

LSU Northeast Research Station

Effect of adjuvant selection on barnyardgrass control with Regiment.

Trial ID: SJ07R007 Protocol ID: SJ07R007
 Location: Study Director:
 Investigator: Bill Williams

General Trial Information

Investigator: Bill Williams

Crop Description

Crop 1: ORYSA Oryza sativa Common rice
 Variety: Cocodrie
 BBCH Scale: BRIC Planting Date: 22/May/07
 Planting Method: DRILLED Rate, Unit: 100 LB/A
 Depth, Unit: 1 IN
 Row Spacing, Unit: 8 IN
 Seed Bed: MEDIUM
 Soil Moisture: DRY
 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: GLXMA Glycine max
 Common Name: Soybean
 Pest 2 Type: W Code: SEBEX Sesbania exaltata
 Common Name: Coffeebean
 Pest 3 Type: W Code: CNPPA Caperonia palustris
 Common Name: Texasweed
 Pest 4 Type: W Code: ECHCG Echinochloa crus-galli
 Common Name: Common barnyardgrass
 Pest 5 Type: W Code: CYPES Cyperus esculentus
 Common Name: Yellow nutsedge

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

Soil Description

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

Moisture and Weather Conditions

Overall Moisture Conditions: Dry
 Closest Weather Station: Northeast Research Station Distance: 0.5 Unit: MI

	Date	Amount	Unit	Type
1.	2/May/07	0.04	IN	
2.	3/May/07	1.24	IN	
3.	15/May/07	0.02	IN	
4.	16/May/07	0.01	IN	
5.	17/May/07	0.01	IN	
6.	23/May/07			FLUSH
7.	30/May/07			FLUSH
8.	3/Jun/07	0.02	IN	
9.	16/Jun/07	0.01	IN	
10.	18/Jun/07	0.02	IN	
11.	19/Jun/07	0.4	IN	
12.	28/Jun/07			FERTILIZE - 300# prilled urea
13.	28/Jun/07			FLOOD
14.	2/Jul/07	0.3	IN	
15.	3/Jul/07	0.06	IN	
16.	4/Jul/07	1.14	IN	
17.	5/Jul/07	0.31	IN	
18.	6/Jul/07	0.27	IN	
19.	7/Jul/07	1.39	IN	
20.	9/Jul/07	0.36	IN	
21.	10/Jul/07	0.01	IN	
22.	11/Jul/07	0.27	IN	
23.	13/Jul/07	0.3	IN	
24.	14/Jul/07	1.96	IN	
25.	15/Jul/07	2.8	IN	
26.	17/Jul/07	1.56	IN	
27.	20/Jul/07	0.93	IN	
28.	21/Jul/07	0.1	IN	
29.	22/Jul/07	0.01	IN	
30.	30/Jul/07	2.35	IN	

Application Description

A

Application Date: 22/Jun/07
Application Method: SPRAY
Application Timing: 4-5 LF
Application Placement: BROFOL
Air Temperature, Unit: 93 F
% Relative Humidity: 42
Wind Velocity, Unit: 0 MPH
Soil Temperature, Unit: 90 F
Soil Moisture: DRY

Crop Stage At Each Application

A

Crop 1 Code, BBCH Scale: ORYSA BRIC
Stage Scale Used: 3 T
Stage Majority, Percent: 8"

Pest Stage At Each Application

A

Pest 1 Code, Disc., Scale: GLXMA W
Stage Majority, Percent: FLOWER
Stage Minimum, Percent: 13"
Pest 2 Code, Disc., Scale: SEBEX W
Stage Majority, Percent: 8"
Pest 3 Code, Disc., Scale: CNPPA W
Stage Majority, Percent: 6"
Pest 4 Code, Disc., Scale: ECHCG W
Stage Majority, Percent: 3 T
Stage Minimum, Percent: 4"
Pest 5 Code, Disc., Scale: CYPES W

Stage Minimum, Percent: 9"
Stage Maximum, Percent: 9"

Application Equipment

A

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

LSU Northeast Research Station

Effect of adjuvant selection on barnyardgrass control with Regiment.

Trial ID: SJ07R007

Protocol ID: SJ07R007

Location:

Study Director:

Investigator: Bill Williams

Pest Type									
Pest Code	ECHCG	ECHCG	ECHCG	SEBEX	SEBEX				
Crop Code									
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P				
Rating Date	29/Jun/07	20/Jul/07	17/Aug/07	29/Jun/07	20/Jul/07				
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL				
Rating Unit	%	%	%	%	%				
Trt-Eval Interval	7 DA-A	28 DA-A	56 DA-A	7 DA-A	28 DA-A				
Trt Treatment	Rate	Unit	Growth						
No. Name	Rate	Unit	Stage	1	2	3	4	5	
1 Regiment	0.3	OZ/A	4-5 lf	30	e0	c0	c0	b0	c
LI 700 (80:20)	0.25	% V/V	4-5 lf						
2 Regiment	0.3	OZ/A	4-5 lf	63	c93	a93	a90	a93	a
Activator 90 (90:10)	0.25	% V/V	4-5 lf						
3 Regiment	0.3	OZ/A	4-5 lf	63	c93	a93	a90	a93	a
Kinetic	0.125	% V/V	4-5 lf						
4 Regiment	0.3	OZ/A	4-5 lf	0	f0	c0	c0	b0	c
Silwet	0.125	% V/V	4-5 lf						
5 Regiment	0.3	OZ/A	4-5 lf	57	d93	a93	a90	a93	a
Phase	1	% V/V	4-5 lf						
6 Regiment	0.3	OZ/A	4-5 lf	82	b77	b70	b90	a93	a
Dyne-Amic	1	% V/V	4-5 lf						
7 Regiment	0.3	OZ/A	4-5 lf	82	b93	a93	a90	a93	a
Rivet	1	% V/V	4-5 lf						
8 Regiment	0.3	OZ/A	4-5 lf	82	b77	b70	b90	a93	a
Soy Surf +	1	% V/V	4-5 lf						
9 Regiment	0.3	OZ/A	4-5 lf	82	b93	a93	a90	a93	a
Phase II	1	% V/V	4-5 lf						
10 Regiment	0.3	OZ/A	4-5 lf	83	b73	b73	b87	a73	b
Dynamic	1	% V/V	4-5 lf						
32% UAN	2	% V/V	4-5 lf						
11 Regiment	0.3	OZ/A	4-5 lf	90	a95	a95	a90	a95	a
Rivet	1	% V/V	4-5 lf						
32% UAN	2	% V/V	4-5 lf						
12 Regiment	0.3	OZ/A	4-5 lf	90	a93	a93	a90	a93	a
Soy Surf +	1	% V/V	4-5 lf						
32% UAN	2	% V/V	4-5 lf						
LSD (P=.10)				4.7	4.6	3.1	2.3	2.9	
Standard Deviation				3.3	3.3	2.2	1.7	2.1	
CV				4.98	4.5	3.05	2.23	2.74	

Grand Mean	66.94	73.47	72.36	74.72	76.25
Bartlett's X2	3.218	3.801	2.522	0.0	2.76
P(Bartlett's X2)	0.864	0.924	0.925	.	0.973
Replicate F	4.000	5.023	11.286	1.000	17.696
Replicate Prob(F)	0.0330	0.0160	0.0004	0.3840	0.0001
Treatment F	200.705	340.780	765.026	1316.636	896.739
Treatment Prob(F)	0.0001	0.0001	0.0001	0.0001	0.0001

LSU Northeast Research Station

Pest Type					
Pest Code		ECHCG	ECHCG	ECHCG	SEBEX SEBEX
Crop Code					
Part Rated		PLATOT P	PLATOT P	PLATOT P	PLATOT P PLATOT P
Rating Date		29/Jun/07	20/Jul/07	17/Aug/07	29/Jun/07 20/Jul/07
Rating Data Type		CONTROL	CONTROL	CONTROL	CONTROL CONTROL
Rating Unit		%	%	%	%
Trt-Eval Interval		7 DA-A	28 DA-A	56 DA-A	7 DA-A 28 DA-A
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	1	2	3 4 5

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.

LSU Northeast Research Station

Pest Type									
Pest Code	SEBEX	GLYMX	GLYMX	GLYMX					
Crop Code	ORYSA								
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT C				
Rating Date	17/Aug/07	29/Jun/07	20/Jul/07	17/Aug/07	29/Jun/07				
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	PHYGEN				
Rating Unit	%	%	%	%	%				
Trt-Eval Interval	56 DA-A	7 DA-A	28 DA-A	56 DA-A	7 DA-A				
Trt Treatment	Rate	Growth							
No.Name	Rate	Unit	Stage	6	7	8	9	10	
1 Regiment	0.3	OZ/A	4-5 lf	0	c 83	b 95	b95	b0	a
LI 700 (80:20)	0.25	% V/V	4-5 lf						
2 Regiment	0.3	OZ/A	4-5 lf	93	a 90	a 95	b95	b0	a
Activator 90 (90:10)	0.25	% V/V	4-5 lf						
3 Regiment	0.3	OZ/A	4-5 lf	93	a 90	a 95	b95	b0	a
Kinetic	0.125	% V/V	4-5 lf						
4 Regiment	0.3	OZ/A	4-5 lf	0	c 50	c 95	b95	b0	a
Silwet	0.125	% V/V	4-5 lf						
5 Regiment	0.3	OZ/A	4-5 lf	93	a 90	a 95	b95	b0	a
Phase	1	% V/V	4-5 lf						
6 Regiment	0.3	OZ/A	4-5 lf	93	a 90	a 95	b95	b0	a
Dyne-Amic	1	% V/V	4-5 lf						
7 Regiment	0.3	OZ/A	4-5 lf	93	a 90	a 95	b95	b0	a
Rivet	1	% V/V	4-5 lf						
8 Regiment	0.3	OZ/A	4-5 lf	93	a 90	a 95	b95	b0	a
Soy Surf +	1	% V/V	4-5 lf						
9 Regiment	0.3	OZ/A	4-5 lf	93	a 90	a 95	b95	b0	a
Phase II	1	% V/V	4-5 lf						
10 Regiment	0.3	OZ/A	4-5 lf	73	b 87	ab 95	b95	b0	a
Dynamic	1	% V/V	4-5 lf						
32% UAN	2	% V/V	4-5 lf						
11 Regiment	0.3	OZ/A	4-5 lf	95	a 90	a 100	a 100	a 0	a
Rivet	1	% V/V	4-5 lf						
32% UAN	2	% V/V	4-5 lf						
12 Regiment	0.3	OZ/A	4-5 lf	93	a 90	a 95	b95	b0	a
Soy Surf +	1	% V/V	4-5 lf						
32% UAN	2	% V/V	4-5 lf						
LSD (P=.10)				2.9	3.5	0.0	0.0	0.0	
Standard Deviation				2.1	2.5	0.0	0.0	0.0	
CV				2.74	2.87	0.0	0.0	0.0	
Grand Mean				76.25	85.83	95.42	95.42	0.0	
Bartlett's X2				2.76	0.0	0.0	0.0	0.0	
P(Bartlett's X2)				0.973	
Replicate F				17.696	0.000	0.000	0.000	0.000	
Replicate Prob(F)				0.0001	1.0000	1.0000	1.0000	1.0000	
Treatment F				896.739	65.125	0.000	0.000	0.000	

Treatment Prob(F)

0.0001

0.0001

1.0000

1.0000

1.0000

LSU Northeast Research Station

Pest Type					
Pest Code		SEBEX	GLYMX	GLYMX	GLYMX
Crop Code					ORYSA
Part Rated		PLATOT P	PLATOT P	PLATOT P	PLATOT P PLATOT C
Rating Date		17/Aug/07	29/Jun/07	20/Jul/07	17/Aug/07 29/Jun/07
Rating Data Type		CONTROL	CONTROL	CONTROL	CONTROL PHYGEN
Rating Unit		%	%	%	%
Trt-Eval Interval		56 DA-A	7 DA-A	28 DA-A	56 DA-A 7 DA-A
Trt Treatment	Rate	Growth			
No. Name	Rate Unit	Stage	6	7	8 9 10

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.

LSU Northeast Research Station

Pest Type				ORYSA		ORYSA	
Pest Code				PLATOT C		PLATOT C	
Crop Code				6/Jul/07		20/Jul/07	
Part Rated				PHYGEN		PHYGEN	
Rating Date				%		%	
Rating Data Type				14 DA-A		28 DA-A	
Rating Unit							
Trt-Eval Interval							
Trt	Treatment	Rate	Growth				
No.	Name	Rate	Unit	Stage	11	12	
1	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	LI 700 (80:20)	0.25	% V/V	4-5 lf			
2	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Activator 90 (90:10)	0.25	% V/V	4-5 lf			
3	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Kinetic	0.125	% V/V	4-5 lf			
4	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Silwet	0.125	% V/V	4-5 lf			
5	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Phase	1	% V/V	4-5 lf			
6	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Dyne-Amic	1	% V/V	4-5 lf			
7	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Rivet	1	% V/V	4-5 lf			
8	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Soy Surf +	1	% V/V	4-5 lf			
9	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Phase II	1	% V/V	4-5 lf			
10	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Dynamic	1	% V/V	4-5 lf			
	32% UAN	2	% V/V	4-5 lf			
11	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Rivet	1	% V/V	4-5 lf			
	32% UAN	2	% V/V	4-5 lf			
12	Regiment	0.3	OZ/A	4-5 lf	0	a0	a
	Soy Surf +	1	% V/V	4-5 lf			
	32% UAN	2	% V/V	4-5 lf			
LSD (P=.10)					0.0	0.0	
Standard Deviation					0.0	0.0	
CV					0.0	0.0	
Grand Mean					0.0	0.0	
Bartlett's X2					0.0	0.0	
P(Bartlett's X2)					.	.	
Replicate F					0.000	0.000	
Replicate Prob(F)					1.0000	1.0000	
Treatment F					0.000	0.000	

Treatment Prob(F)

1.0000

1.0000

LSU Northeast Research Station

Pest Type				
Pest Code				
Crop Code			ORYSA	ORYSA
Part Rated			PLATOT C	PLATOT C
Rating Date			6/Jul/07	20/Jul/07
Rating Data Type			PHYGEN	PHYGEN
Rating Unit			%	%
Trt-Eval Interval			14 DA-A	28 DA-A
Trt Treatment		Rate	Growth	
No. Name		Rate Unit	Stage	11 12

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.