

LSU Northeast Research Station

Evaluation of tankmix partners for glyphosate for broader spectrum burndown weed control.

Trial ID: SJ07B007 Protocol ID: SJ07B007

Location: Study Director:
Investigator: Bill Williams

General Trial Information

Investigator: Bill Williams

Pest Description

Pest 1 Type: W **Code:** OEOLA *Oenothera laciniata*
Common Name: Cutleaf eveningprimrose

Pest 2 Type: W **Code:** POAAN *Poa annua*
Common Name: Annual bluegrass

Pest 3 Type: W **Code:** COPDI *Coronopus didymus*
Common Name: Twincross

Pest 4 Type: W **Code:** STEME *Stellaria media*
Common Name: Common chickweed

Pest 5 Type: W **Code:** VENSP *Vernonia stipulacea*
Common Name: Speedwell

Pest 6 Type: W **Code:** TRFSE *Trifolium semipilosum*
Common Name: Kenya white clover

Site and Design

Plot Width, Unit: 6.67 FT **Site Type:** FIELD
Plot Length, Unit: 15 FT **Tillage Type:** CONVENTIONAL-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Soil Description

Description Name: OAC
% Sand: 20 **% OM:** 1.6 **Texture:** Silty Clay Loam
% Silt: 54 **pH:** 5.9 **Soil Name:** Mhoon
% Clay: 26 **CEC:** 12.4 **Fert. Level:** EXCELLENT

Moisture and Weather Conditions

Overall Moisture Conditions: Dry
Closest Weather Station: Northeast Research Station

	Date	Amount	Unit
1.	21/Feb/07	0.01	IN
2.	24/Feb/07	0.65	IN
3.	25/Feb/07	0.01	IN
4.	1/Mar/07	1.17	IN
5.	27/Mar/07	0.01	IN
6.	31/Mar/07	0.63	IN
7.	1/Apr/07	0.01	IN
8.	2/Apr/07	0.01	IN
9.	3/Apr/07	0.09	IN

10.4/Apr/07 0.19 IN
 11.7/Apr/07 0.14 IN
 12.8/Apr/07 0.1 IN
 13.10/Apr/07 1.01 IN
 14.14/Apr/07 0.39 IN
 15.18/Apr/07 0.11 IN
 16.25/Apr/07 1.37 IN
 17.26/Apr/07 0.41 IN
 18.2/May/07 0.04 IN
 19.3/May/07 1.24 IN
 20.15/May/07 0.02 IN
 21.16/May/07 0.01 IN
 22.17/May/07 0.01 IN
 23.3/Jun/07 0.02 IN
 24.16/Jun/07 0.01 IN
 25.18/Jun/07 0.02 IN
 26.19/Jun/07 0.4 IN
 27.2/Jul/07 0.3 IN
 28.3/Jul/07 0.06 IN
 29.4/Jul/07 1.14 IN
 30.5/Jul/07 0.31 IN
 31.6/Jul/07 0.27 IN
 32.7/Jul/07 1.39 IN
 33.9/Jul/07 0.36 IN
 34.10/Jul/07 0.01 IN
 35.11/Jul/07 0.27 IN
 36.13/Jul/07 0.3 IN
 37.14/Jul/07 1.96 IN
 38.15/Jul/07 2.8 IN
 39.17/Jul/07 1.56 IN
 40.20/Jul/07 0.93 IN
 41.21/Jul/07 0.1 IN
 42.22/Jul/07 0.01 IN
 43.30/Jul/07 2.35 IN

Application Description

A

Application Date: 7/Mar/07
Time of Day: 10:00
Application Method: SPRAY
Application Timing: E. March
Application Placement: BROFOL
Applied By: BW
Air Temperature, Unit: 57 F
% Relative Humidity: 61
Wind Velocity, Unit: 6 MPH
Wind Direction: S
Soil Temperature, Unit: 52 F
Soil Moisture: DRY
% Cloud Cover: 20

Pest Stage At Each Application

A

Pest 1 Code, Disc., Scale: OEOLA W
Stage Majority, Percent: Flower
Stage Minimum, Percent: 7"
Pest 2 Code, Disc., Scale: POAAN W
Stage Majority, Percent: Flower
Stage Minimum, Percent: 4"
Pest 3 Code, Disc., Scale: COPDI W
Stage Minimum, Percent: 6"
Stage Maximum, Percent: 8"
Pest 4 Code, Disc., Scale: STEME W

Stage Majority, Percent: Flower
Stage Minimum, Percent: 4"
Stage Maximum, Percent: 5"
Pest 5 Code, Disc., Scale: VENSF W
Stage Majority, Percent: Flower
Stage Minimum, Percent: 6"
Stage Maximum, Percent: 7"
Pest 6 Code, Disc., Scale: TRFSE W
Stage Minimum, Percent: 12"
Stage Maximum, Percent: 16"

Application Equipment

A

Appl. Equipment: Backpack
Operating Pressure, Unit: 32
Nozzle Type: Greenleaf
Nozzle Size: 11002
Nozzle Spacing, Unit: 20 "
Nozzles/Row: 2
Carrier: Water
Spray Volume, Unit: 15 GPA
Mix Size, Unit: 0.5
Propellant: CO2

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Protocol ID: SJ07B007

Location:

Study Director:

Investigator: Bill Williams

Pest Type

Pest Code

Rating Date

Trt-Eval Interval

OEOLA OEOLA OEOLA COPDI COPDI COPDI
 15/Mar/07 22/Mar/07 3/Apr/07 15/Mar/07 22/Mar/07 3/Apr/07
 8 DA-A 15 DA-A 27 DA-A 8 DA-A 15 DA-A 27 DA-A

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	1	2	3	6	7	8	
1	Glyphos Extra	1.5	PT/A	PP	30	a23	f 30	e 50	a93	a93	a
2	Glyphos Extra	1.5	PT/A	PP	30	a73	b 87	ab 50	a95	a93	a
	Clarity	8	OZ/A	PP							
3	Glyphos Extra	1.5	PT/A	PP	30	a85	a 93	a 50	a92	a93	a
	2,4-D Amine	1.5	PT/A	PP							
4	Glyphos Extra	1.5	PT/A	PP	30	a83	a 93	a 50	a93	a93	a
	Clarity	4	OZ/A	PP							
	2,4-D Amine	1.0	PT/A	PP							
5	Glyphos Extra	1.5	PT/A	PP	30	a37	e 63	d 50	a95	a93	a
	Harmony Extra	0.4	OZ WT/A	APP							
6	Glyphos Extra	1.5	PT/A	PP	30	a47	d 53	d 50	a95	a82	a
	Aim	2.0	OZ/A	PP							
7	Glyphos Extra	1.5	PT/A	PP	30	a57	c 87	ab 50	a93	a93	a
	Grandstand	0.5	PT/A	PP							
8	Glyphos Extra	1.5	PT/A	PP	30	a53	cd90	a 50	a93	a93	a
	Stinger	6	OZ/A	PP							
9	Glyphos Extra	1.5	PT/A	PP	30	a57	c 63	d 50	a90	a92	a
	Atrazine	1.0	PT/A	PP							
10	Glyphos Extra	1.5	PT/A	PP	30	a72	b 83	abc50	a95	a92	a
	Sencor 75DF	3	OZ WT/A	APP							
11	Glyphos Extra	1.5	PT/A	PP	30	a27	f 60	d 50	a93	a92	a
	Princep 4FL	1.0	PT/A	PP							
12	Glyphos Extra	1.5	PT/A	PP	30	a77	ab75	c 50	a95	a85	a
	Valor	1	OZ WT/A	APP							
13	Glyphos Extra	1.5	PT/A	PP	30	a47	d 57	d 50	a95	a85	a
	Goal 2XL	8	OZ/A	PP							
14	Glyphos Extra	1.5	PT/A	PP	30	a80	ab78	bc 50	a93	a92	a
	Direx	1.5	PT/A	PP							
LSD (P=.10)					0.0	6.0	7.5	0.0	4.6	9.4	
Standard Deviation					0.0	4.3	5.4	0.0	3.3	6.8	
CV					0.0	7.35	7.43	0.0	3.5	7.45	
Grand Mean					30.0	58.33	72.38	50.0	93.69	90.83	
Bartlett's X2					0.0	1.098	4.969	0.0	6.101	29.342	
P(Bartlett's X2)					.	1.00	0.933	.	0.528	0.006*	

Replicate F	0.000	8.786	0.268	0.000	1.715	4.455
Replicate Prob(F)	1.0000	0.0012	0.7671	1.0000	0.1997	0.0217
Treatment F	0.000	69.686	35.797	0.000	0.617	1.000
Treatment Prob(F)	1.0000	0.0001	0.0001	1.0000	0.8182	0.4786

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Pest Type

Pest Code

Rating Date

Trt-Eval Interval

OEOLA	OEOLA	OEOLA	COPDI	COPDI	COPDI
15/Mar/07	22/Mar/07	3/Apr/07	15/Mar/07	22/Mar/07	3/Apr/07
8 DA-A	15 DA-A	27 DA-A	8 DA-A	15 DA-A	27 DA-A

Trt Treatment

Rate

Growth

No. Name

Rate Unit

Stage

1

2

3

6

7

8

Means followed by same letter do not significantly differ (P=.10, Student-Newman-Keuls)

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

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Pest Type

Pest Code

Rating Date

Trt-Eval Interval

CAPBP CAPBP CAPBP STEME STEME STEME
 15/Mar/07 22/Mar/07 3/Apr/07 15/Mar/07 22/Mar/07 3/Apr/07
 8 DA-A 15 DA-A 27 DA-A 8 DA-A 15 DA-A 27 DA-A

Trt No.	Treatment Name	Rate	Rate Unit	Growth Stage	11	12	13	16	17	18	
1	Glyphos Extra	1.5	PT/A	PP	50	a93	a93	a50	a93	a93	a
2	Glyphos Extra	1.5	PT/A	PP	50	a95	a93	a50	a95	a93	a
	Clarity	8	OZ/A	PP							
3	Glyphos Extra	1.5	PT/A	PP	50	a95	a93	a50	a95	a93	a
	2,4-D Amine	1.5	PT/A	PP							
4	Glyphos Extra	1.5	PT/A	PP	50	a95	a93	a50	a95	a93	a
	Clarity	4	OZ/A	PP							
	2,4-D Amine	1.0	PT/A	PP							
5	Glyphos Extra	1.5	PT/A	PP	50	a95	a93	a50	a95	a93	a
	Harmony Extra	0.4	OZ WT/APP								
6	Glyphos Extra	1.5	PT/A	PP	50	a95	a93	a50	a95	a93	a
	Aim	2.0	OZ/A	PP							
7	Glyphos Extra	1.5	PT/A	PP	50	a95	a93	a50	a95	a93	a
	Grandstand	0.5	PT/A	PP							
8	Glyphos Extra	1.5	PT/A	PP	50	a95	a93	a50	a95	a93	a
	Stinger	6	OZ/A	PP							
9	Glyphos Extra	1.5	PT/A	PP	50	a95	a92	a50	a95	a92	a
	Atrazine	1.0	PT/A	PP							
10	Glyphos Extra	1.5	PT/A	PP	50	a95	a92	a50	a95	a92	a
	Sencor 75DF	3	OZ WT/APP								
11	Glyphos Extra	1.5	PT/A	PP	50	a95	a92	a50	a95	a92	a
	Princep 4FL	1.0	PT/A	PP							
12	Glyphos Extra	1.5	PT/A	PP	50	a95	a93	a50	a95	a93	a
	Valor	1	OZ WT/APP								
13	Glyphos Extra	1.5	PT/A	PP	50	a95	a93	a50	a95	a93	a
	Goal 2XL	8	OZ/A	PP							
14	Glyphos Extra	1.5	PT/A	PP	50	a95	a92	a50	a95	a92	a
	Direx	1.5	PT/A	PP							
LSD (P=.10)					0.0	1.1	1.9	0.0	1.1	1.9	
Standard Deviation					0.0	0.8	1.4	0.0	0.8	1.4	
CV					0.0	0.81	1.46	0.0	0.81	1.46	
Grand Mean					50.0	94.88	92.86	50.0	94.88	92.86	
Bartlett's X2					0.0	0.0	0.0	0.0	0.0	0.0	
P(Bartlett's X2)					.	.	1.00	.	.	1.00	
Replicate F					0.000	1.000	50.700	0.000	1.000	50.700	
Replicate Prob(F)					1.0000	0.3816	0.0001	1.0000	0.3816	0.0001	
Treatment F					0.000	1.000	1.000	0.000	1.000	1.000	
Treatment Prob(F)					1.0000	0.4786	0.4786	1.0000	0.4786	0.4786	

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Rating Date

Trt-Eval Interval

POAAN POAAN POAAN

15/Mar/07 22/Mar/07 3/Apr/07

8 DA-A 15 DA-A 27 DA-A

Trt No.	Treatment Name	Rate		Growth Stage	Growth			
		Rate	Unit		21	22	23	
1	Glyphos Extra	1.5	PT/A	PP	70	a93	a93	a
2	Glyphos Extra	1.5	PT/A	PP	70	a95	a93	a
	Clarity	8	OZ/A	PP				
3	Glyphos Extra	1.5	PT/A	PP	70	a95	a93	a
	2,4-D Amine	1.5	PT/A	PP				
4	Glyphos Extra	1.5	PT/A	PP	70	a95	a93	a
	Clarity	4	OZ/A	PP				
	2,4-D Amine	1.0	PT/A	PP				
5	Glyphos Extra	1.5	PT/A	PP	70	a95	a93	a
	Harmony Extra	0.4	OZ WT/A	PP				
6	Glyphos Extra	1.5	PT/A	PP	70	a95	a93	a
	Aim	2.0	OZ/A	PP				
7	Glyphos Extra	1.5	PT/A	PP	70	a95	a93	a
	Grandstand	0.5	PT/A	PP				
8	Glyphos Extra	1.5	PT/A	PP	70	a95	a93	a
	Stinger	6	OZ/A	PP				
9	Glyphos Extra	1.5	PT/A	PP	70	a95	a92	a
	Atrazine	1.0	PT/A	PP				
10	Glyphos Extra	1.5	PT/A	PP	70	a95	a92	a
	Sencor 75DF	3	OZ WT/A	PP				
11	Glyphos Extra	1.5	PT/A	PP	70	a95	a92	a
	Princep 4FL	1.0	PT/A	PP				
12	Glyphos Extra	1.5	PT/A	PP	70	a95	a93	a
	Valor	1	OZ WT/A	PP				
13	Glyphos Extra	1.5	PT/A	PP	70	a95	a93	a
	Goal 2XL	8	OZ/A	PP				
14	Glyphos Extra	1.5	PT/A	PP	70	a95	a92	a
	Direx	1.5	PT/A	PP				
LSD (P=.10)					0.0	1.1	1.9	
Standard Deviation					0.0	0.8	1.4	
CV					0.0	0.81	1.46	
Grand Mean					70.0	94.88	92.86	
Bartlett's X2					0.0	0.0	0.0	
P(Bartlett's X2)					.	.	1.00	
Replicate F					0.000	1.000	50.700	
Replicate Prob(F)					1.0000	0.3816	0.0001	
Treatment F					0.000	1.000	1.000	
Treatment Prob(F)					1.0000	0.4786	0.4786	

Means followed by same letter do not significantly differ (P=.10, Student-Newman-Keuls)

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