.241 g/mx	207	211	509	702
22	Conventional trt SONIC	70 %		WG	4.5 oz/a		A A	2.123 g/mx	208	214	409	613

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	Sponsor Contact: Corteva-Kevin Johnson	

Reps: 4 Appl Code: A Plots: 6.67 by 25 feet
 Spray vol: 15 GAL/AC Mix Size: 945 mL (total for 4 plots; minimum=869.4 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate Rate	Appl Unit	Code	Amt Product to Measure	Rep			
									1	2	3	4
23	TRIVENCE @ 8 OZ						A		209	314	506	614
	VALOR SX	51 %		WG	2 oz/a		A	0.9436 g/mx				
	CLASSIC	25 %		WG	1.28 oz/a		A	0.6039 g/mx				
	TRICOR	75 %		DF	4.75 oz/a		A	2.241 g/mx				

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	Sponsor Contact: Corteva-Kevin Johnson	

Reps: 4 Appl Code: B Plots: 6.67 by 25 feet
 Spray vol: 15 GAL/AC Mix Size: 945 mL (total for 4 plots; minimum=869.4 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Appl Unit	Appl Code	Amt to Measure	Rep 1	Rep 2	Rep 3	Rep 4
2	DURANGO DMA	4	LBAE/GAL	SL	32 fl oz/a	B		15.75 mL/mx	102	302	405	708
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
3	ENLIST DUO	3.34	LBAE/GAL	SL	56 fl oz/a	B		55.12 g/mx	103	304	410	706
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
4	ENLIST DUO	3.34	LBAE/GAL	SL	56 fl oz/a	B		55.12 g/mx	104	210	412	608
	CINCH	7.64	LB/GAL	EC	16 fl oz/a	B		7.875 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
5	ENLIST DUO	3.34	LBAE/GAL	SL	75 fl oz/a	B		73.83 g/mx	105	307	508	601
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
6	ENLIST DUO	3.34	LBAE/GAL	SL	75 fl oz/a	B		73.83 g/mx	106	309	512	607
	CINCH	7.64	LB/GAL	EC	16 fl oz/a	B		7.875 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
7	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx	107	310	510	611
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
8	ENLIST ONE	3.8	LBA/GAL	L	24 fl oz/a	B		11.81 mL/mx	108	301	413	704
	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
9	ENLIST ONE	3.8	LBA/GAL	L	24 fl oz/a	B		11.81 mL/mx	109	402	407	602
	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx				
	CINCH	7.64	LB/GAL	EC	16 fl oz/a	B		7.875 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
10	ENLIST ONE	3.8	LBA/GAL	L	32 fl oz/a	B		15.75 mL/mx	110	306	501	604
	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
11	ENLIST ONE	3.8	LBA/GAL	L	32 fl oz/a	B		15.75 mL/mx	111	311	505	705
	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx				
	CINCH	7.64	LB/GAL	EC	16 fl oz/a	B		7.875 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
12	DURANGO DMA	4	LBAE/GAL	SL	32 fl oz/a	B		15.75 mL/mx	112	403	502	606
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
13	ENLIST DUO	3.34	LBAE/GAL	SL	56 fl oz/a	B		55.12 g/mx	113	308	411	703
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
14	ENLIST DUO	3.34	LBAE/GAL	SL	75 fl oz/a	B		73.83 g/mx	114	313	511	514
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
15	ENLIST DUO	3.34	LBAE/GAL	SL	75 fl oz/a	B		73.83 g/mx	201	404	408	605
	CINCH	7.64	LB/GAL	EC	16 fl oz/a	B		7.875 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
16	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx	202	305	507	609
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
17	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx	203	212	406	603
	CINCH	7.64	LB/GAL	EC	16 fl oz/a	B		7.875 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
18	ENLIST ONE	3.8	LBA/GAL	L	24 fl oz/a	B		11.81 mL/mx	204	213	504	707
	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
19	ENLIST ONE	3.8	LBA/GAL	L	24 fl oz/a	B		11.81 mL/mx	205	401	503	612
	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx				
	CINCH	7.64	LB/GAL	EC	16 fl oz/a	B		7.875 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
20	ENLIST ONE	3.8	LBA/GAL	L	32 fl oz/a	B		15.75 mL/mx	206	303	513	701
	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				

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Reps: 4 Appl Code: B Plots: 6.67 by 25 feet
 Spray vol: 15 GAL/AC Mix Size: 945 mL (total for 4 plots; minimum=869.4 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Appl Unit	Appl Code	Amt Product to Measure	Rep			
									1	2	3	4
21	ENLIST ONE	3.8	LBA/GAL	L	32 fl oz/a	B		15.75 mL/mx	207	211	509	702
	INTERLINE	2.34	LBA/GAL	L	29 fl oz/a	B		14.27 mL/mx				
	CINCH	7.64	LB/GAL	EC	16 fl oz/a	B		7.875 mL/mx				
	N-PAK	3.4	LBA/GAL	L	2.5 % v/v	B		23.62 mL/mx				
22	ASSURE II	0.88	LB/GAL	EC	16 fl oz/a	B		7.875 mL/mx	208	214	409	613
	FLEXSTAR	1.88	LB/GAL	L	3.5 pt/a	B		27.56 mL/mx				
23	ASSURE II	0.88	LB/GAL	EC	16 fl oz/a	B		7.875 mL/mx	209	314	506	614
	FLEXSTAR	1.88	LB/GAL	L	3.5 pt/a	B		27.56 mL/mx				

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Reps: 4 Appl Code: _ Plots: 6.67 by 25 feet
 Spray vol: 15 GAL/AC Mix Size: 945 mL (total for 4 plots; minimum=869.4 mL)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Appl Unit	Rate Code	Amt Product to Measure	Rep			
									1	2	3	4
1	UNTREATED								101	312	414	610
23	Conventional trt								209	314	506	614

Sort Order: Application Code, Replicate 1

Product quantities required for listed treatments and applications of trials included in this table:

Amount*	Unit	Treatment Name	Form Conc	Form Unit	Form Type	Lot Code
29.194	g	SONIC	70	%	WG	
39.375	mL	DURANGO DMA	4	LBAE/GAL	SL	
590.561	mL	N-PAK	3.4	LBA/GAL	L	
287.929	mL	ENLIST DUO	3.34	LBAE/GAL	SL	
78.750	mL	CINCH	7.64	LB/GAL	EC	
196.260	mL	INTERLINE	2.34	LBA/GAL	L	
137.812	mL	ENLIST ONE	3.8	LBA/GAL	L	
12.975	g	VALOR SX	51	%	WG	
8.304	g	CLASSIC	25	%	WG	
30.815	g	TRICOR	75	%	DF	
19.687	mL	ASSURE II	0.88	LB/GAL	EC	
68.906	mL	FLEXSTAR	1.88	LB/GAL	L	

* 'Per area' calculations based on spray volume= 15 GAL/AC, mix size= 945 mL (mix size basis).

* Product amount calculations increased 25 % for overage adjustment.

* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 945 mL.

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Pest Type Pest Code Pest Name			W Weed AMATA Common waterhe>		W Weed AMATA Common waterhe>			
Crop Code	GLXMA	GLXMA		GLXMA		GLXMA		
Crop Name	Soybean	Soybean		Soybean		Soybean		
Part Rated	PLOT C	PLOT C	PLOT P	PLOT C	PLOT P	PLOT C		
Rating Date	5/16/2018	5/22/2018	5/22/2018	6/4/2018	6/4/2018	6/19/2018		
Rating Type	PHYGEN	PHYGEN	CONTRO	PHYGEN	CONTRO	PHYGEN		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell	T. Campbell	T. Campbell		
Days After First/Last Applic.	8 8	14 14	14 14	27 27	27 27	42 42		
Trt-Eval Interval	8 DA-A	14 DA-A	14 DA-A	27 DA-A	27 DA-A	42 DA-A		
Days After Emergence	4 DE-1	10 DE-1	10 DE-1	23 DE-1	23 DE-1	38 DE-1		
ARM Action Codes	P							
Number of Decimals	0	0	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Appl Code	1	2	3	4	5	6
1 UNTREATED			0	0	0	0	0	0
2 SONIC DURANGO DMA N-PAK	4.5 oz/a A 32 fl oz/a B 2.5 % v/v B		0 -	0 -	98 -	0 -	88 f	0 -
3 SONIC ENLIST DUO N-PAK	4.5 oz/a A 56 fl oz/a B 2.5 % v/v B		0 -	0 -	100 -	0 -	89 ef	0 -
4 SONIC ENLIST DUO CINCH N-PAK	4.5 oz/a A 56 fl oz/a B 16 fl oz/a B 2.5 % v/v B		0 -	0 -	99 -	0 -	95 a-e	0 -
5 SONIC ENLIST DUO N-PAK	4.5 oz/a A 75 fl oz/a B 2.5 % v/v B		0 -	0 -	98 -	0 -	90 def	0 -
6 SONIC ENLIST DUO CINCH N-PAK	4.5 oz/a A 75 fl oz/a B 16 fl oz/a B 2.5 % v/v B		0 -	0 -	99 -	0 -	95 a-e	0 -
7 SONIC INTERLINE N-PAK	4.5 oz/a A 29 fl oz/a B 2.5 % v/v B		0 -	0 -	100 -	0 -	97 abc	0 -
8 SONIC ENLIST ONE INTERLINE N-PAK	4.5 oz/a A 24 fl oz/a B 29 fl oz/a B 2.5 % v/v B		0 -	0 -	100 -	0 -	90 def	0 -
9 SONIC ENLIST ONE INTERLINE CINCH N-PAK	4.5 oz/a A 24 fl oz/a B 29 fl oz/a B 16 fl oz/a B 2.5 % v/v B		0 -	0 -	96 -	0 -	92 c-f	0 -
10 SONIC ENLIST ONE INTERLINE N-PAK	4.5 oz/a A 32 fl oz/a B 29 fl oz/a B 2.5 % v/v B		0 -	0 -	99 -	0 -	92 c-f	0 -
11 SONIC ENLIST ONE INTERLINE CINCH N-PAK	4.5 oz/a A 32 fl oz/a B 29 fl oz/a B 16 fl oz/a B 2.5 % v/v B		0 -	0 -	100 -	0 -	93 b-f	0 -

Means followed by same letter or symbol do not significantly differ (P=,05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Untreated treatment(s) 1 excluded from analysis.
 Missing data estimates are included in columns: Yates=3,5,7,8,9,10,11,12; Average=1,2,4,6
 Could not calculate LSD (% mean diff) for columns 1,2,4,6,10 because error mean square = 0.

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11	Location: Meigs	Trial Year: 2018
Protocol ID: 18S-MGS-Soy-11	Investigator: Dr. Bill Johnson	
Project ID: NA18P2E002 Enlist Soy Pro	Study Director: Taylor Campbell	
	Sponsor Contact: Corteva-Kevin Johnson	

Pest Type Pest Code Pest Name			W Weed AMATA Common waterhe>		W Weed AMATA Common waterhe>			
Crop Code	GLXMA	GLXMA		GLXMA		GLXMA		
Crop Name	Soybean	Soybean		Soybean		Soybean		
Part Rated	PLOT C	PLOT C	PLOT P	PLOT C	PLOT P	PLOT C		
Rating Date	5/16/2018	5/22/2018	5/22/2018	6/4/2018	6/4/2018	6/19/2018		
Rating Type	PHYGEN	PHYGEN	CONTRO	PHYGEN	CONTRO	PHYGEN		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell	T. Campbell	T. Campbell		
Days After First/Last Applic.	8 8	14 14	14 14	27 27	27 27	42 42		
Trt-Eval Interval	8 DA-A	14 DA-A	14 DA-A	27 DA-A	27 DA-A	42 DA-A		
Days After Emergence	4 DE-1	10 DE-1	10 DE-1	23 DE-1	23 DE-1	38 DE-1		
ARM Action Codes	P							
Number of Decimals	0	0	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Appl Code	1	2	3	4	5	6
12 TRIVENCE @ 8 OZ		A	0 -	0 -	100 -	0 -	97 abc	0 -
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
DURANGO DMA	32 fl oz/a	B						
N-PAK	2.5 % v/v	B						
13 TRIVENCE @ 8 OZ		A	0 -	0 -	100 -	0 -	97 abc	0 -
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
ENLIST DUO	56 fl oz/a	B						
N-PAK	2.5 % v/v	B						
14 TRIVENCE @ 8 OZ		A	0 -	0 -	100 -	0 -	100 a	0 -
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
ENLIST DUO	75 fl oz/a	B						
N-PAK	2.5 % v/v	B						
15 TRIVENCE @ 8 OZ		A	0 -	0 -	100 -	0 -	96 a-d	0 -
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
ENLIST DUO	75 fl oz/a	B						
CINCH	16 fl oz/a	B						
N-PAK	2.5 % v/v	B						
16 TRIVENCE @ 8 OZ		A	0 -	0 -	100 -	0 -	95 a-e	0 -
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
INTERLINE	29 fl oz/a	B						
N-PAK	2.5 % v/v	B						
17 TRIVENCE @ 8 OZ		A	0 -	0 -	100 -	0 -	98 abc	0 -
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
INTERLINE	29 fl oz/a	B						
CINCH	16 fl oz/a	B						
N-PAK	2.5 % v/v	B						

Means followed by same letter or symbol do not significantly differ (P=,05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Untreated treatment(s) 1 excluded from analysis.
 Missing data estimates are included in columns: Yates=3,5,7,8,9,10,11,12; Average=1,2,4,6
 Could not calculate LSD (% mean diff) for columns 1,2,4,6,10 because error mean square = 0.

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11	Location: Meigs	Trial Year: 2018
Protocol ID: 18S-MGS-Soy-11	Investigator: Dr. Bill Johnson	
Project ID: NA18P2E002 Enlist Soy Pro	Study Director: Taylor Campbell	
	Sponsor Contact: Corteva-Kevin Johnson	

Pest Type Pest Code Pest Name			W Weed AMATA Common waterhe>		W Weed AMATA Common waterhe>			
Crop Code	GLXMA	GLXMA		GLXMA		GLXMA		
Crop Name	Soybean	Soybean		Soybean		Soybean		
Part Rated	PLOT C	PLOT C		PLOT C		PLOT C		
Rating Date	5/16/2018	5/22/2018	PLOT P 5/22/2018	PLOT C 6/4/2018	PLOT P 6/4/2018	PLOT C 6/19/2018		
Rating Type	PHYGEN	PHYGEN	CONTRO	PHYGEN	CONTRO	PHYGEN		
Rating Unit	%	%	%	%	%	%		
Number of Subsamples	1	1	1	1	1	1		
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell	T. Campbell	T. Campbell		
Days After First/Last Applic.	8 8	14 14	14 14	27 27	27 27	42 42		
Trt-Eval Interval	8 DA-A	14 DA-A	14 DA-A	27 DA-A	27 DA-A	42 DA-A		
Days After Emergence	4 DE-1	10 DE-1	10 DE-1	23 DE-1	23 DE-1	38 DE-1		
ARM Action Codes	P							
Number of Decimals	0	0	0	0	0	0		
Trt Treatment No. Name	Rate Rate Unit	Appl Code	1	2	3	4	5	6
18 TRIVENCE @ 8 OZ		A	0 -	0 -	100 -	0 -	98 ab	0 -
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
ENLIST ONE	24 fl oz/a	B						
INTERLINE	29 fl oz/a	B						
N-PAK	2.5 % v/v	B						
19 TRIVENCE @ 8 OZ		A	0 -	0 -	100 -	0 -	96 a-d	0 -
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
ENLIST ONE	24 fl oz/a	B						
INTERLINE	29 fl oz/a	B						
CINCH	16 fl oz/a	B						
N-PAK	2.5 % v/v	B						
20 TRIVENCE @ 8 OZ		A	0 -	0 -	100 -	0 -	98 ab	0 -
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
ENLIST ONE	32 fl oz/a	B						
INTERLINE	29 fl oz/a	B						
N-PAK	2.5 % v/v	B						
21 TRIVENCE @ 8 OZ		A	0 -	0 -	100 -	0 -	99 ab	0 -
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
ENLIST ONE	32 fl oz/a	B						
INTERLINE	29 fl oz/a	B						
CINCH	16 fl oz/a	B						
N-PAK	2.5 % v/v	B						
22 Conventional trt		A	0 -	0 -	100 -	0 -	96 a-d	0 -
SONIC	4.5 oz/a	A						
ASSURE II	16 fl oz/a	B						
FLEXSTAR	3.5 pt/a	B						

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Untreated treatment(s) 1 excluded from analysis.
 Missing data estimates are included in columns: Yates=3,5,7,8,9,10,11,12; Average=1,2,4,6
 Could not calculate LSD (% mean diff) for columns 1,2,4,6,10 because error mean square = 0.

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11	Location: Meigs	Trial Year: 2018
Protocol ID: 18S-MGS-Soy-11	Investigator: Dr. Bill Johnson	
Project ID: NA18P2E002 Enlist Soy Pro	Study Director: Taylor Campbell	
	Sponsor Contact: Corteva-Kevin Johnson	

Pest Type Pest Code Pest Name			W Weed AMATA Common waterhe>			W Weed AMATA Common waterhe>		
Crop Code	GLXMA	GLXMA		GLXMA		GLXMA		GLXMA
Crop Name	Soybean	Soybean		Soybean		Soybean		Soybean
Part Rated	PLOT C	PLOT C	PLOT P	PLOT C	PLOT P	PLOT C	PLOT P	PLOT C
Rating Date	5/16/2018	5/22/2018	5/22/2018	6/4/2018	6/4/2018	6/19/2018	6/19/2018	6/19/2018
Rating Type	PHYGEN	PHYGEN	CONTRO	PHYGEN	CONTRO	PHYGEN	CONTRO	PHYGEN
Rating Unit	%	%	%	%	%	%	%	%
Number of Subsamples	1	1	1	1	1	1	1	1
Assessed By	T. Campbell	T. Campbell	T. Campbell	T. Campbell	T. Campbell	T. Campbell	T. Campbell	T. Campbell
Days After First/Last Applic.	8 8	14 14	14 14	27 27	27 27	42 42	42 42	42 42
Trt-Eval Interval	8 DA-A	14 DA-A	14 DA-A	27 DA-A	27 DA-A	42 DA-A	42 DA-A	42 DA-A
Days After Emergence	4 DE-1	10 DE-1	10 DE-1	23 DE-1	23 DE-1	38 DE-1	38 DE-1	38 DE-1
ARM Action Codes	P							
Number of Decimals	0	0	0	0	0	0	0	0
Trt Treatment	Rate	Appl						
No. Name	Rate Unit	Code	1	2	3	4	5	6
23 Conventional trt			0 -	0 -	100 -	0 -	100 a	0 -
TRIVENCE @ 8 OZ		A						
VALOR SX	2 oz/a	A						
CLASSIC	1.28 oz/a	A						
TRICOR	4.75 oz/a	A						
ASSURE II	16 fl oz/a	B						
FLEXSTAR	3.5 pt/a	B						
LSD P=.05					2.3		6.3	
Standard Deviation	0.0	0.0			1.6	0.0	4.5	0.0
CV	0.0	0.0			1.61	0.0	4.71	0.0
Levene's F	0.00	0.00			1.622	0.00	2.379	0.00
Levene's Prob(F)	0.00*	0.00*			0.072	0.00*	0.004*	0.00*
Skewness					-4.1566*		-1.6046*	
Kurtosis					18.3691*		2.5929*	
Replicate F	0.000	0.000			2.826	0.000	3.208	0.000
Replicate Prob(F)	1.0000	1.0000			0.0461	1.0000	0.0293	1.0000
Treatment F	0.000	0.000			1.724	0.000	2.496	0.000
Treatment Prob(F)	1.0000	1.0000			0.0519	1.0000	0.0030	1.0000

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 Untreated treatment(s) 1 excluded from analysis.
 Missing data estimates are included in columns: Yates=3,5,7,8,9,10,11,12; Average=1,2,4,6
 Could not calculate LSD (% mean diff) for columns 1,2,4,6,10 because error mean square = 0.

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11	Location: Meigs	Trial Year: 2018
Protocol ID: 18S-MGS-Soy-11	Investigator: Dr. Bill Johnson	
Project ID: NA18P2E002 Enlist Soy Pro	Study Director: Taylor Campbell	
	Sponsor Contact: Corteva-Kevin Johnson	

Pest Type Pest Code Pest Name	W Weed AMATA Common waterhe>	GLXMA Soybean PLOT P 6/19/2018 CONTR0 PHYGEN % 1 T. Campbell	W Weed AMATA Common waterhe>	GLXMA Soybean PLOT C 7/3/2018 PHYGEN % 1 T. Campbell	W Weed AMATA Common waterhe>	GLXMA Soybean PLOT C 7/12/2018 PHYGEN % 1 T. Campbell	
Crop Code		GLXMA		GLXMA		GLXMA	
Crop Name		Soybean		Soybean		Soybean	
Part Rated		PLOT P		PLOT C		PLOT C	
Rating Date		6/19/2018		7/3/2018		7/12/2018	
Rating Type		CONTR0		PHYGEN		PHYGEN	
Rating Unit		%		%		%	
Number of Subsamples Assessed By		1 T. Campbell		1 T. Campbell		1 T. Campbell	
Days After First/Last Applic.	42 42	56 8	56 8	65 17	65 17	65 17	
Trt-Eval Interval	42 DA-A		52 DE-1	61 DE-1	61 DE-1	61 DE-1	
Days After Emergence	38 DE-1	52 DE-1	52 DE-1	61 DE-1	61 DE-1	61 DE-1	
ARM Action Codes							
Number of Decimals	0	0	0	0	0	0	
Trt Treatment No. Name	Rate	Appl Code	7	8	9	10	11
1 UNTREATED			0	0	0	0	0
2 SONIC DURANGO DMA N-PAK	4.5 oz/a A 32 fl oz/a B 2.5 % v/v B		83 cde	0 f	65 e	0 b	93 -
3 SONIC ENLIST DUO N-PAK	4.5 oz/a A 56 fl oz/a B 2.5 % v/v B		81 e	2 def	91 a-d	0 b	100 -
4 SONIC ENLIST DUO CINCH N-PAK	4.5 oz/a A 56 fl oz/a B 16 fl oz/a B 2.5 % v/v B		91 a-e	2 def	94 a-d	0 b	100 -
5 SONIC ENLIST DUO N-PAK	4.5 oz/a A 75 fl oz/a B 2.5 % v/v B		85 b-e	3 c	92 a-d	0 b	97 -
6 SONIC ENLIST DUO CINCH N-PAK	4.5 oz/a A 75 fl oz/a B 16 fl oz/a B 2.5 % v/v B		92 abc	2 def	91 a-d	0 b	96 -
7 SONIC INTERLINE N-PAK	4.5 oz/a A 29 fl oz/a B 2.5 % v/v B		94 ab	0 f	98 ab	0 b	100 -
8 SONIC ENLIST ONE INTERLINE N-PAK	4.5 oz/a A 24 fl oz/a B 29 fl oz/a B 2.5 % v/v B		82 de	0 f	84 d	0 b	100 -
9 SONIC ENLIST ONE INTERLINE CINCH N-PAK	4.5 oz/a A 24 fl oz/a B 29 fl oz/a B 16 fl oz/a B 2.5 % v/v B		85 b-e	1 ef	85 cd	0 b	99 -
10 SONIC ENLIST ONE INTERLINE N-PAK	4.5 oz/a A 32 fl oz/a B 29 fl oz/a B 2.5 % v/v B		87 a-e	1 ef	86 bcd	0 b	73 -
11 SONIC ENLIST ONE INTERLINE CINCH N-PAK	4.5 oz/a A 32 fl oz/a B 29 fl oz/a B 16 fl oz/a B 2.5 % v/v B		88 a-e	1 def	91 a-d	0 b	100 -

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Untreated treatment(s) 1 excluded from analysis.
 Missing data estimates are included in columns: Yates=3,5,7,8,9,10,11,12; Average=1,2,4,6
 Could not calculate LSD (% mean diff) for columns 1,2,4,6,10 because error mean square = 0.

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11 Protocol ID: 18S-MGS-Soy-11 Project ID: NA18P2E002 Enlist Soy Pro				Location: Meigs Trial Year: 2018 Investigator: Dr. Bill Johnson Study Director: Taylor Campbell Sponsor Contact: Corteva-Kevin Johnson			
Pest Type Pest Code Pest Name	W Weed AMATA Common waterhe>			W Weed AMATA Common waterhe>			W Weed AMATA Common waterhe>
Crop Code			GLXMA			GLXMA	
Crop Name			Soybean			Soybean	
Part Rated	PLOT P		PLOT C	PLOT P		PLOT C	PLOT P
Rating Date	6/19/2018		7/3/2018	7/3/2018		7/12/2018	7/12/2018
Rating Type	CONTRO		PHYGEN	CONTRO		PHYGEN	CONTRO
Rating Unit	%		%	%		%	%
Number of Subsamples Assessed By	1 T. Campbell		1 T. Campbell	1 T. Campbell		1 T. Campbell	1 T. Campbell
Days After First/Last Applic.	42 42		56 8	56 8		65 17	65 17
Trt-Eval Interval	42 DA-A			52 DE-1		61 DE-1	61 DE-1
Days After Emergence	38 DE-1		52 DE-1	52 DE-1		61 DE-1	61 DE-1
ARM Action Codes							
Number of Decimals	0		0	0		0	0
Trt Treatment No. Name	Rate	Appl Code	7	8	9	10	11
12 TRIVENCE @ 8 OZ		A	94 ab	0 f	91 a-d	0 b	100 -
VALOR SX	2 oz/a	A					
CLASSIC	1.28 oz/a	A					
TRICOR	4.75 oz/a	A					
DURANGO DMA	32 fl oz/a	B					
N-PAK	2.5 % v/v	B					
13 TRIVENCE @ 8 OZ		A	91 a-d	1 ef	95 a-d	0 b	100 -
VALOR SX	2 oz/a	A					
CLASSIC	1.28 oz/a	A					
TRICOR	4.75 oz/a	A					
ENLIST DUO	56 fl oz/a	B					
N-PAK	2.5 % v/v	B					
14 TRIVENCE @ 8 OZ		A	96 a	2 cd	100 a	0 b	75 -
VALOR SX	2 oz/a	A					
CLASSIC	1.28 oz/a	A					
TRICOR	4.75 oz/a	A					
ENLIST DUO	75 fl oz/a	B					
N-PAK	2.5 % v/v	B					
15 TRIVENCE @ 8 OZ		A	94 ab	2 cde	98 ab	0 b	97 -
VALOR SX	2 oz/a	A					
CLASSIC	1.28 oz/a	A					
TRICOR	4.75 oz/a	A					
ENLIST DUO	75 fl oz/a	B					
CINCH	16 fl oz/a	B					
N-PAK	2.5 % v/v	B					
16 TRIVENCE @ 8 OZ		A	91 a-d	0 f	94 a-d	0 b	99 -
VALOR SX	2 oz/a	A					
CLASSIC	1.28 oz/a	A					
TRICOR	4.75 oz/a	A					
INTERLINE	29 fl oz/a	B					
N-PAK	2.5 % v/v	B					
17 TRIVENCE @ 8 OZ		A	94 ab	0 f	99 ab	0 b	100 -
VALOR SX	2 oz/a	A					
CLASSIC	1.28 oz/a	A					
TRICOR	4.75 oz/a	A					
INTERLINE	29 fl oz/a	B					
CINCH	16 fl oz/a	B					
N-PAK	2.5 % v/v	B					

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=3,5,7,8,9,10,11,12; Average=1,2,4,6

Could not calculate LSD (% mean diff) for columns 1,2,4,6,10 because error mean square = 0.

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11 Protocol ID: 18S-MGS-Soy-11 Project ID: NA18P2E002 Enlist Soy Pro				Location: Meigs Trial Year: 2018 Investigator: Dr. Bill Johnson Study Director: Taylor Campbell Sponsor Contact: Corteva-Kevin Johnson						
Pest Type			W Weed			W Weed				
Pest Code			AMATA			AMATA				
Pest Name			Common waterhe>			Common waterhe>				
Crop Code				GLXMA			GLXMA			
Crop Name				Soybean			Soybean			
Part Rated			PLOT P	PLOT C			PLOT P	PLOT C		
Rating Date			6/19/2018	7/3/2018			7/3/2018	7/12/2018		
Rating Type			CONTRO	PHYGEN			CONTRO	PHYGEN		
Rating Unit			%	%			%	%		
Number of Subsamples			1	1			1	1		
Assessed By			T. Campbell	T. Campbell			T. Campbell	T. Campbell		
Days After First/Last Applic.			42 42	56 8			56 8	65 17		
Trt-Eval Interval			42 DA-A			52 DE-1	61 DE-1			65 17
Days After Emergence			38 DE-1	52 DE-1			52 DE-1	61 DE-1		
ARM Action Codes										
Number of Decimals			0	0			0	0		
Trt Treatment	Rate	Appl								
No. Name	Rate Unit	Code	7	8	9	10	11			
18 TRIVENCE @ 8 OZ		A	90 a-e	0 f	95 a-d	0 b	100 -			
VALOR SX	2 oz/a	A								
CLASSIC	1.28 oz/a	A								
TRICOR	4.75 oz/a	A								
ENLIST ONE	24 fl oz/a	B								
INTERLINE	29 fl oz/a	B								
N-PAK	2.5 % v/v	B								
19 TRIVENCE @ 8 OZ		A	93 ab	0 f	98 abc	0 b	100 -			
VALOR SX	2 oz/a	A								
CLASSIC	1.28 oz/a	A								
TRICOR	4.75 oz/a	A								
ENLIST ONE	24 fl oz/a	B								
INTERLINE	29 fl oz/a	B								
CINCH	16 fl oz/a	B								
N-PAK	2.5 % v/v	B								
20 TRIVENCE @ 8 OZ		A	93 ab	0 f	94 a-d	0 b	100 -			
VALOR SX	2 oz/a	A								
CLASSIC	1.28 oz/a	A								
TRICOR	4.75 oz/a	A								
ENLIST ONE	32 fl oz/a	B								
INTERLINE	29 fl oz/a	B								
N-PAK	2.5 % v/v	B								
21 TRIVENCE @ 8 OZ		A	94 ab	1 ef	98 abc	0 b	100 -			
VALOR SX	2 oz/a	A								
CLASSIC	1.28 oz/a	A								
TRICOR	4.75 oz/a	A								
ENLIST ONE	32 fl oz/a	B								
INTERLINE	29 fl oz/a	B								
CINCH	16 fl oz/a	B								
N-PAK	2.5 % v/v	B								
22 Conventional trt		A	91 a-d	13 a	91 a-d	2 a	98 -			
SONIC	4.5 oz/a	A								
ASSURE II	16 fl oz/a	B								
FLEXSTAR	3.5 pt/a	B								

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

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Untreated treatment(s) 1 excluded from analysis.

Missing data estimates are included in columns: Yates=3,5,7,8,9,10,11,12; Average=1,2,4,6

Could not calculate LSD (% mean diff) for columns 1,2,4,6,10 because error mean square = 0.

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11	Location: Meigs	Trial Year: 2018
Protocol ID: 18S-MGS-Soy-11	Investigator: Dr. Bill Johnson	
Project ID: NA18P2E002 Enlist Soy Pro	Study Director: Taylor Campbell	
	Sponsor Contact: Corteva-Kevin Johnson	

Pest Type Pest Code Pest Name	W Weed AMATA Common waterhe>	GLXMA Soybean PLOT P 6/19/2018 CONTRO %	W Weed AMATA Common waterhe>	GLXMA Soybean PLOT P 7/3/2018 CONTRO %	W Weed AMATA Common waterhe>		
Crop Code		GLXMA		GLXMA			
Crop Name		Soybean		Soybean			
Part Rated	PLOT P	PLOT C	PLOT P	PLOT C	PLOT P		
Rating Date	6/19/2018	7/3/2018	7/3/2018	7/12/2018	7/12/2018		
Rating Type	CONTRO	PHYGEN	CONTRO	PHYGEN	CONTRO		
Rating Unit	%	%	%	%	%		
Number of Subsamples Assessed By	1 T. Campbell	1 T. Campbell	1 T. Campbell	1 T. Campbell	1 T. Campbell		
Days After First/Last Applic.	42 42	56 8	56 8	65 17	65 17		
Trt-Eval Interval	42 DA-A						
Days After Emergence	38 DE-1	52 DE-1	52 DE-1	61 DE-1	61 DE-1		
ARM Action Codes							
Number of Decimals	0	0	0	0	0		
Trt Treatment No. Name	Rate Unit	Appl Code	7	8	9	10	11
23 Conventional trt			97 a	10 b	98 abc	2 a	100 -
TRIVENCE @ 8 OZ		A					
VALOR SX	2 oz/a	A					
CLASSIC	1.28 oz/a	A					
TRICOR	4.75 oz/a	A					
ASSURE II	16 fl oz/a	B					
FLEXSTAR	3.5 pt/a	B					
LSD P=.05	10.0	1.6			12.7	.	21.2
Standard Deviation	7.1	1.1			9.0	0.0	15.0
CV	7.85	64.49			9.76	0.0	15.47
Levene's F	1.272	2.309			2.241	0.00	1.014
Levene's Prob(F)	0.229	0.006*			0.007*	0.00*	0.461
Skewness	-2.1276*	2.5218*			-2.1864*	2.8303*	-6.1114*
Kurtosis	7.8529*	5.9085*			5.8896*	6.1548*	37.3014*
Replicate F	1.663	1.682			2.364	0.000	2.487
Replicate Prob(F)	0.1846	0.1805			0.0800	1.0000	0.0691
Treatment F	1.743	34.540			2.799	0.000	1.019
Treatment Prob(F)	0.0486	0.0001			0.0010	1.0000	0.4562

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
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 Untreated treatment(s) 1 excluded from analysis.
 Missing data estimates are included in columns: Yates=3,5,7,8,9,10,11,12; Average=1,2,4,6
 Could not calculate LSD (% mean diff) for columns 1,2,4,6,10 because error mean square = 0.

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11 Protocol ID: 18S-MGS-Soy-11 Project ID: NA18P2E002 Enlist Soy Pro	Location: Meigs Investigator: Dr. Bill Johnson Study Director: Taylor Campbell Sponsor Contact: Corteva-Kevin Johnson	Trial Year: 2018
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Pest Type	W Weed		
Pest Code	AMATA		
Pest Name	Common waterhe>		
Crop Code			
Crop Name			
Part Rated	PLOT P		
Rating Date	7/23/2018		
Rating Type	CONTRO		
Rating Unit	%		
Number of Subsamples	1		
Assessed By	T. Campbell		
Days After First/Last Applic.	76 28		
Trt-Eval Interval			
Days After Emergence	72 DE-1		
ARM Action Codes			
Number of Decimals	0		
Trt Treatment	Rate	Appl	
No. Name	Rate Unit	Code	12
1 UNTREATED			0
2 SONIC	4.5 oz/a	A	95 -
DURANGO DMA	32 fl oz/a	B	
N-PAK	2.5 % v/v	B	
3 SONIC	4.5 oz/a	A	100 -
ENLIST DUO	56 fl oz/a	B	
N-PAK	2.5 % v/v	B	
4 SONIC	4.5 oz/a	A	100 -
ENLIST DUO	56 fl oz/a	B	
CINCH	16 fl oz/a	B	
N-PAK	2.5 % v/v	B	
5 SONIC	4.5 oz/a	A	99 -
ENLIST DUO	75 fl oz/a	B	
N-PAK	2.5 % v/v	B	
6 SONIC	4.5 oz/a	A	96 -
ENLIST DUO	75 fl oz/a	B	
CINCH	16 fl oz/a	B	
N-PAK	2.5 % v/v	B	
7 SONIC	4.5 oz/a	A	100 -
INTERLINE	29 fl oz/a	B	
N-PAK	2.5 % v/v	B	
8 SONIC	4.5 oz/a	A	100 -
ENLIST ONE	24 fl oz/a	B	
INTERLINE	29 fl oz/a	B	
N-PAK	2.5 % v/v	B	
9 SONIC	4.5 oz/a	A	100 -
ENLIST ONE	24 fl oz/a	B	
INTERLINE	29 fl oz/a	B	
CINCH	16 fl oz/a	B	
N-PAK	2.5 % v/v	B	
10 SONIC	4.5 oz/a	A	100 -
ENLIST ONE	32 fl oz/a	B	
INTERLINE	29 fl oz/a	B	
N-PAK	2.5 % v/v	B	
11 SONIC	4.5 oz/a	A	100 -
ENLIST ONE	32 fl oz/a	B	
INTERLINE	29 fl oz/a	B	
CINCH	16 fl oz/a	B	
N-PAK	2.5 % v/v	B	

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.
 Untreated treatment(s) 1 excluded from analysis.
 Missing data estimates are included in columns: Yates=3,5,7,8,9,10,11,12; Average=1,2,4,6
 Could not calculate LSD (% mean diff) for columns 1,2,4,6,10 because error mean square = 0.

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11	Location: Meigs	Trial Year: 2018
Protocol ID: 18S-MGS-Soy-11	Investigator: Dr. Bill Johnson	
Project ID: NA18P2E002 Enlist Soy Pro	Study Director: Taylor Campbell	
	Sponsor Contact: Corteva-Kevin Johnson	

Pest Type	W Weed		
Pest Code	AMATA		
Pest Name	Common waterhe>		
Crop Code			
Crop Name			
Part Rated	PLOT P		
Rating Date	7/23/2018		
Rating Type	CONTRO		
Rating Unit	%		
Number of Subsamples	1		
Assessed By	T. Campbell		
Days After First/Last Applic.	76 28		
Trt-Eval Interval			
Days After Emergence	72 DE-1		
ARM Action Codes			
Number of Decimals	0		
Trt No.	Treatment Name	Rate	Appl Code
		Rate Unit	
12	TRIVENCE @ 8 OZ		A
	VALOR SX	2 oz/a	A
	CLASSIC	1.28 oz/a	A
	TRICOR	4.75 oz/a	A
	DURANGO DMA	32 fl oz/a	B
	N-PAK	2.5 % v/v	B
13	TRIVENCE @ 8 OZ		A
	VALOR SX	2 oz/a	A
	CLASSIC	1.28 oz/a	A
	TRICOR	4.75 oz/a	A
	ENLIST DUO	56 fl oz/a	B
	N-PAK	2.5 % v/v	B
14	TRIVENCE @ 8 OZ		A
	VALOR SX	2 oz/a	A
	CLASSIC	1.28 oz/a	A
	TRICOR	4.75 oz/a	A
	ENLIST DUO	75 fl oz/a	B
	N-PAK	2.5 % v/v	B
15	TRIVENCE @ 8 OZ		A
	VALOR SX	2 oz/a	A
	CLASSIC	1.28 oz/a	A
	TRICOR	4.75 oz/a	A
	ENLIST DUO	75 fl oz/a	B
	CINCH	16 fl oz/a	B
	N-PAK	2.5 % v/v	B
16	TRIVENCE @ 8 OZ		A
	VALOR SX	2 oz/a	A
	CLASSIC	1.28 oz/a	A
	TRICOR	4.75 oz/a	A
	INTERLINE	29 fl oz/a	B
	N-PAK	2.5 % v/v	B
17	TRIVENCE @ 8 OZ		A
	VALOR SX	2 oz/a	A
	CLASSIC	1.28 oz/a	A
	TRICOR	4.75 oz/a	A
	INTERLINE	29 fl oz/a	B
	CINCH	16 fl oz/a	B
	N-PAK	2.5 % v/v	B

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Purdue Weed Science

Trial ID: 18S-MGS-Soy-11 Protocol ID: 18S-MGS-Soy-11 Project ID: NA18P2E002 Enlist Soy Pro		Location: Meigs Investigator: Dr. Bill Johnson Study Director: Taylor Campbell Sponsor Contact: Corteva-Kevin Johnson		Trial Year: 2018	
Pest Type Pest Code Pest Name		W Weed AMATA Common waterhe>			
Crop Code Crop Name Part Rated Rating Date Rating Type Rating Unit Number of Subsamples Assessed By Days After First/Last Applic. Trt-Eval Interval Days After Emergence ARM Action Codes Number of Decimals		PLOT P 7/23/2018 CONTRO % 1 T. Campbell 76 28 72 DE-1 0			
Trt Treatment No. Name		Rate Rate Unit	Appl Code	12	
18 TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR ENLIST ONE INTERLINE N-PAK		2 oz/a 1.28 oz/a 4.75 oz/a 24 fl oz/a 29 fl oz/a 2.5 % v/v	A A A B B B	100 -	
19 TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR ENLIST ONE INTERLINE CINCH N-PAK		2 oz/a 1.28 oz/a 4.75 oz/a 24 fl oz/a 29 fl oz/a 16 fl oz/a 2.5 % v/v	A A A B B B B	100 -	
20 TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR ENLIST ONE INTERLINE N-PAK		2 oz/a 1.28 oz/a 4.75 oz/a 32 fl oz/a 29 fl oz/a 2.5 % v/v	A A A B B B	100 -	
21 TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR ENLIST ONE INTERLINE CINCH N-PAK		2 oz/a 1.28 oz/a 4.75 oz/a 32 fl oz/a 29 fl oz/a 16 fl oz/a 2.5 % v/v	A A A B B B B	100 -	
22 Conventional trt SONIC ASSURE II FLEXSTAR		4.5 oz/a 16 fl oz/a 3.5 pt/a	A A B B	99 -	

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 Could not calculate LSD (% mean diff) for columns 1,2,4,6,10 because error mean square = 0.

Purdue Weed Science

Trial ID: 18S-MGS-Soy-11 Protocol ID: 18S-MGS-Soy-11 Project ID: NA18P2E002 Enlist Soy Pro		Location: Meigs Investigator: Dr. Bill Johnson Study Director: Taylor Campbell Sponsor Contact: Corteva-Kevin Johnson		Trial Year: 2018	
Pest Type Pest Code Pest Name		W Weed AMATA Common waterhe>			
Crop Code Crop Name Part Rated Rating Date Rating Type Rating Unit Number of Subsamples Assessed By Days After First/Last Applic. Trt-Eval Interval Days After Emergence ARM Action Codes Number of Decimals		PLOT P 7/23/2018 CONTRO % 1 T. Campbell 76 28 72 DE-1 0			
Trt Treatment No. Name		Rate Rate Unit	Appl Code	12	
23 Conventional trt TRIVENCE @ 8 OZ VALOR SX CLASSIC TRICOR ASSURE II FLEXSTAR		A 2 oz/a 1.28 oz/a 4.75 oz/a 16 fl oz/a 3.5 pt/a	A A A A B B	100 -	
LSD P=.05 Standard Deviation CV Levene's F Levene's Prob(F) Skewness Kurtosis		3.0 2.1 2.11 2.257 0.007* -5.0537* 26.2239*			
Replicate F Replicate Prob(F) Treatment F Treatment Prob(F)		1.916 0.1366 1.535 0.0999			

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Purdue Weed Science

Trial ID: 18S-MGS-Soy-11	Location: Meigs	Trial Year: 2018
Protocol ID: 18S-MGS-Soy-11	Investigator: Dr. Bill Johnson	
Project ID: NA18P2E002 Enlist Soy Pro	Study Director: Taylor Campbell	
	Sponsor Contact: Corteva-Kevin Johnson	

Pest Type

W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop

Pest Code

AMATA, Amaranthus tamariscinus, Common waterhemp = US

Crop Code

GLXMA, BSOY, Glycine max, Soybean = US

Part Rated

PLOT = plot

C = Crop is Part Rated

P = Pest is Part Rated

Rating Type

PHYGEN = phytotoxicity - general / injury

CONTRO = control / burndown or knockdown

Rating Unit

% = percent

ARM Action Codes

P = Rating scale of 0 to 100 (e.g. % control or injury)