Purdue Weed Science

Looking at Fall Applied Treatments for Marestail & other winter annuals

Trial ID: 15F-CORT-FALLOW-02 Location: CORTLAND Trial Year: 2015
Protocol ID: Investigator: Dr. Bill Johnson
Project ID: Study Director: Dustin Johnson
Sponsor Contact: Winfield-George Watters

General Trial Information

Study Director: Dustin Johnson **Title:** Research Associate
Investigator: Dr. Bill Johnson **Title:** Professor

Discipline: H herbicide
Trial Status: E established
Initiation Date: Nov-10-2015

Trial Location

City: Cortland **Country:** USA United States
State/Prov.: Indiana
Postal Code: 42778

Conducted Under GLP: No
Conducted Under GEP: No

Contacts

Study Director: Dustin Johnson **Title:** Research Associate
Organization: Purdue University
Address: 915 W. State Street
City+State/Prov: West Lafayette, IN
Postal Code: 47907 **E-mail:** john1357@purdue.edu
Country: USA United States

Investigator: Dr. Bill Johnson **Title:** Professor
Organization: Purdue University
Address: 915 W. State Street
City+State/Prov: West Lafayette, IN
Postal Code: 47907 **E-mail:** wgj@purdue.edu
Country: USA United States

Cooperator/Landowner

City: Cortland
State/Prov: IN
Postal Code: 47228
Country: USA United States

Pest Description

Pest 1 Type: W **Code:** ERICA Conyza canadensis
Common Name: Canada horseweed

Pest 2 Type: W **Code:** LAMAM Lamium amplexicaule
Common Name: Henbit

Pest 3 Type: W **Code:** THLSS Thlaspi sp.
Common Name: Pennycress

Pest 4 Type: W **Code:** CHEAL Chenopodium album
Common Name: common lambsquarters

Site and Design

Treated Plot Width: 6.67 FT **Site Type:** FIELD field
Treated Plot Length: 30 FT **Experimental Unit:** 1 PLOT plot
Treated Plot Area: 200.1 FT2 **Treatments:** 12 **Tillage Type:** NOTILL no-till
Replications: 4 **Study Design:** RACOBL Randomized Complete Block (RCB)

Field Prep./Maintenance:
11/10/15 Grower applied glyphosate prior to setup of trial. There was some injury to fall emerged horseweed prior to establishment of trial.

Soil Description

Description Name: CORTLAND
% Sand: 46.6 **% OM:** 1.6 **Texture:** SL sandy loam
% Silt: 35.6 **pH:** 6.6 **Soil Name:** Fox-Ockley
% Clay: 17.8 **CEC:** 9
Soil Drainage: E excellent

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Application Description

	A
Application Date:	Nov-10-2015
Appl. Start Time:	9:00 AM
Appl. Stop Time:	9:25 AM
Application Method:	SPRAY
Application Timing:	FALL
Application Placement:	BROADC
Applied By:	M. Zimmer
Air Temperature, Unit:	47 F
% Relative Humidity:	85
Wind Velocity, Unit:	5 MPH
Wind Direction:	WSW
Dew Presence (Y/N):	N no
Soil Temperature, Unit:	53 F
Soil Moisture:	WET
% Cloud Cover:	100

Pest Stage At Each Application

	A
Pest 1 Code, Type, Scale:	ERICA W
Stage Majority, Percent:	14
Stage Minimum, Percent:	11
Stage Maximum, Percent:	19
Diameter, Unit:	3 IN
Height Minimum, Maximum:	0 6
Density, Unit:	1500 YD2
Pest 2 Code, Type, Scale:	LAMAM W
Stage Majority, Percent:	31G
Stage Minimum, Percent:	09
Stage Maximum, Percent:	32G
Height, Unit:	0.25 IN
Height Minimum, Maximum:	0 0.5
Density, Unit:	750 YD2
Pest 3 Code, Type, Scale:	THLSS W
Pest 4 Code, Type, Scale:	CHEAL W

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Application Equipment

	A
Appl. Equipment:	CO2 BACKPACK
Equipment Type:	SPRBAC
Operation Pressure, Unit:	18 PSI
Nozzle Type:	FLAFXR
Nozzle Size:	XR11002
Nozzle Spacing, Unit:	20 IN
Nozzles/Row:	4
Boom Length, Unit:	6.67 FT
Boom Height, Unit:	17 IN
Ground Speed, Unit:	3 MPH
Carrier:	WATER
Water Hardness (ppm CaCO3):	150
Spray Volume, Unit:	15 GAL/AC
Mix Size, Unit:	1119 mL
Tank Mix (Y/N):	N no

Trt No Treatment Application Comment
11/10/2015-Fall Application-High residue in some plot areas

Date By Notes
Nov-10-2015 D. JOHNSON Setup Trial.
Nov-25-2015 D. JOHNSON Rated Trial 14 DAT: Weed densities for ERICA and LAMAM extremely low, especially for horseweed. Very few plants in untreated checks and check strips. High residue cover in a lot of plot areas.
Dec-10-2015 D. JOHNSON Rated Trial 28 DAT: Warmer temps in between rating dates. There was some newly emerged ERICA and LAMAM.
Apr-5-2016 D. JOHNSON Winter Annuals especially spring draba very prevalent and field penny cress in most plots.
Apr-14-2016 D. JOHNSON Spring Rating: Large amount of spring emerged ERICA. There is not much fall emerged ERICA. Rated THLSS and density low/sporadic in blocks 2&4. ERICA pressure is lower towards the south. Pockets of emerged CHEAL.
May-6-2016 D. JOHNSON Spring Rating: Marcelo Moretti rated. Spring emerged ERICA is rosette to bolting up to 5". THLSS is still sporadic in blocks 2 & 4. CHEAL is prevalent on the S & W side of trial, but not throughout.

Trial Comments

Reps: 4 Plots: 6.67 by 30 feet
Spray vol: 15 GAL/AC Mix Size: 1119 mL (calculated mix size 1043.3)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Code	Amt Product to Measure	Rep 1	2	3	4
1	Untreated Check								101	204	403	505
2	BRASH	3.87	LBAE/GAL	L	2	pt/a	A	18.65 ml/mx	102	208	401	506
	SUPERB HC	100	%	L	0.5	% v/v	A	5.594 ml/mx				
3	BRASH	3.87	LBAE/GAL	L	2	pt/a	A	18.65 ml/mx	103	210	406	504
	DIMETRIC	75	%	DG	4	oz/a	A	2.235 g/mx				
	SUPERB HC	100	%	L	0.5	% v/v	A	5.594 ml/mx				
4	BRASH	3.87	LBAE/GAL	L	2	pt/a	A	18.65 ml/mx	104	203	405	407
	DIMETRIC	75	%	DG	8	oz/a	A	4.47 g/mx				
	SUPERB HC	100	%	L	0.5	% v/v	A	5.594 ml/mx				
5	BRASH	3.87	LBAE/GAL	L	2	pt/a	A	18.65 ml/mx	105	303	306	508
	AGH 15003	3	LBA/GAL	L	8	fl oz/a	A	4.662 ml/mx				
	SUPERB HC	100	%	L	0.5	% v/v	A	5.594 ml/mx				
6	BRASH	3.87	LBAE/GAL	L	2	pt/a	A	18.65 ml/mx	106	205	307	409
	AGH 15003	3	LBA/GAL	L	16	fl oz/a	A	9.325 ml/mx				
	SUPERB HC	100	%	L	0.5	% v/v	A	5.594 ml/mx				
7	SHREDDER LV-6	5.6	LBAE/GAL	L	1.33	pt/a	A	12.4 ml/mx	107	209	404	502
	SUPERB HC	100	%	L	0.5	% v/v	A	5.594 ml/mx				

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Spray vol: 15 GAL/AC Mix Size: 1119 mL (calculated mix size 1043.3)

Trt No.	Treatment Name	Form Conc	Form Unit	Form Type	Rate	Rate Unit	Appl Code	Amt Product to Measure	Rep 1	2	3	4
8	SHREDDER LV-6	5.6	LBAE/GAL	L	1.33	pt/a	A	12.4 ml/mx	108	304	402	501
	DIMETRIC	75	%	DG	4	oz/a	A	2.235 g/mx				
	SUPERB HC	100	%	L	0.5	% v/v	A	5.594 ml/mx				
9	SHREDDER LV-6	5.6	LBAE/GAL	L	1.33	pt/a	A	12.4 ml/mx	109	207	308	507
	DIMETRIC	75	%	DG	8	oz/a	A	4.47 g/mx				
	SUPERB HC	100	%	L	0.5	% v/v	A	5.594 ml/mx				
10	SHREDDER LV-6	5.6	LBAE/GAL	L	1.33	pt/a	A	12.4 ml/mx	110	302	310	408
	AGH 15003	3	LBA/GAL	L	8	fl oz/a	A	4.662 ml/mx				
	SUPERB HC	100	%	L	0.5	% v/v	A	5.594 ml/mx				
11	SHREDDER LV-6	5.6	LBAE/GAL	L	1.33	pt/a	A	12.4 ml/mx	201	206	305	503
	AGH 15003	3	LBA/GAL	L	16	fl oz/a	A	9.325 ml/mx				
	SUPERB HC	100	%	L	0.5	% v/v	A	5.594 ml/mx				
12	Untreated Check								202	301	309	410

Sort Order: Replicate 1

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

Amount*	Unit	Treatment Name	Form Conc	Form Type	Lot Code
116.562	ml	BRASH	3.87	L	
69.930	ml	SUPERB HC	100	L	
16.761	g	DIMETRIC	75	DG	
34.969	ml	AGH 15003	3	L	
77.514	ml	SHREDDER LV-6	5.6	L	

* 'Per area' calculations based on spray volume= 15 GAL/AC, mix size= 1119 mL (mix size basis).
* Product amount calculations increased 25 % for overage adjustment.
* 'Per volume' calculations use spray volume= 15 GAL/AC, mix size= 1119 mL.

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Trt No.	Treatment Name	Rate	Unit	Appl Code	Plot	1	2	3	4	5
	Pest Type					W Weed	W Weed	W Weed	W Weed	W Weed
	Pest Code					ERICA	LAMAM	ERICA	LAMAM	ERICA
	Pest Scientific Name					Conyza canaden>	Lamium amplexi>	Conyza canaden>	Lamium amplexi>	Conyza canaden>
	Pest Name					Canada horsewe>	Henbit	Canada horsewe>	Henbit	Canada horsewe>
	Rating Date					Nov-25-2015	Nov-25-2015	Dec-10-2015	Dec-10-2015	Apr-14-2016
	Rating Type					PERCEN	PERCEN	PERCEN	PERCEN	PERCEN
	Number of Subsamples					1	1	1	1	1
	SE Group No.					1	2	3	4	5
	Days After First/Last Applic.					15 15	15 15	30 30	30 30	156 156
	Trt-Eval Interval					15 DA-A	15 DA-A	30 DA-A	30 DA-A	156 DA-A
	ARM Action Codes					P	P	P	P	P
1	Untreated Check				101	0.0	0.0	0.0	0.0	0.0
					204	0.0	0.0	0.0	0.0	0.0
					403	0.0	0.0	0.0	0.0	0.0
					505	0.0	0.0	0.0	0.0	0.0
					Mean =	0.0	0.0	0.0	0.0	0.0
2	BRASH	2	pt/a	A	102	60.0	.	80.0	.	20.0
	SUPERB HC	0.5	% v/v	A	208	.	60.0	.	70.0	40.0
					401	70.0	.	100.0	.	30.0
					506	.	.	.	.	10.0
					Mean =	65.0	60.0	90.0	70.0	25.0
3	BRASH	2	pt/a	A	103	.	.	.	.	30.0
	DIMETRIC	4	oz/a	A	210	.	.	.	.	.
	SUPERB HC	0.5	% v/v	A	406	.	.	.	.	0.0
					504	70.0	60.0	85.0	100.0	10.0
					Mean =	70.0	60.0	85.0	100.0	13.3
4	BRASH	2	pt/a	A	104	.	.	.	.	0.0
	DIMETRIC	8	oz/a	A	203	.	.	.	.	40.0
	SUPERB HC	0.5	% v/v	A	405	.	.	.	.	0.0
					407	.	50.0	.	90.0	20.0
					Mean =	.	50.0	.	90.0	15.0
5	BRASH	2	pt/a	A	105	.	.	.	.	0.0
	AGH 15003	8	fl oz/a	A	303	.	.	.	.	20.0
	SUPERB HC	0.5	% v/v	A	306	70.0	60.0	100.0	100.0	20.0
					508	70.0	30.0	100.0	100.0	20.0
					Mean =	70.0	45.0	100.0	100.0	15.0
6	BRASH	2	pt/a	A	106	.	.	.	.	40.0
	AGH 15003	16	fl oz/a	A	205	.	.	.	.	20.0
	SUPERB HC	0.5	% v/v	A	307	.	.	.	.	20.0
					409	.	60.0	.	100.0	30.0
					Mean =	.	60.0	.	100.0	27.5
7	SHREDDER LV-6	1.33	pt/a	A	107	70.0	40.0	100.0	40.0	30.0
	SUPERB HC	0.5	% v/v	A	209	.	60.0	.	80.0	40.0
					404	.	.	.	.	0.0
					502	.	60.0	75.0	100.0	40.0
					Mean =	70.0	53.3	87.5	73.3	27.5
8	SHREDDER LV-6	1.33	pt/a	A	108	90.0	80.0	90.0	80.0	50.0
	DIMETRIC	4	oz/a	A	304	.	.	.	.	30.0
	SUPERB HC	0.5	% v/v	A	402	.	.	.	.	50.0
					501	80.0	70.0	80.0	100.0	40.0
					Mean =	85.0	75.0	85.0	90.0	42.5
9	SHREDDER LV-6	1.33	pt/a	A	109	.	40.0	.	40.0	0.0
	DIMETRIC	8	oz/a	A	207	.	.	.	.	50.0
	SUPERB HC	0.5	% v/v	A	308	.	.	.	.	20.0
					507	.	10.0	.	90.0	10.0
					Mean =	.	25.0	.	65.0	20.0
10	SHREDDER LV-6	1.33	pt/a	A	110	.	60.0	.	50.0	30.0
	AGH 15003	8	fl oz/a	A	302	60.0	.	60.0	.	60.0
	SUPERB HC	0.5	% v/v	A	310	.	40.0	.	50.0	30.0
					408	.	.	.	.	30.0
					Mean =	60.0	50.0	60.0	50.0	37.5

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Project ID: Study Director: Dustin Johnson
Sponsor Contact: Winfield-George Watters

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	1	2	3	4	5
	Pest Type					W Weed	W Weed	W Weed	W Weed	W Weed
	Pest Code					ERICA	LAMAM	ERICA	LAMAM	ERICA
	Pest Scientific Name					Conyza canaden>	Lamium amplexi>	Conyza canaden>	Lamium amplexi>	Conyza canaden>
	Pest Name					Canada horsewe>	Henbit	Canada horsewe>	Henbit	Canada horsewe>
	Rating Date					Nov-25-2015	Nov-25-2015	Dec-10-2015	Dec-10-2015	Apr-14-2016
	Rating Type					PERCEN	PERCEN	PERCEN	PERCEN	PERCEN
	Number of Subsamples					1	1	1	1	1
	SE Group No.					1	2	3	4	5
	Days After First/Last Applic.					15 15	15 15	30 30	30 30	156 156
	Trt-Eval Interval					15 DA-A	15 DA-A	30 DA-A	30 DA-A	156 DA-A
	ARM Action Codes					P	P	P	P	P
11	SHREDDER LV-6	1.33	pt/a	A	201	.	.	.	.	50.0
	AGH 15003	16	fl oz/a	A	206	.	.	.	.	30.0
	SUPERB HC	0.5	% v/v	A	305	.	50.0	.	60.0	20.0
					503	80.0	70.0	85.0	100.0	20.0
					Mean =	80.0	60.0	85.0	80.0	30.0
12	Untreated Check				202	0.0	0.0	0.0	0.0	0.0
					301	0.0	0.0	0.0	0.0	0.0
					309	0.0	0.0	0.0	0.0	0.0
					410	0.0	0.0	0.0	0.0	0.0
					Mean =	0.0	0.0	0.0	0.0	0.0

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Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	6	7	8	9	10
	Pest Type					W Weed	W Weed	W Weed	W Weed	W Weed
	Pest Code					LAMAM	THLAR	ERICA	LAMAM	THLAR
	Pest Scientific Name					Lamium amplexi>	Thlaspi arvense	Conyza canaden>	Lamium amplexi>	Thlaspi arvense
	Pest Name					Henbit	Field Pennycre>	Canada horsewe>	Henbit	Fanweed
	Rating Date					Apr-14-2016	Apr-14-2016	May-6-2016	May-6-2016	May-6-2016
	Rating Type					PERCEN	PERCEN	PERCEN	PERCEN	PERCEN
	Number of Subsamples					1	1	1	1	1
	SE Group No.					6	7	8	9	10
	Days After First/Last Applic.					156 156	156 156	178 178	178 178	178 178
	Trt-Eval Interval					156 DA-A	156 DA-A	178 DA-A	178 DA-A	178 DA-A
	ARM Action Codes					P	P	P	P	P
1	Untreated Check				101	0.0	0.0	0.0	0.0	0.0
					204	0.0	0.0	0.0	0.0	0.0
					403	0.0	0.0	0.0	0.0	0.0
					505	0.0	0.0	0.0	0.0	0.0
					Mean =	0.0	0.0	0.0	0.0	0.0
2	BRASH	2	pt/a	A	102	95.0	90.0	0.0	75.0	60.0
	SUPERB HC	0.5	% v/v	A	208	80.0	.	0.0	90.0	.
					401	80.0	.	0.0	95.0	.
					506	75.0	80.0	0.0	70.0	95.0
					Mean =	82.5	85.0	0.0	82.5	77.5
3	BRASH	2	pt/a	A	103	90.0	95.0	0.0	85.0	40.0
	DIMETRIC	4	oz/a	A	210	.	.	70.0	.	.
	SUPERB HC	0.5	% v/v	A	406	30.0	.	0.0	60.0	.
					504	20.0	0.0	0.0	95.0	.
					Mean =	46.7	47.5	17.5	80.0	40.0
4	BRASH	2	pt/a	A	104	95.0	50.0	0.0	95.0	0.0
	DIMETRIC	8	oz/a	A	203	90.0	90.0	0.0	95.0	100.0
	SUPERB HC	0.5	% v/v	A	405	0.0	.	20.0	20.0	.
					407	20.0	.	0.0	60.0	.
					Mean =	51.3	70.0	5.0	67.5	50.0
5	BRASH	2	pt/a	A	105	80.0	90.0	0.0	50.0	40.0
	AGH 15003	8	fl oz/a	A	303	60.0	.	0.0	60.0	.
	SUPERB HC	0.5	% v/v	A	306	70.0	80.0	0.0	80.0	100.0
					508	75.0	80.0	0.0	80.0	80.0
					Mean =	71.3	83.3	0.0	67.5	73.3
6	BRASH	2	pt/a	A	106	95.0	80.0	0.0	80.0	90.0
	AGH 15003	16	fl oz/a	A	205	70.0	.	0.0	95.0	.
	SUPERB HC	0.5	% v/v	A	307	70.0	.	10.0	90.0	.
					409	70.0	50.0	0.0	95.0	.
					Mean =	76.3	65.0	2.5	90.0	90.0
7	SHREDDER LV-6	1.33	pt/a	A	107	50.0	50.0	0.0	60.0	80.0
	SUPERB HC	0.5	% v/v	A	209	.	.	0.0	.	.
					404	70.0	.	0.0	80.0	.
					502	80.0	.	0.0	95.0	.
					Mean =	66.7	50.0	0.0	78.3	80.0
8	SHREDDER LV-6	1.33	pt/a	A	108	75.0	75.0	0.0	80.0	60.0
	DIMETRIC	4	oz/a	A	304	70.0	80.0	0.0	40.0	80.0
	SUPERB HC	0.5	% v/v	A	402	80.0	.	0.0	95.0	.
					501	80.0	.	0.0	95.0	.
					Mean =	76.3	77.5	0.0	77.5	70.0
9	SHREDDER LV-6	1.33	pt/a	A	109	80.0	10.0	0.0	70.0	0.0
	DIMETRIC	8	oz/a	A	207	80.0	.	0.0	90.0	.
	SUPERB HC	0.5	% v/v	A	308	70.0	.	10.0	100.0	.
					507	85.0	80.0	0.0	95.0	100.0
					Mean =	78.8	45.0	2.5	88.8	50.0
10	SHREDDER LV-6	1.33	pt/a	A	110	90.0	90.0	0.0	80.0	100.0
	AGH 15003	8	fl oz/a	A	302	90.0	90.0	0.0	90.0	90.0
	SUPERB HC	0.5	% v/v	A	310	80.0	60.0	0.0	90.0	100.0
					408	30.0	.	0.0	60.0	.
					Mean =	72.5	80.0	0.0	80.0	96.7

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Pest Code					LAMAM	THLAR	ERICA	LAMAM	THLAR
Pest Scientific Name					Lamium amplexi>	Thlaspi arvense	Conyza canaden>	Lamium amplexi>	Thlaspi arvense
Pest Name					Henbit	Field Pennycre>	Canada horsewe>	Henbit	Fanweed
Rating Date					Apr-14-2016	Apr-14-2016	May-6-2016	May-6-2016	May-6-2016
Rating Type					PERCEN	PERCEN	PERCEN	PERCEN	PERCEN
Number of Subsamples					1	1	1	1	1
SE Group No.					6	7	8	9	10
Days After First/Last Applic.					156 156	156 156	178 178	178 178	178 178
Trt-Eval Interval					156 DA-A	156 DA-A	178 DA-A	178 DA-A	178 DA-A
ARM Action Codes					P	P	P	P	P
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	Plot	6	7	8	9	10
11	SHREDDER LV-6	1.33	pt/a	A	201	95.0	90.0	0.0	99.0	98.0
	AGH 15003	16	fl oz/a	A	206	80.0	.	0.0	90.0	.
	SUPERB HC	0.5	% v/v	A	305	60.0	60.0	0.0	60.0	60.0
					503	80.0	.	0.0	95.0	.
					Mean =	78.8	75.0	0.0	86.0	79.0
12	Untreated Check				202	0.0	0.0	0.0	0.0	0.0
					301	0.0	0.0	0.0	0.0	0.0
					309	0.0	0.0	0.0	0.0	0.0
					410	0.0	0.0	0.0	0.0	0.0
					Mean =	0.0	0.0	0.0	0.0	0.0

Purdue Weed Science

Looking at Fall Applied Treatments for Marestail & other winter annuals

Trial ID: 15F-CORT-FALLOW-02 Location: CORTLAND Trial Year: 2015
Protocol ID: Investigator: Dr. Bill Johnson
Project ID: Study Director: Dustin Johnson
Sponsor Contact: Winfield-George Watters

Pest Type
W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop
Pest Code
ERICA, Conyza canadensis, = ERICA, Conyza canadensis,
LAMAM, Lamium amplexicaule, = US
THLAR, Thlaspi arvense, = US
Rating Type
PERCEN = percent
ARM Action Codes
P = Rating scale of 0 to 100 (e.g. % control or injury)

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	2	3	4	5
	Pest Type				W Weed	W Weed	W Weed	W Weed	W Weed
	Pest Code				ERICA	LAMAM	ERICA	LAMAM	ERICA
	Pest Scientific Name				Conyza canaden>	Lamium amplexi>	Conyza canaden>	Lamium amplexi>	Conyza canaden>
	Pest Name				Canada horsewe>	Henbit	Canada horsewe>	Henbit	Canada horsewe>
	Rating Date				Nov-25-2015	Nov-25-2015	Dec-10-2015	Dec-10-2015	Apr-14-2016
	Rating Type				PERCEN	PERCEN	PERCEN	PERCEN	PERCEN
	Number of Subsamples				1	1	1	1	1
	SE Group No.				1	2	3	4	5
	Days After First/Last Applic.				15 15	15 15	30 30	30 30	156 156
	Trt-Eval Interval				15 DA-A	15 DA-A	30 DA-A	30 DA-A	156 DA-A
	ARM Action Codes				P	P	P	P	P
1	Untreated Check				0.0 d	0.0 b	0.0 c	0.0 b	0.0 b
2	BRASH	2	pt/a	A	65.0 bc	60.0 a	90.0 ab	70.0 a	25.0 ab
	SUPERB HC	0.5	% v/v	A					
3	BRASH	2	pt/a	A	70.0 abc	60.0 a	85.0 ab	100.0 a	13.3 ab
	DIMETRIC	4	oz/a	A					
	SUPERB HC	0.5	% v/v	A					
4	BRASH	2	pt/a	A		50.0 a		90.0 a	15.0 ab
	DIMETRIC	8	oz/a	A					
	SUPERB HC	0.5	% v/v	A					
5	BRASH	2	pt/a	A	70.0 abc	45.0 a	100.0 a	100.0 a	15.0 ab
	AGH 15003	8	fl oz/a	A					
	SUPERB HC	0.5	% v/v	A					
6	BRASH	2	pt/a	A		60.0 a		100.0 a	27.5 ab
	AGH 15003	16	fl oz/a	A					
	SUPERB HC	0.5	% v/v	A					
7	SHREDDER LV-6	1.33	pt/a	A	70.0 abc	53.3 a	87.5 ab	73.3 a	27.5 ab
	SUPERB HC	0.5	% v/v	A					
8	SHREDDER LV-6	1.33	pt/a	A	85.0 a	75.0 a	85.0 ab	90.0 a	42.5 a
	DIMETRIC	4	oz/a	A					
	SUPERB HC	0.5	% v/v	A					
9	SHREDDER LV-6	1.33	pt/a	A		25.0 ab		65.0 a	20.0 ab
	DIMETRIC	8	oz/a	A					
	SUPERB HC	0.5	% v/v	A					
10	SHREDDER LV-6	1.33	pt/a	A	60.0 c	50.0 a	60.0 b	50.0 a	37.5 a
	AGH 15003	8	fl oz/a	A					
	SUPERB HC	0.5	% v/v	A					
11	SHREDDER LV-6	1.33	pt/a	A	80.0 ab	60.0 a	85.0 ab	80.0 a	30.0 ab
	AGH 15003	16	fl oz/a	A					
	SUPERB HC	0.5	% v/v	A					
12	Untreated Check				0.0 d	0.0 b	0.0 c	0.0 b	0.0 b
	LSD P=.05				6.54	19.17	13.41	22.78	18.93
	Standard Deviation				3.78	12.17	8.02	14.46	13.14
	CV				18.9	64.9	30.23	51.4	63.1
	Bartlett's X2				0.0	1.378	0.695	0.71	4.173
	P(Bartlett's X2)				.	0.927	0.706	0.871	0.90
	Skewness				-0.1364	-0.2385	-0.2091	-0.2713	0.244
	Kurtosis				-2.0635	-1.6286	-2.0152	-1.6683	-0.989
	Replicate F				0.333	0.305	0.582	3.233	2.194
	Replicate Prob(F)				0.8022	0.8209	0.6454	0.0692	0.1079
	Treatment F				207.375	11.162	69.991	16.827	4.028
	Treatment Prob(F)				0.0001	0.0003	0.0001	0.0001	0.0010

Purdue Weed Science

Looking at Fall Applied Treatments for Marestail & other winter annuals

Trial ID: 15F-CORT-FALLOW-02 Location: CORTLAND Trial Year: 2015
Protocol ID: Investigator: Dr. Bill Johnson
Project ID: Study Director: Dustin Johnson
Sponsor Contact: Winfield-George Watters

Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	6	7	8	9	10
	Pest Type				W Weed	W Weed	W Weed	W Weed	W Weed
	Pest Code				LAMAM	THLAR	ERICA	LAMAM	THLAR
	Pest Scientific Name				Lamium amplexi>	Thlaspi arvense	Conyza canaden>	Lamium amplexi>	Thlaspi arvense
	Pest Name				Henbit	Field Pennycre>	Canada horsewe>	Henbit	Fanweed
	Rating Date				Apr-14-2016	Apr-14-2016	May-6-2016	May-6-2016	May-6-2016
	Rating Type				PERCEN	PERCEN	PERCEN	PERCEN	PERCEN
	Number of Subsamples				1	1	1	1	1
	SE Group No.				6	7	8	9	10
	Days After First/Last Applic.				156 156	156 156	178 178	178 178	178 178
	Trt-Eval Interval				156 DA-A	156 DA-A	178 DA-A	178 DA-A	178 DA-A
	ARM Action Codes				P	P	P	P	P
1	Untreated Check				0.0 b	0.0 -	0.0 -	0.0 b	0.0 -
2	BRASH	2	pt/a	A	82.5 a	85.0 -	0.0 -	82.5 a	77.5 -
	SUPERB HC	0.5	% v/v	A					
3	BRASH	2	pt/a	A	46.7 a	47.5 -	17.5 -	80.0 a	40.0 -
	DIMETRIC	4	oz/a	A					
	SUPERB HC	0.5	% v/v	A					
4	BRASH	2	pt/a	A	51.3 a	70.0 -	5.0 -	67.5 a	50.0 -
	DIMETRIC	8	oz/a	A					
	SUPERB HC	0.5	% v/v	A					
5	BRASH	2	pt/a	A	71.3 a	83.3 -	0.0 -	67.5 a	73.3 -
	AGH 15003	8	fl oz/a	A					
	SUPERB HC	0.5	% v/v	A					
6	BRASH	2	pt/a	A	76.3 a	65.0 -	2.5 -	90.0 a	90.0 -
	AGH 15003	16	fl oz/a	A					
	SUPERB HC	0.5	% v/v	A					
7	SHREDDER LV-6	1.33	pt/a	A	66.7 a	50.0 -	0.0 -	78.3 a	80.0 -
	SUPERB HC	0.5	% v/v	A					
8	SHREDDER LV-6	1.33	pt/a	A	76.3 a	77.5 -	0.0 -	77.5 a	70.0 -
	DIMETRIC	4	oz/a	A					
	SUPERB HC	0.5	% v/v	A					
9	SHREDDER LV-6	1.33	pt/a	A	78.8 a	45.0 -	2.5 -	88.8 a	50.0 -
	DIMETRIC	8	oz/a	A					
	SUPERB HC	0.5	% v/v	A					
10	SHREDDER LV-6	1.33	pt/a	A	72.5 a	80.0 -	0.0 -	80.0 a	96.7 -
	AGH 15003	8	fl oz/a	A					
	SUPERB HC	0.5	% v/v	A					
11	SHREDDER LV-6	1.33	pt/a	A	78.8 a	75.0 -	0.0 -	86.0 a	79.0 -
	AGH 15003	16	fl oz/a	A					
	SUPERB HC	0.5	% v/v	A					
12	Untreated Check				0.0 b	0.0 -	0.0 -	0.0 b	0.0 -
	LSD P=.05				27.66	37.04	15.51	26.10	43.21
	Standard Deviation				19.18	24.43	10.78	18.10	28.05
	CV				34.22	79.76	470.43	28.64	98.06
	Bartlett's X2				26.186	11.697	15.094	9.345	8.4
	P(Bartlett's X2)				0.002*	0.165	0.002*	0.406	0.21
	Skewness				-0.8726*	-0.411	5.9526*	-1.0754*	-0.1751
	Kurtosis				-0.8562	-1.6706	37.7583*	-0.3058	-1.8056*
	Replicate F				2.851	0.581	0.831	0.276	1.706
	Replicate Prob(F)				0.0534	0.6374	0.4867	0.8420	0.2187
	Treatment F				9.331	4.959	0.878	12.289	4.014
	Treatment Prob(F)				0.0001	0.0032	0.5693	0.0001	0.0122

Purdue Weed Science

Looking at Fall Applied Treatments for Marestail & other winter annuals

Trial ID: 15F-CORT-FALLOW-02 Location: CORTLAND Trial Year: 2015
Protocol ID: Investigator: Dr. Bill Johnson
Project ID: Study Director: Dustin Johnson
Sponsor Contact: Winfield-George Watters

Pest Type
W, Weed, G-BYRW7, G-WedStg = Weed or volunteer crop
Pest Code
ERICA, Conyza canadensis, = ERICA, Conyza canadensis,
LAMAM, Lamium amplexicaule, = US
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