LSU Northeast Research Station

IR5878 weed control programs for drill-seeded rice.

Trial ID: SJ06R004 Protocol ID: SJ06R004
Location: Study Director: Bill Williams
Investigator: Bill Williams

General Trial Information

Study Director: Bill Williams
Investigator: Bill Williams

Crop Description

Crop 1: ORYSA Oryza sativa Common rice
Variety: CL 131
BBCH Scale: BRIC **Planting Date:** 4/24/06
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:** 5/31/06
Harvest Equipment: Small plot combine
Harvested Width, Unit: 5 FT **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

Pest 4 Type: W **Code:** CNPPA Caperonia palustris
Common Name: Texasweed

Pest 5 Type: W **Code:** CYPIR Cyperus iria
Common Name: Rice flatsedge

Pest 6 Type: W **Code:** COMDI Commelina diffusa
Common Name: Spreading dayflower

Site and Design

Plot Width, Unit: 6.67 FT **Site Type:** RICE PADDY
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.	6/27/06	Prilled urea	300	LB/A

Soil Description

Description Name: Bay 4 - North End
% Sand: 25.2 **% OM:** 2.07 **Texture:** Clay
% Silt: 32.8 **pH:** 7.87 **Soil Name:** Sharkey
% Clay: 42 **CEC:** 21.9 **Fert. Level:** Excellent

Moisture Conditions

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

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	Date	Time	Amount	Unit	Type	Interval	Unit
1.	5/26/06				Flush		
2.	5/28/06	5:00 pm	0.18	In	Rain	1	Hou
3.	5/29/06	2:30 pm	0.46	In	Rain	2.5	Hou
4.	5/30/06	1:30 pm	0.79	In	Rain	3	Hou
5.	6/2/06	6:30 pm	0.03	In	Rain	1	Hou
6.	6/5/06				Flush		
7.	6/12/06				Flush		
8.	6/17/06	7:00 pm	0.03	In	Rain	1	Hou
9.	6/18/06	10:00 p	0.01	In	Rain	1	Hou
10.	6/19/06	10:00 p	0.05	In	Rain	1	Hou
11.	6/20/06	2:30 pm	0.19	In	Rain	1	Hou
12.	6/24/06	9:00 pm	0.07	In	Rain	1	Hou
13.	6/27/06				Fertilizer		
14.	6/28/06				Permanent Flood		
15.	7/3/06	1:00 pm	0.07	In	Rain	0.5	Hou
16.	7/4/06	3:00 pm	0.69	In	Rain	1.5	Hou
17.	7/4/06	7:00 am				1	Hou
18.	7/5/06	12:00 a	1.25	In	Rain	0.75	Hou
19.	7/5/06	6:00pm				1.5	Hou
20.	7/6/06	6:00 pm	0.35	In	Rain	3.5	Hou
21.	7/11/06	2:00 pm	0.45	In	Rain	2	Hou

Application Description

	A	B	C	D
Application Date:	5/25/06	6/7/06	6/16/06	7/7/06
Time of Day:	8:30	2:00	10:00	11:00
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	1 LF	MPOST	PRE/POFL
Application Placement:	BANSOI	BANFOL	BANFOL	BANFOL
Air Temperature, Unit:	72 F	97 F	85 F	84 F
% Relative Humidity:	68	46	74	67
Wind Velocity, Unit:	3 MPH	2 MPH	4 MPH	3 MPH
Wind Direction:	N	N	S	S
Soil Temperature, Unit:	81 F	91 F	88 F	83 F
Soil Moisture:	DRY	WET	DAMP	WET
% Cloud Cover:	30	0	70	30

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	3 LF 100	2-3 TILL 100
Height, Unit:		3 IN	5.5 IN	17 IN
Height Minimum, Maximum:		3 3	5 6	16 18

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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	3-4 LF 100	3-4 LF 100	1-2 T 100
Height, Unit:		0.75 IN	1.5 IN	18 IN
Height Minimum, Maximum:		0.5 1	1 2	17 19
Pest 2 Code, Disc., Scale:	LEFPA W	LEFPA W	LEFPA W	LEFPA W
Stage Majority, Percent:	N/A	4 LF 100	3 100	1-2 T 100
Height, Unit:		0.75 IN	1 IN	21 IN
Height Minimum, Maximum:		0.5 1	1 1	20 22
Pest 3 Code, Disc., Scale:	SEBEX W	SEBEX W	SEBEX W	SEBEX W
Stage Majority, Percent:	N/A	1 LF 100	6-7 LF 100	
Height, Unit:		0.75 IN	3.5 IN	21 IN
Height Minimum, Maximum:		0.5 1	3 4	20 22
Pest 4 Code, Disc., Scale:	CNPPA W	CNPPA W	CNPPA W	CNPPA W
Stage Majority, Percent:	N/A	3-4 LF 100	6 LF 100	
Height, Unit:		3 IN	5 IN	8 IN
Height Minimum, Maximum:		3 3	5 5	7 9
Pest 5 Code, Disc., Scale:	CYPIR W	CYPIR W	CYPIR W	CYPIR W
Stage Majority, Percent:	N/A	3 LF 100	4 LF 100	
Height, Unit:		0.75 IN	2.5 IN	7 IN
Height Minimum, Maximum:		0.5 1	2.5 2.5	6 8
Pest 6 Code, Disc., Scale:	COMDI W	COMDI W	COMDI W	COMDI W
Stage Majority, Percent:	N/A	N/A	N/A	
Height, Unit:				7.5 IN
Height Minimum, Maximum:				7 8

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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IR5878 weed control programs for drill-seeded rice.

Trial ID: SJ06R004 Protocol ID: SJ06R004
Location: Study Director: Bill Williams
Investigator: Bill Williams

Trt No.	Treatment Name	Rate	Rate Unit	1	2	3	4	5	6	7	8
Pest Type				W Weed					W Weed		
Pest Code				ECHCG	ECHCG	ECHCG	ECHCG	ECHCG	LEFPA	LEFPA	LEFPA
Crop Code											
BBCH Scale											
Crop Name											
Part Rated				PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Date				5/31/06	6/10/06	6/22/06	6/30/06	7/21/06	6/22/06	6/30/06	7/21/06
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%	%
Days After First/Last Applic.				6 6	16 3	28 6	36 14	57 14	28 6	36 14	57 14
Trt-Eval Interval				6 DA-A	16 DA-A	6 DA-C	14 DA-C	14 DA-D	6 DA-C	14 DA-C	14 DA-D
Plant-Eval Interval				37 DP-1	47 DP-1	59 DP-1	67 DP-1	88 DP-1	59 DP-1	67 DP-1	88 DP-1
ARM Action Codes											
Number of Decimals											
1	Treated Check			95.0 a	73.3 a	71.7 bc	50.0 d	91.7 a	50.0 c	30.0 c	85.0 ab
	Command	0.3	lb ai/a								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
2	Command	0.3	lb ai/a	95.0 a	73.3 a	71.7 bc	50.0 d	90.0 ab	50.0 c	30.0 c	86.7 ab
	IR5878	0.0656	lb ai/a								
	NIS	0.25	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
3	Command	0.3	lb ai/a	95.0 a	73.3 a	95.0 a	83.3 ab	88.3 ab	95.0 a	90.0 ab	86.7 ab
	IR5878	0.0656	lb ai/a								
	Superwham	3	lb ai/a								
	COC	1	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
4	Command	0.3	lb ai/a	95.0 a	73.3 a	95.0 a	91.7 a	93.3 a	95.0 a	91.7 a	93.3 a
	IR5878	0.0656	lb ai/a								
	Superwham	4	lb ai/a								
	COC	1	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
5	IR5878	0.0656	lb ai/a	0.0 b	0.0 b	63.3 c	66.7 c	83.3 abc	0.0 d	0.0 d	0.0 d
	Facet	0.5	lb ai/a								
	COC	1.67	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
6	Newpath	0.094	lb ai/a	0.0 b	0.0 b	90.0 a	86.7 ab	86.7 ab	63.3 b	30.0 c	0.0 d
	COC	1	% v/v								
	IR5878	0.0656	lb ai/a								
	Newpath	0.0625	lb ai/a								
	COC	1	% v/v								
7	Grasp	0.0313	lb ai/a	0.0 b	0.0 b	66.7 bc	83.3 ab	85.0 ab	0.0 d	30.0 c	85.0 ab
	IR5878	0.0656	lb ai/a								
	COC	1	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
8	Command	0.3	lb ai/a	95.0 a	73.3 a	70.0 bc	80.0 b	90.0 ab	50.0 c	30.0 c	76.7 bc
	IR5878	0.0656	lb ai/a								
	Facet	0.5	lb ai/a								
	COC	1.67	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								

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Trt No.	Treatment Name	Rate	Rate Unit	1	2	3	4	5	6	7	8
Pest Type				W Weed					W Weed		
Pest Code				ECHCG	ECHCG	ECHCG	ECHCG	ECHCG	LEFPA	LEFPA	LEFPA
Crop Code											
BBCH Scale											
Crop Name											
Part Rated				PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Date				5/31/06	6/10/06	6/22/06	6/30/06	7/21/06	6/22/06	6/30/06	7/21/06
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit				%	%	%	%	%	%	%	%
Days After First/Last Applic.				6 6	16 3	28 6	36 14	57 14	28 6	36 14	57 14
Trt-Eval Interval				6 DA-A	16 DA-A	6 DA-C	14 DA-C	14 DA-D	6 DA-C	14 DA-C	14 DA-D
Plant-Eval Interval				37 DP-1	47 DP-1	59 DP-1	67 DP-1	88 DP-1	59 DP-1	67 DP-1	88 DP-1
ARM Action Codes											
Number of Decimals											
9	Command	0.3	lb ai/a	95.0 a	73.3 a	71.7 bc	50.0 d	73.3 cd	50.0 c	30.0 c	76.7 bc
	IR5878	0.0656	lb ai/a								
	Permit	0.0117	lb ai/a								
	NIS	0.25	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
10	Command	0.3	lb ai/a	95.0 a	73.3 a	71.7 bc	50.0 d	78.3 bc	50.0 c	30.0 c	76.7 bc
	IR5878	0.0656	lb ai/a								
	Permit	0.0155	lb ai/a								
	NIS	0.25	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
11	Command	0.3	lb ai/a	95.0 a	73.3 a	70.0 bc	50.0 d	83.3 abc	50.0 c	30.0 c	66.7 c
	IR5878	0.0656	lb ai/a								
	Grandstand	0.25	lb ai/a								
	COC	1	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
12	Command	0.3	lb ai/a	95.0 a	75.0 a	73.3 b	50.0 d	66.7 d	53.3 c	30.0 c	70.0 c
	IR5878	0.0656	lb ai/a								
	Aim	0.0156	lb ai/a								
	NIS	0.25	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
13	Command	0.3	lb ai/a	95.0 a	75.0 a	95.0 a	91.7 a	91.7 a	95.0 a	88.3 b	91.7 ab
	Permit	0.047	lb ai/a								
	Superwham	4	lb ai/a								
	COC	1	% v/v								
	Clincher	0.28	lb ai/a								
	COC	1	% v/v								
LSD (P=.05)				0.00	5.02	6.01	5.95	7.90	3.65	1.99	9.46
Standard Deviation				0.00	2.98	3.57	3.53	4.69	2.17	1.18	5.61
CV				0.0	5.26	4.61	5.19	5.53	4.02	2.84	8.15
Bartlett's X2				0.0	1.082	3.02	1.947	5.485	0.0	0.0	6.405
P(Bartlett's X2)				.	0.999	0.883	0.856	0.856	1.00	1.00	0.78
Replicate F				0.000	34.988	0.454	0.052	3.182	2.182	0.000	7.566
Replicate Prob(F)				1.0000	0.0001	0.6406	0.9499	0.0594	0.1347	1.0000	0.0028
Treatment F				0.000	353.193	32.613	80.918	8.467	588.114	1795.462	94.763
Treatment Prob(F)				1.0000	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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Trt No.	Treatment Name	Rate	Rate Unit	9	10	11	12	13	14	15
	Pest Type			W Weed						
	Pest Code			SEBEX	SEBEX	SEBEX	SEBEX	SEBEX		
	Crop Code								ORYSA	ORYSA
	BBCH Scale								BRIC	BRIC
	Crop Name								Common rice	Common rice
	Part Rated			PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	GRAIN C	GRAIN C
	Rating Date			5/31/06	6/10/06	6/22/06	6/30/06	7/21/06	9/20/06	9/20/06
	Rating Data Type			CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	YIELD	YIELD
	Rating Unit			%	%	%	%	%	LB/PLOT	BU
	Days After First/Last Applic.			6 6	16 3	28 6	36 14	57 14	118 75	118 75
	Trt-Eval Interval			6 DA-A	16 DA-A	6 DA-C	14 DA-C	14 DA-D		
	Plant-Eval Interval			37 DP-1	47 DP-1	59 DP-1	67 DP-1	88 DP-1	149 DP-1	149 DP-1
	ARM Action Codes									TY1
	Number of Decimals									0
1	Treated Check			0.0 a	0.0 a	0.0 d	0.0 c	0.0 b	1.57 d	23 d
	Command	0.3	lb ai/a							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
2	Command	0.3	lb ai/a	0.0 a	0.0 a	80.0 abc	85.0 b	91.7 a	0.27 e	4 e
	IR5878	0.0656	lb ai/a							
	NIS	0.25	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
3	Command	0.3	lb ai/a	0.0 a	0.0 a	95.0 a	95.0 a	93.3 a	6.07 ab	90 ab
	IR5878	0.0656	lb ai/a							
	Superwham	3	lb ai/a							
	COC	1	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
4	Command	0.3	lb ai/a	0.0 a	0.0 a	95.0 a	95.0 a	93.3 a	7.13 a	106 a
	IR5878	0.0656	lb ai/a							
	Superwham	4	lb ai/a							
	COC	1	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
5	IR5878	0.0656	lb ai/a	0.0 a	0.0 a	75.0 bc	95.0 a	93.3 a	4.20 c	62 c
	Facet	0.5	lb ai/a							
	COC	1.67	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
6	Newpath	0.094	lb ai/a	0.0 a	0.0 a	81.7 abc	93.3 a	93.3 a	6.20 ab	92 ab
	COC	1	% v/v							
	IR5878	0.0656	lb ai/a							
	Newpath	0.0625	lb ai/a							
	COC	1	% v/v							
7	Grasp	0.0313	lb ai/a	0.0 a	0.0 a	95.0 a	90.0 ab	93.3 a	6.07 ab	90 ab
	IR5878	0.0656	lb ai/a							
	COC	1	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
8	Command	0.3	lb ai/a	0.0 a	0.0 a	88.3 ab	95.0 a	93.3 a	4.90 bc	73 bc
	IR5878	0.0656	lb ai/a							
	Facet	0.5	lb ai/a							
	COC	1.67	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
9	Command	0.3	lb ai/a	0.0 a	0.0 a	90.0 ab	95.0 a	93.3 a	5.10 bc	76 bc
	IR5878	0.0656	lb ai/a							
	Permit	0.0117	lb ai/a							
	NIS	0.25	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
10	Command	0.3	lb ai/a	0.0 a	0.0 a	90.0 ab	95.0 a	93.3 a	5.13 bc	76 bc
	IR5878	0.0656	lb ai/a							
	Permit	0.0155	lb ai/a							
	NIS	0.25	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							

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Pest Type				W Weed						
Pest Code				SEBEX	SEBEX	SEBEX	SEBEX	SEBEX		
Crop Code									ORYSA	ORYSA
BBCH Scale									BRIC	BRIC
Crop Name									Common rice	Common rice
Part Rated				PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	GRAIN C	GRAIN C
Rating Date				5/31/06	6/10/06	6/22/06	6/30/06	7/21/06	9/20/06	9/20/06
Rating Data Type				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	YIELD	YIELD
Rating Unit				%	%	%	%	%	LB/PLOT	BU
Days After First/Last Applic.				6 6	16 3	28 6	36 14	57 14	118 75	118 75
Trt-Eval Interval				6 DA-A	16 DA-A	6 DA-C	14 DA-C	14 DA-D		
Plant-Eval Interval				37 DP-1	47 DP-1	59 DP-1	67 DP-1	88 DP-1	149 DP-1	149 DP-1
ARM Action Codes										TY1
Number of Decimals										0
Trt No.	Treatment Name	Rate	Rate Unit	9	10	11	12	13	14	15
11	Command	0.3	lb ai/a	0.0 a	0.0 a	71.7 c	93.3 a	93.3 a	5.07 bc	75 bc
	IR5878	0.0656	lb ai/a							
	Grandstand	0.25	lb ai/a							
	COC	1	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
12	Command	0.3	lb ai/a	0.0 a	0.0 a	95.0 a	95.0 a	93.3 a	5.07 bc	75 bc
	IR5878	0.0656	lb ai/a							
	Aim	0.0156	lb ai/a							
	NIS	0.25	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
13	Command	0.3	lb ai/a	0.0 a	0.0 a	95.0 a	95.0 a	93.3 a	6.40 ab	95 ab
	Permit	0.047	lb ai/a							
	Superwham	4	lb ai/a							
	COC	1	% v/v							
	Clincher	0.28	lb ai/a							
	COC	1	% v/v							
LSD (P=.05)				0.00	0.00	11.34	5.66	1.87	0.982	14.6
Standard Deviation				0.00	0.00	6.73	3.36	1.11	0.583	8.7
CV				0.0	0.0	8.32	3.89	1.29	12.0	12.0
Bartlett's X2				0.0	0.0	2.925	3.899	0.0	41.572	41.569
P(Bartlett's X2)				.	.	0.818	0.273	1.00	0.001*	0.001*
Replicate F				0.000	0.000	0.693	2.787	69.391	1.351	1.352
Replicate Prob(F)				1.0000	1.0000	0.5096	0.0816	0.0001	0.2779	0.2778
Treatment F				0.000	0.000	43.495	181.156	1631.826	32.996	32.997
Treatment Prob(F)				1.0000	1.0000	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.

ARM Action Codes
TY1 = 14.85*[14]