

LSU Northeast Research Station

Amazon sprangletop control in Clearfield rice.

Trial ID: SJ06R031
Location:

Protocol ID:
Study Director:
Investigator: Bill Williams

General Trial Information

Investigator: Bill Williams

Objectives:

The objective of this study is to evaluate herbicides that can be tank mixed with Newpath to control annual grasses escaping control from earlier Newpath applications. Herbicides other than Newpath were used at select timings to ensure the presence of certain annual grasses.

Crop Description

Crop 1: ORYSA Oryza sativa Common rice
Variety: CL 161
BBCH Scale: BRIC **Planting Date:** 4/25/06
Planting Method: DRILLED **Rate, Unit:** 100 LB/A
Depth, Unit: 1 IN
Row Spacing, Unit: 8 IN
Seed Bed: MEDIUM
Soil Moisture: DRY **Emergence Date:** 5/6/06
Harvested Width, Unit: 5 FT **Harvest Equipment:** Small plot combine
Harvested Length, Unit: 12 FT
% Standard Moisture: 12.0

Pest Description

Pest 1 Type: W **Code:** ECHCG **Echinochloa crus-galli**
Common Name: Common barnyardgrass
Pest 2 Type: W **Code:** LEFPA **Leptochloa panicoides**
Common Name: Amazon sprangletop
Pest 3 Type: W **Code:** SEBEX **Sesbania exaltata**
Common Name: Hemp sesbania

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

Maintenance

No.	Date	Maintenance Treatment Name	Rate	Rate Unit
1.	6/7/06	Prilled Urea	300	lb/A

Soil Description

Description Name: Bay 3 - North End
% Sand: 26 **% OM:** 2.23 **Texture:** Clay
% Silt: 32 **pH:** 7.98 **Soil Name:** Sharkey
% Clay: 42 **CEC:** 21.9 **Fert. Level:** Excellent

Moisture Conditions

Overall Moisture Conditions: Dry
Closest Weather Station: Northeast Research Station **Distance:** 0.25 **Unit:** MI

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	Date	Time	Amount	Unit	Type	Interval	Unit
1.	4/26/06	5:00 am	0.62	In	Rain	7	Hou
2.	4/26/06	10:00 p				3	Hou
3.	4/27/06	8:00 am	0.15	In	Rain	1	Hou
4.	4/30/06	8:30 am	1.19	In	Rain	1	Hou
5.	5/5/06	8:00 pm	1.49	In	Rain	1	Hou
6.	5/5/06	4:00 am				4	Hou
7.	5/6/06	8:00 am	0.31	In	Rain	3.5	Hou
8.	5/7/06	11:00 a	1.06	In	Rain	4	Hou
9.	5/7/06	12:00 p				2	Hou
10.	5/9/06	7:00 pm	0.39	In	Rain	0.75	Hou
11.	5/11/06	7:15 pm	0.2	In	Rain	0.5	Hou
12.	5/15/06	10:00 a	0.21	In	Rain	1	Hou
13.	5/19/06				Flush		
14.	5/27/06				Flush		
15.	5/28/06	5:00 pm	0.18	In	Rain	1	Hou
16.	5/29/06	2:30 pm	0.46	In	Rain	2.5	Hou
17.	5/30/06	1:30 pm	0.79	In	Rain	3	Hou
18.	6/2/06	6:30 pm	0.03	In	Rain	1	Hou
19.	6/7/06				Fertilize		
20.	6/7/06				Perment Flood		
21.	6/17/06	7:00 pm	0.03	In	Rain	1	Hou
22.	6/18/06	10:00 p	0.01	In	Rain	1	Hou
23.	6/19/06	10:00 p	0.05	In	Rain	1	Hou
24.	6/20/06	2:30 pm	0.19	In	Rain	1	Hou
25.	6/24/06	9:00 pm	0.07	In	Rain	1	Hou
26.	7/3/06	1:00 pm	0.07	In	Rain	0.5	Hou
27.	7/4/06	3:00 pm	0.69	In	Rain	1.5	Hou
28.	7/4/06	7:00 am				1	Hou
29.	7/5/06	12:00 a	1.25	In	Rain	0.75	Hou
30.	7/5/06	6:00pm				1.5	Hou
31.	7/6/06	6:00 pm	0.35	In	Rain	3.5	Hou
32.	7/11/06	2:00 pm	0.45	In	Rain	2	Hou

Application Description

	A	B	C	D
Application Date:	5/3/06	5/9/06	5/27/06	6/15/06
Time of Day:	10:00	11:00	6:30am	11:00
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	DPRE/PRE	VEPOST	4-5 LF	POTF
Application Placement:	BROSIOI	BROFOL	BROFOL	BROFOL
Air Temperature, Unit:	85 F	82 F	74 F	92 F
% Relative Humidity:	63	88	86	48
Wind Velocity, Unit:	3 MPH	8 MPH	1 MPH	3 MPH
Wind Direction:	S	S	SE	S
Soil Temperature, Unit:	82 F	76 F	79 F	94 F
Soil Moisture:	Damp	Wet	DRY	DAMP
% Cloud Cover:	20	80	0	0

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Crop Stage At Each Application

	A	B	C	D
Crop 1 Code, BBCH Scale:	ORYSA BRIC	ORYSA BRIC	ORYSA BRIC	ORYSA BRIC
Stage Scale Used:	BBCH	BBCH	BBCH	BBCH
Stage Majority, Percent:	N/A	2 LF 100	4-5 LF 100	5LF 1-2T 100
Height, Unit:		3 IN	4 IN	15 IN
Height Minimum, Maximum:		3 3	4 4	15 15

Pest Stage At Each Application

	A	B	C	D
Pest 1 Code, Disc., Scale:	ECHCG W	ECHCG W	ECHCG W	ECHCG W
Stage Majority, Percent:	N/A	1 LF 100	5LF 1T 100	8-11 T 100
Height, Unit:		1 IN	7 IN	16.5 IN
Height Minimum, Maximum:		1 1	6 8	16 17
Pest 2 Code, Disc., Scale:	LEFPA W	LEFPA W	LEFPA W	LEFPA W
Stage Majority, Percent:	N/A	1 LF 100	4-5 LF 100	2-4 T 100
Height, Unit:		1 IN	6 IN	14.5 IN
Height Minimum, Maximum:		1 1	5 7	14 15
Pest 3 Code, Disc., Scale:	SEBEX W	SEBEX W	SEBEX W	SEBEX W
Stage Majority, Percent:	N/A	N/A		7-8 LF 100
Height, Unit:			7 IN	10 IN
Height Minimum, Maximum:			6 8	10 10

Application Equipment

	A	B	C	D
Appl. Equipment:	Backpack	Backpack	Backpack	Backpack
Operating Pressure, Unit:	31 PSI	31 PSI	31 PSI	31 PSI
Nozzle Type:	Greenleaf	Greenleaf	Greenleaf	Greenleaf
Nozzle Size:	11002	11002	11002	11002
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN	20 IN
Nozzles/Row:	2	2	2	2
Ground Speed, Unit:	2.8 MPH	2.8 MPH	2.8 MPH	2.8 MPH
Carrier:	Water	Water	Water	Water
Spray Volume, Unit:	15 GAL/AC	15 GAL/AC	15 GAL/AC	15 GAL/AC
Propellant:	CO2	CO2	CO2	CO2

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Amazon sprangletop control in Clearfield rice.

Trial ID: SJ06R031
Location:

Protocol ID:
Study Director:
Investigator: Bill Williams

Pest Code	LEFPA	LEFPA	LEFPA	LEFPA	LEFPA	LEFPA	LEFPA	LEFPA	LEFPA	ORYSA
Crop Code										BRIC
BBCH Scale										GRAIN C
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	9/13/06
Rating Date	5/23/06	5/31/06	6/6/06	6/15/06	6/20/06	6/26/06	7/3/06	7/11/06		YIELD
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	lb/plt
Rating Unit	%	%	%	%	%	%	%	%	%	133 90
Days After First/Last Applic.	20 14	28 4	34 10	43 0	48 5	54 11	61 18	69 26	69 26	
Trt-Eval Interval	14 DA-B	22 DA-B	10 DA-C	19 DA-C	5 DA-D	11 DA-D	18 DA-D	26 DA-D	26 DA-D	
Plant-Eval Interval	28 DP-1	36 DP-1	42 DP-1	51 DP-1	56 DP-1	62 DP-1	69 DP-1	77 DP-1	77 DP-1	141 DP-1
ARM Action Codes										
Number of Decimals										
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate	Rate
No. Name	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit	Unit
1	2	3	4	5	6	7	8	9		
1 Facet	0.5 lb/a	0.0 b	0.0 c	0.0 b	0.0 b	0.0 c	0.0 c	0.0 c	0.0 c	2.23 d
2 Facet	0.5 lb/a	93.3 a	90.0 b	83.3 a	83.3 a	83.3 b	83.3 b	80.0 b	80.0 b	6.13 c
Newpath	4 oz/a									
COC	1 % v/v									
Newpath	4 oz/a									
COC	1 % v/v									
3 Facet	0.5 lb/a	95.0 a	90.0 b	90.0 a	90.0 a	93.3 a	90.0 ab	83.3 b	80.0 b	6.50 c
Newpath	4 oz/a									
Clincher	13.5 oz/a									
COC	1 % v/v									
Newpath	4 oz/a									
COC	1 % v/v									
4 Facet	0.5 lb/a	93.3 a	90.0 b	91.7 a	93.3 a	95.0 a	95.0 a	93.3 a	94.7 a	7.43 b
Newpath	4 oz/a									
COC	1 % v/v									
Newpath	4 oz/a									
Clincher	13.5 oz/a									
COC	1 % v/v									
5 Facet	0.5 lb/a	93.3 a	90.0 b	90.0 a	93.3 a	95.0 a	95.0 a	95.0 a	94.7 a	8.30 a
Newpath	4 oz/a									
Beyond	2 oz/a									
COC	1 % v/v									
Newpath	4 oz/a									
COC	1 % v/v									
6 Facet	0.5 lb/a	66.3 a	93.3 a	91.7 a	93.3 a	95.0 a	95.0 a	95.0 a	95.0 a	8.03 a
Newpath	4 oz/a									
COC	1 % v/v									
Newpath	4 oz/a									
Beyond	2 oz/a									
COC	1 % v/v									
7 Facet	0.5 lb/a	93.3 a	90.0 b	83.3 a	83.3 a	95.0 a	95.0 a	95.0 a	96.3 a	6.60 c
Newpath	4 oz/a									
COC	1 % v/v									
Newpath	4 oz/a									
COC	1 % v/v									
Clincher	15 oz/a									
COC	2.5 % v/v									
8 Facet	0.5 lb/a	93.3 a	90.0 b	83.3 a	83.3 a	95.0 a	95.0 a	95.0 a	96.3 a	6.73 c
Newpath	4 oz/a									
COC	1 % v/v									
Newpath	4 oz/a									
COC	1 % v/v									
Beyond	5 oz/a									
COC	1 % v/v									
LSD (P=.05)	30.04	1.79	6.30	9.36	3.88	6.86	3.88	3.62	0.506	
Standard Deviation	17.15	1.02	3.60	5.35	2.22	3.92	2.22	2.06	0.289	
CV	21.85	1.29	4.69	6.9	2.72	4.83	2.78	2.59	4.45	
Bartlett's X2	31.741	0.0	1.799	3.971	0.866	0.31	0.866	1.55	5.862	
P(Bartlett's X2)	0.001*	.	0.773	0.681	0.352	0.577	0.352	0.671	0.556	

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Crop Code										BRIC
BBCH Scale										GRAIN C
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	
Rating Date	5/23/06	5/31/06	6/6/06	6/15/06	6/20/06	6/26/06	7/3/06	7/11/06	7/11/06	9/13/06
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	YIELD
Rating Unit	%	%	%	%	%	%	%	%	%	lb/plt
Days After First/Last Applic.	20 14	28 4	34 10	43 0	48 5	54 11	61 18	69 26	69 26	133 90
Trt-Eval Interval	14 DA-B	22 DA-B	10 DA-C	19 DA-C	5 DA-D	11 DA-D	18 DA-D	26 DA-D	26 DA-D	
Plant-Eval Interval	28 DP-1	36 DP-1	42 DP-1	51 DP-1	56 DP-1	62 DP-1	69 DP-1	77 DP-1	77 DP-1	141 DP-1
ARM Action Codes										
Number of Decimals										
Replicate F	1.519	1.000	2.011	0.000	1.485	0.068	1.485	5.045	5.045	0.378
Replicate Prob(F)	0.2528	0.3927	0.1707	1.0000	0.2601	0.9346	0.2601	0.0224	0.0224	0.6922
Treatment F	11.189	2950.857	225.655	105.250	671.727	213.272	653.455	763.004	763.004	127.491
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

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

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Pest Code		ORYSA
Crop Code		BRIC
BBCH Scale		GRAIN C
Part Rated		9/13/06
Rating Date		YIELD
Rating Data Type		BU
Rating Unit		133 90
Days After First/Last Applic.		
Trt-Eval Interval		141 DP-1
Plant-Eval Interval		TY1
ARM Action Codes		0
Number of Decimals		
Trt No.	Treatment Name	Rate Unit
		10
1	Facet	0.5 lb/a
		34 d
2	Facet	0.5 lb/a
	Newpath	4 oz/a
	COC	1 % v/v
	Newpath	4 oz/a
	COC	1 % v/v
		92 c
3	Facet	0.5 lb/a
	Newpath	4 oz/a
	Clincher	13.5 oz/a
	COC	1 % v/v
	Newpath	4 oz/a
	COC	1 % v/v
		98 c
4	Facet	0.5 lb/a
	Newpath	4 oz/a
	COC	1 % v/v
	Newpath	4 oz/a
	Clincher	13.5 oz/a
	COC	1 % v/v
		112 b
5	Facet	0.5 lb/a
	Newpath	4 oz/a
	Beyond	2 oz/a
	COC	1 % v/v
	Newpath	4 oz/a
	COC	1 % v/v
		125 a
6	Facet	0.5 lb/a
	Newpath	4 oz/a
	COC	1 % v/v
	Newpath	4 oz/a
	Beyond	2 oz/a
	COC	1 % v/v
		121 a
7	Facet	0.5 lb/a
	Newpath	4 oz/a
	COC	1 % v/v
	Newpath	4 oz/a
	COC	1 % v/v
	Clincher	15 oz/a
	COC	2.5 % v/v
		99 c
8	Facet	0.5 lb/a
	Newpath	4 oz/a
	COC	1 % v/v
	Newpath	4 oz/a
	COC	1 % v/v
	Beyond	5 oz/a
	COC	1 % v/v
		101 c
LSD (P=.05)		7.6
Standard Deviation		4.3
CV		4.45
Bartlett's X2		5.862
P(Bartlett's X2)		0.556
Replicate F		0.380
Replicate Prob(F)		0.6905
Treatment F		127.543
Treatment Prob(F)		0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

LSU Northeast Research Station

Pest Code	
Crop Code	ORYSA
BBCH Scale	BRIC
Part Rated	GRAIN C
Rating Date	9/13/06
Rating Data Type	YIELD
Rating Unit	BU
Days After First/Last Applic.	133 90
Trt-Eval Interval	
Plant-Eval Interval	141 DP-1
ARM Action Codes	TY1
Number of Decimals	0

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

ARM Action Codes

TY1 = 15.03333*[9]