

## LSU Northeast Research Station

Evaluation of Grasp for post-flood weed control.

Trial ID: SJ05R007

Study Dir.:

Location:

Investigator: Bill Williams

**GENERAL TRIAL INFORMATION**

Investigator: Bill Williams

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

**CROP AND WEED DESCRIPTION**

Weed Code	Common Name	Scientific Name
1.	SEBEX Coffeebean	Sesbania exaltata
2.	CYPCP Annual sedge	Cyperus compressus
3.	LEFPA Sprangletop, tighthead	Leptochloa panicoides
4.	ECHCG Barnyardgrass, common	Echinochloa crus-galli

Crop 1: ORYSA RICE

Variety: Cypress

Planting Date: 5/16/05

Planting Method: DRILLED

Rate: 90 LB/A

Depth: 0.25 IN

Row Spacing: 8 IN

Spacing Within Row: 5 FT

Seed Bed: MEDIUM

Soil Moisture: DRY

Emergence Date: 5/25/05

**SITE AND DESIGN**

Plot Width, Unit: 6.67 FT

Plot Length, Unit: 15 FT

Reps: 3

Site Type: RICE PADDY

Tillage Type: CONVENTIONAL-TILL

Study Design: FACTORIAL

**SOIL DESCRIPTION**

% Sand: 24	% OM: 2.11	Texture: Clay
% Silt: 34	pH: 7.94	Soil Name: Sharkey
% Clay: 42	CEC: 21.9	Fert. Level: EXCELLENT

**MOISTURE CONDITIONS**

Date	Time	Amount	Unit	Type	Interval	Unit
1.	5/17/05	10:00		Flushed	0	na
2.	5/21/05	10:00		Flushed	0	na
3.	5/25/05	8:00 PM	0.78	in Rainfall	0	na
4.	5/29/05	1:00 AM	0.63	in Rainfall	0	na
5.	5/30/05	11:00 A	1.51	in Rainfall	0	na
6.	5/31/05	8:00 PM	0.26	in Rainfall	0	na
7.	6/2/05	4:00 PM	0.04	in Rainfall	0	na
8.	6/6/05	7:00 PM	0.39	in Rainfall	0	na
9.	6/17/05			300 lb Urea - Permanent flood	0	na
10.	6/18/05	11:00 A	0.42	in Rainfall	0	na
11.	7/3/05	6:00 PM	0.06	in Rainfall	0	na
12.	7/6/05	1:30 PM	1.6	in Rainfall	0	na
13.	7/8/05	1:45 PM	0.93	in Rainfall	0	na
14.	7/10/05	1:00 PM	0.04	in Rainfall	0	na
15.	7/14/05	2:00 PM	0.44	in Rainfall	0	na
16.	7/16/05	10:00 P	0.04	in Rainfall	0	na
17.	7/17/05	1:00 PM	0.25	in Rainfall	0	na
18.	7/18/05	7:00 PM	0.05	in Rainfall	0	na
19.	7/22/05	2:30 PM	0.15	in Rainfall	0	na
20.	8/4/05	3:30 PM	0.27	in Rainfall	0	na
21.	8/5/05	8:00 PM	0.45	in Rainfall	0	na
22.	8/6/05	6:00 PM	0.25	in Rainfall	0	na
23.	8/16/05	6:00 PM	1.31	in Rainfall	0	na
24.	8/22/05	9:00 PM	0.05	in Rainfall	0	na

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## APPLICATION DESCRIPTION

	A	B	C
Application Date:	5/18/05	6/14/05	6/23/05
Time of Day:	3:00	2:00	11:00
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	3DPF	POTF
Applic. Placement:	BROSOI	BROFOL	BROFOL
Air Temp., Unit:	91 F	95 F	92 F
% Relative Humidity:	63	68	62
Wind Velocity, Unit:	5 S	5 S	0 na
Dew Presence (Y/N):	N	N	N
Soil Temp., Unit:	97 F	100 F	91 F
Soil Moisture:	DRY	DAMP	FLOODED
% Cloud Cover:	40	40	30

## CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ORYSA n/a	ORYSA 1 T	ORYSA 4-5 T
Stage Scale:	n/a	8-10 in	14-16 in

## WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	SEBEX n/a	SEBEX n/a	SEBEX n/a
Stage Scale:	n/a	8-10"	17 in
Weed 2 Code, Stage:	CYPCP n/a	CYPCP 2-3 lf	CYPCP n/a
Stage Scale:	n/a	2-4 in	17 in
Weed 3 Code, Stage:	LEFPA n/a	LEFPA n/a	LEFPA E boot
Stage Scale:	n/a	n/a	16 in
Weed 4 Code, Stage:	ECHCG n/a	ECHCG 5 lf-1T	ECHCG 4-5 T
Stage Scale:	n/a	6-8 in	16 in

## APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	Backpack	Backpack	Backpack
Operating Pressure:	31	31	31
Nozzle Type:	Greenleaf	Greenleaf	Greenleaf
Nozzle Size:	11002	11002	11002
Nozzle Spacing, Unit:	20 "	20 "	20 "
Nozzles/Row:	4	4	4
Carrier:	Water	Water	Water
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA
Propellant:	CO2	CO2	CO2

LSU Northeast Research Station

Evaluation of Grasp for post-flood weed control.

Trial ID: SJ05R007  
 Location:

Study Dir.:  
 Investigator: Bill Williams

Weed Code	ECHCG	ECHCG	ECHCG	ECHCG	LEFPA
Crop Code					
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Rating Date	6/30/05	7/14/05	7/27/05	8/10/05	6/30/05
Trt-Eval Interval	7 DA-C	21 DA-C	34 DA-C	48 DA-C	7 DA-C
ARM Action Codes					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	1	2	3	4	5	
1	Command	1.3	PT/A	PRE	95	a 90	a 90	a 95	a 95	a
	Grasp Treatment				3 DPF					
	Grasp	2.0	OZ/A							
	COC	2.5	% V/V							
2	Command	1.3	PT/A	PRE	95	a 95	a 95	a 95	a 95	a
	Grasp Treatment				3 DPF					
	Grasp	2.3	OZ/A							
	COC	2.5	% V/V							
3	Command	1.3	PT/A	PRE	95	a 93	a 93	a 93	a 95	a
	Grasp Treatment				3 DPF					
	Grasp	2.6	OZ/A							
	COC	2.5	% V/V							
4	Command	1.3	PT/A	PRE	95	a 95	a 95	a 95	a 95	a
	Grasp Treatment				3 DPF					
	Grasp	2.9	OZ/A							
	COC	2.5	% V/V							
5	Command	1.3	PT/A	PRE	95	a 95	a 95	a 95	a 95	a
	Grasp Treatment				3 DPF					
	Grasp	2.3	OZ/A							
	Clincher	15	OZ/A							
	COC	2.5	% V/V							
6	Command	1.3	PT/A	PRE	92	a 95	a 95	a 92	a 95	a
	Grasp Treatment				POTF					
	Grasp	2.0	OZ/A							
	COC	2.5	% V/V							
7	Command	1.3	PT/A	PRE	92	a 95	a 95	a 95	a 95	a
	Grasp Treatment				POTF					
	Grasp	2.3	OZ/A							
	COC	2.5	% V/V							

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Weed Code	ECHCG	ECHCG	ECHCG	ECHCG	LEFPA
Crop Code					
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Rating Date	6/30/05	7/14/05	7/27/05	8/10/05	6/30/05
Trt-Eval Interval	7 DA-C	21 DA-C	34 DA-C	48 DA-C	7 DA-C
ARM Action Codes					
# Subsamples, Dec.					

Trt	Treatment	Rate	Unit	Grow	Stg	1	2	3	4	5				
8	Command	1.3	PT/A	PRE	92	a	93	a	93	a	90	a	95	a
	Grasp Treatment			POTF										
	Grasp	2.6	OZ/A											
	COC	2.5	% V/V											
9	Command	1.3	PT/A	PRE	93	a	95	a	95	a	90	a	95	a
	Grasp Treatment			POTF										
	Grasp	2.9	OZ/A											
	COC	2.5	% V/V											
10	Command	1.3	PT/A	PRE	93	a	93	a	93	a	95	a	95	a
	Grasp Treatment			POTF										
	Grasp	2.3	OZ/A											
	Clincher	15	OZ/A											
	COC	2.5	% V/V											
11	Command	1.3	PT/A	PRE	92	a	92	a	90	a	77	b	95	a
12	Facet	8	OZ/A	PRE	73	b	60	b	57	b	43	c	87	b
	Grasp	2.3	OZ/A	POTF										
	Clincher	15	OZ/A	POTF										
	COC	2.5	% V/V	POTF										
LSD (P=.05)						5.2	5.2	6.3	6.6	2.8				
Bartlett's X2						2.85	4.838	4.133	3.196	0.0				
P(Bartlett's X2)						0.827	0.304	0.53	0.67	.				

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

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

## LSU Northeast Research Station

Weed Code	LEFPA	LEFPA	LEFPA	SEBEX	SEBEX
Crop Code					
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Rating Date	7/14/05	7/27/05	8/10/05	6/30/05	7/14/05
Trt-Eval Interval	21 DA-C	34 DA-C	48 DA-C	7 DA-C	21 DA-C
ARM Action Codes					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	6	7	8	9	10	
1	Command	1.3	PT/A	PRE	93	a 93	ab 93	a 73	de 93	a
	Grasp Treatment			3 DPF						
	Grasp	2.0	OZ/A							
	COC	2.5	% V/V							
2	Command	1.3	PT/A	PRE	92	a 92	ab 93	a 95	a 95	a
	Grasp Treatment			3 DPF						
	Grasp	2.3	OZ/A							
	COC	2.5	% V/V							
3	Command	1.3	PT/A	PRE	92	a 92	ab 93	a 95	a 93	a
	Grasp Treatment			3 DPF						
	Grasp	2.6	OZ/A							
	COC	2.5	% V/V							
4	Command	1.3	PT/A	PRE	92	a 92	ab 92	a 95	a 95	a
	Grasp Treatment			3 DPF						
	Grasp	2.9	OZ/A							
	COC	2.5	% V/V							
5	Command	1.3	PT/A	PRE	93	a 93	ab 93	a 95	a 93	a
	Grasp Treatment			3 DPF						
	Grasp	2.3	OZ/A							
	Clincher	15	OZ/A							
	COC	2.5	% V/V							
6	Command	1.3	PT/A	PRE	92	a 92	ab 92	a 77	cd 72	c
	Grasp Treatment			POTF						
	Grasp	2.0	OZ/A							
	COC	2.5	% V/V							
7	Command	1.3	PT/A	PRE	95	a 95	a 92	a 67	e 73	c
	Grasp Treatment			POTF						
	Grasp	2.3	OZ/A							
	COC	2.5	% V/V							
8	Command	1.3	PT/A	PRE	90	a 90	ab 93	a 83	bc 73	c
	Grasp Treatment			POTF						
	Grasp	2.6	OZ/A							
	COC	2.5	% V/V							

## LSU Northeast Research Station

Weed Code	LEFPA	LEFPA	LEFPA	SEBEX	SEBEX
Crop Code					
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Rating Date	7/14/05	7/27/05	8/10/05	6/30/05	7/14/05
Trt-Eval Interval	21 DA-C	34 DA-C	48 DA-C	7 DA-C	21 DA-C
ARM Action Codes					
# Subsamples, Dec.					

Trt	Treatment	Rate	Unit	Grow	6	7	8	9	10	
9	Command	1.3	PT/A	PRE	88	a 88	b 92	a 93	a 85	b
	Grasp Treatment			POTF						
	Grasp	2.9	OZ/A							
	COC	2.5	% V/V							
10	Command	1.3	PT/A	PRE	93	a 93	ab 92	a 73	de 63	d
	Grasp Treatment			POTF						
	Grasp	2.3	OZ/A							
	Clincher	15	OZ/A							
	COC	2.5	% V/V							
11	Command	1.3	PT/A	PRE	92	a 92	ab 93	a 0	f 0	e
12	Facet	8	OZ/A	PRE	73	b 67	c 77	b 85	b 87	b
	Grasp	2.3	OZ/A	POTF						
	Clincher	15	OZ/A	POTF						
	COC	2.5	% V/V	POTF						
LSD (P=.05)					6.8	6.4	4.4	7.1	6.4	
Bartlett's X2					8.246	8.246	2.216	1.086	3.206	
P(Bartlett's X2)					0.605	0.605	0.998	0.982	0.921	

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

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Weed Code	SEBEX	SEBEX	CYPCP	CYPCP	CYPCP
Crop Code					
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Rating Date	7/27/05	8/10/05	6/30/05	7/14/05	7/27/05
Trt-Eval Interval	34 DA-C	48 DA-C	7 DA-C	21 DA-C	34 DA-C
ARM Action Codes					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	11	12	13	14	15	
1	Command	1.3	PT/A	PRE	83	c 82	b 90	b 95	a 95	a
	Grasp Treatment			3 DPF						
	Grasp	2.0	OZ/A							
	COC	2.5	% V/V							
2	Command	1.3	PT/A	PRE	95	a 95	a 95	a 95	a 95	a
	Grasp Treatment			3 DPF						
	Grasp	2.3	OZ/A							
	COC	2.5	% V/V							
3	Command	1.3	PT/A	PRE	93	ab 93	a 95	a 95	a 95	a
	Grasp Treatment			3 DPF						
	Grasp	2.6	OZ/A							
	COC	2.5	% V/V							
4	Command	1.3	PT/A	PRE	95	a 95	a 95	a 95	a 95	a
	Grasp Treatment			3 DPF						
	Grasp	2.9	OZ/A							
	COC	2.5	% V/V							
5	Command	1.3	PT/A	PRE	93	ab 95	a 95	a 95	a 95	a
	Grasp Treatment			3 DPF						
	Grasp	2.3	OZ/A							
	Clincher	15	OZ/A							
	COC	2.5	% V/V							
6	Command	1.3	PT/A	PRE	67	d 67	d 92	b 95	a 95	a
	Grasp Treatment			POTF						
	Grasp	2.0	OZ/A							
	COC	2.5	% V/V							
7	Command	1.3	PT/A	PRE	70	d 73	c 90	b 95	a 95	a
	Grasp Treatment			POTF						
	Grasp	2.3	OZ/A							
	COC	2.5	% V/V							
8	Command	1.3	PT/A	PRE	83	c 90	a 92	b 93	b 93	b
	Grasp Treatment			POTF						
	Grasp	2.6	OZ/A							
	COC	2.5	% V/V							

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Weed Code	SEBEX	SEBEX	CYPCP	CYPCP	CYPCP
Crop Code					
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Rating Date	7/27/05	8/10/05	6/30/05	7/14/05	7/27/05
Trt-Eval Interval	34 DA-C	48 DA-C	7 DA-C	21 DA-C	34 DA-C
ARM Action Codes					
# Subsamples, Dec.					

Trt	Treatment	Rate	Unit	Grow	Stg	11	12	13	14	15		
9	Command	1.3	PT/A	PRE	85	c	92	a	95	a	95	a
	Grasp Treatment			POTF								
	Grasp	2.9	OZ/A									
	COC	2.5	% V/V									
10	Command	1.3	PT/A	PRE	63	d	82	b	90	b	95	a
	Grasp Treatment			POTF								
	Grasp	2.3	OZ/A									
	Clincher	15	OZ/A									
	COC	2.5	% V/V									
11	Command	1.3	PT/A	PRE	0	e	0	e	0	c	0	c
12	Facet	8	OZ/A	PRE	87	bc	90	a	90	b	95	a
	Grasp	2.3	OZ/A	POTF								
	Clincher	15	OZ/A	POTF								
	COC	2.5	% V/V	POTF								

LSD (P=.05)	7.6	5.7	1.9	1.4	1.4
Bartlett's X2	4.11	2.673	0.0	0.0	0.0
P(Bartlett's X2)	0.767	0.849	1.00	.	.

Means followed by same letter do not significantly differ (P=.05, LSD)  
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Weed Code	CYPCP										
Crop Code	ORYSA ORYSA ORYSA										
Part Rated	PLATOT P	GRAIN C	GRAIN C	GRAIN C							
Rating Data Type	CONTROL	lb/plt	Moisture	YIELD							
Rating Unit	%	5x12ft	%	BU							
Rating Date	8/10/05	9/22/05	9/22/05	9/22/05							
Trt-Eval Interval	48 DA-C										
ARM Action Codes	TY1										
# Subsamples, Dec.	0										
Trt	Treatment	Rate	Unit	Grow	Stg	16	17	18	19		
No.	Name	Rate	Unit	Stg	16	17	18	19			
9	Command	1.3	PT/A	PRE	95	a 6	a-d 12	a 96	a-d		
	Grasp Treatment			POTF							
	Grasp	2.9	OZ/A								
	COC	2.5	% V/V								
10	Command	1.3	PT/A	PRE	95	a 4	d 12	a 70	cd		
	Grasp Treatment			POTF							
	Grasp	2.3	OZ/A								
	Clincher	15	OZ/A								
	COC	2.5	% V/V								
11	Command	1.3	PT/A	PRE	0	c 4	cd 17	a 70	d		
12	Facet	8	OZ/A	PRE	95	a 1	e 6	a 23	e		
	Grasp	2.3	OZ/A	POTF							
	Clincher	15	OZ/A	POTF							
	COC	2.5	% V/V	POTF							
LSD (P=.05)					1.4	2.6	5.5	43.4			
Bartlett's X2					0.0	10.403	57.608	10.588			
P(Bartlett's X2)					.	0.495	0.001*	0.478			

Means followed by same letter do not significantly differ (P=.05, LSD)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Column 19: TY1 = 16.13333\*[17]\*(100-[18])/88