

LSU Northeast Research Station

Effect of adjuvants on weed control with Regiment alone and tank mixed with Londax or Permit

Trial ID: SJ06R033
Location:

Protocol ID: SJ06R033
Study Director:
Investigator: Bill Williams

General Trial Information

Investigator: Bill Williams

Conclusions:

Regiment combinations with Londax and Permit as affected by the use of UAN were evaluated. The addition of UAN may have been a little faster, but there were essentially no differences in weed control by 4 weeks after application.

Crop Description

Crop 1: ORYSA Oryza sativa Common rice
Variety: Tranasse
BBCH Scale: BRIC Planting Date: 5/25/06
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: 5/31/06
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: Coffeebean
Pest 4 Type: W Code: CNPPA Caperonia palustris
Common Name: Texasweed
Pest 5 Type: W Code: CYPPIR Cyperus iria
Common Name: Rice flatsedge

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: Factorial

Soil Description

Description Name: Bay 1 - South End
% Sand: 20 % OM: 1.8 Texture: Clay
% Silt: 30 pH: 7.88 Soil Name: Sharkey
% Clay: 50 CEC: 22.4 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.	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
Application Date:	5/25/06	6/23/06
Time of Day:	8:30	10:30
Application Method:	SPRAY	SPRAY
Application Timing:	PRE	3DPF
Application Placement:	BROSOI	BROFOL
Air Temperature, Unit:	72 F	94 F
% Relative Humidity:	68	44
Wind Velocity, Unit:	3 MPH	0 MPH
Wind Direction:	N	
Soil Temperature, Unit:	81 F	96 F
Soil Moisture:	DRY	DRY
% Cloud Cover:	30	80

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ORYSA BRIC	ORYSA BRIC
Stage Scale Used:	BBCH	BBCH
Stage Majority, Percent:	NA	4 leaf 100
Stage Minimum, Percent:		3 T
Height, Unit:		7.5 In
Height Minimum, Maximum:		7 8

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Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	ECHCG W	ECHCG W
Stage Majority, Percent:	N/A	3 till 100
Height, Unit:		6 IN
Height Minimum, Maximum:		6 6
Pest 2 Code, Disc., Scale:	LEFPA W	LEFPA W
Stage Majority, Percent:	N/A	4 leaf 100
Stage Minimum, Percent:		3 T
Height, Unit:		4 IN
Height Minimum, Maximum:		4 4
Pest 3 Code, Disc., Scale:	SEBEX W	SEBEX W
Stage Majority, Percent:	N/A	8 leaf 100
Height, Unit:		6 IN
Height Minimum, Maximum:		6 6
Pest 4 Code, Disc., Scale:	CNPPA W	CNPPA W
Stage Majority, Percent:	N/A	6 lf 100
Height, Unit:		8 IN
Height Minimum, Maximum:		8 8
Pest 5 Code, Disc., Scale:	CYPIR W	CYPIR W
Stage Majority, Percent:	N/A	--
Height, Unit:		6 IN
Height Minimum, Maximum:		6 6

Application Equipment

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

Trt No Treatment Application Comment

6 Used 7.8 Starwort brand of metolachlor instead of Me-Too-Lachlor
 7 Used 7.8 Starwort brand of metolachlor instead of Me-Too-Lachlor

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Trial ID: SJ06R033
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Study Director:
Investigator: Bill Williams

Pest Type	W Weed	ECHCG	ECHCG	ECHCG	ECHCG	ECHCG	SEBEX	SEBEX	SEBEX	SEBEX		
Pest Code	ECHCG	ECHCG	ECHCG	ECHCG	ECHCG	ECHCG	SEBEX	SEBEX	SEBEX	SEBEX		
Crop Code												
BBCH Scale												
Crop Name												
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P		
Rating Date	5/30/06	6/10/06	6/30/06	7/7/06	7/21/06	5/30/06	6/30/06	7/7/06	7/21/06			
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit	%	%	%	%	%	%	%	%	%	%		
Days After First/Last Applic.	5 5	16 16	36 7	43 14	57 28	5 5	36 7	43 14	57 28			
Trt-Eval Interval	5 DA-A	16 DA-A	7 DA-B	14 DA-B	28 DA-B	5 DA-A	7 DA-B	14 DA-B	28 DA-B			
Plant-Eval Interval	5 DP-1	16 DP-1	36 DP-1	43 DP-1	57 DP-1	5 DP-1	36 DP-1	43 DP-1	57 DP-1			
ARM Action Codes												
Number of Decimals												
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7	8	9
1	Command Regiment Londax Kinetic	1.33 0.3 0.375 0.25	pt/a oz/a oz/a % v/v	95.0 a	90.0 a	91.7 a	90.0 a	95.0 a	0.0 a	91.7 ab	95.0 a	91.7 a
2	Command Regiment Londax Kinetic 32% UAN	1.33 0.3 0.375 0.25 2	pt/a oz/a oz/a % v/v % v/v	95.0 a	88.3 a	90.0 a	90.0 a	93.3 a	0.0 a	93.3 ab	95.0 a	91.7 a
3	Command Regiment Londax Kinetic	1.33 0.3 0.75 0.25	pt/a oz/a oz/a % v/v	95.0 a	90.0 a	91.7 a	85.0 ab	95.0 a	0.0 a	90.0 b	95.0 a	91.7 a
4	Command Regiment Londax Kinetic 32% UAN	1.33 0.3 0.75 0.25 2	pt/a oz/a oz/a % v/v % v/v	95.0 a	90.0 a	91.7 a	90.0 a	95.0 a	0.0 a	91.7 ab	95.0 a	91.7 a
5	Command Regiment Permit Kinetic	1.33 0.3 0.25 0.25	pt/a oz/a oz/a % v/v	95.0 a	90.0 a	91.7 a	73.3 c	95.0 a	0.0 a	91.7 ab	95.0 a	91.7 a
6	Command Regiment Permit Kinetic 32% UAN	1.33 0.3 0.25 0.25 2	pt/a oz/a oz/a % v/v % v/v	95.0 a	90.0 a	91.7 a	85.0 ab	95.0 a	0.0 a	91.7 ab	95.0 a	91.7 a
7	Command Regiment Permit Kinetic	1.33 0.3 0.5 0.25	pt/a oz/a oz/a % v/v	95.0 a	90.0 a	90.0 a	80.0 b	95.0 a	0.0 a	91.7 ab	95.0 a	91.7 a
8	Command Regiment Permit Kinetic 32% UAN	1.33 0.3 0.5 0.25 2	pt/a oz/a oz/a % v/v % v/v	95.0 a	90.0 a	90.0 a	85.0 ab	95.0 a	0.0 a	91.7 ab	95.0 a	91.7 a
9	Command Regiment Londax Kinetic	1.33 0.5 0.375 0.25	pt/a oz/a oz/a % v/v	95.0 a	90.0 a	91.7 a	85.0 ab	81.7 b	0.0 a	90.0 b	95.0 a	91.7 a
10	Command Regiment Londax Kinetic 32% UAN	1.33 0.5 0.375 0.25 2	pt/a oz/a oz/a % v/v % v/v	95.0 a	90.0 a	91.7 a	81.7 b	95.0 a	0.0 a	91.7 ab	95.0 a	91.7 a

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Pest Type	W Weed	ECHCG	ECHCG	ECHCG	ECHCG	SEBEX	SEBEX	SEBEX	SEBEX			
Pest Code	ECHCG	ECHCG	ECHCG	ECHCG	ECHCG	SEBEX	SEBEX	SEBEX	SEBEX			
Crop Code												
BBCH Scale												
Crop Name												
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P			
Rating Date	5/30/06	6/10/06	6/30/06	7/7/06	7/21/06	5/30/06	6/30/06	7/7/06	7/21/06			
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Unit	%	%	%	%	%	%	%	%	%			
Days After First/Last Applic.	5 5	16 16	36 7	43 14	57 28	5 5	36 7	43 14	57 28			
Trt-Eval Interval	5 DA-A	16 DA-A	7 DA-B	14 DA-B	28 DA-B	5 DA-A	7 DA-B	14 DA-B	28 DA-B			
Plant-Eval Interval	5 DP-1	16 DP-1	36 DP-1	43 DP-1	57 DP-1	5 DP-1	36 DP-1	43 DP-1	57 DP-1			
ARM Action Codes												
Number of Decimals												
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7	8	9
11	Command Regiment	1.33	pt/a	95.0 a	90.0 a	91.7 a	80.0 b	95.0 a	0.0 a	90.0 b	95.0 a	91.7 a
	Londax	0.5	oz/a									
	Kinetic	0.75	oz/a									
	Kinetic	0.25	% v/v									
12	Command Regiment	1.33	pt/a	95.0 a	90.0 a	91.7 a	80.0 b	95.0 a	0.0 a	91.7 ab	95.0 a	91.7 a
	Londax	0.5	oz/a									
	Kinetic	0.75	oz/a									
	Kinetic	0.25	% v/v									
	32% UAN	2	% v/v									
13	Command Regiment	1.33	pt/a	95.0 a	85.0 a	91.7 a	81.7 b	95.0 a	0.0 a	91.7 ab	95.0 a	91.7 a
	Londax	0.5	oz/a									
	Permit	0.25	oz/a									
	Kinetic	0.25	% v/v									
14	Command Regiment	1.33	pt/a	95.0 a	90.0 a	91.7 a	81.7 b	95.0 a	0.0 a	93.3 ab	95.0 a	91.7 a
	Londax	0.5	oz/a									
	Permit	0.25	oz/a									
	Kinetic	0.25	% v/v									
	32% UAN	2	% v/v									
15	Command Regiment	1.33	pt/a	95.0 a	86.7 a	93.3 a	90.0 a	95.0 a	0.0 a	95.0 a	95.0 a	91.7 a
	Londax	0.5	oz/a									
	Permit	0.5	oz/a									
	Kinetic	0.25	% v/v									
16	Command Regiment	1.33	pt/a	95.0 a	88.3 a	91.7 a	90.0 a	95.0 a	0.0 a	95.0 a	95.0 a	91.7 a
	Londax	0.5	oz/a									
	Permit	0.5	oz/a									
	Kinetic	0.25	% v/v									
	32% UAN	2	% v/v									
LSD (P=.05)		0.00		0.00	4.29	2.47	4.44	3.47	0.00	2.65	0.00	0.00
Standard Deviation		0.00		0.00	2.58	1.48	2.66	2.08	0.00	1.59	0.00	0.00
CV		0.0		0.0	2.88	1.62	3.16	2.21	0.0	1.73	0.0	0.0
Bartlett's X2		0.0		0.0	3.279	2.334	2.062	1.628	0.0	0.0	0.0	0.0
P(Bartlett's X2)		.		.	0.351	1.00	0.914	0.202	.	1.00	.	1.00
Replicate F		0.000		0.000	3.848	57.381	3.824	0.360	0.000	21.164	0.000	0.000
Replicate Prob(F)		1.0000		1.0000	0.0325	0.0001	0.0332	0.7006	1.0000	0.0001	1.0000	1.0000
Treatment F		0.000		0.000	1.000	0.952	10.191	7.672	0.000	2.726	0.000	0.000
Treatment Prob(F)		1.0000		1.0000	0.4801	0.5229	0.0001	0.0001	1.0000	0.0094	1.0000	1.0000

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 Type			
Pest Code			
Crop Code	ORYSA	ORYSA	
BBCH Scale	BRIC	BRIC	
Crop Name	Common rice	Common rice	
Part Rated	GRAIN C	GRAIN C	
Rating Date	9/13/06	9/13/06	
Rating Data Type	YIELD	YIELD	
Rating Unit	lb/A	BU	
Days After First/Last Applic.	111 82	111 82	
Trt-Eval Interval			
Plant-Eval Interval	111 DP-1	111 DP-1	
ARM Action Codes		TY1	
Number of Decimals		0	
Trt	Treatment	Rate	
No.	Name	Rate Unit	
			10
			11
12	Command Regiment	1.33 pt/a	6.57 a
	Londax	0.5 oz/a	
	Kinetic	0.75 oz/a	
	32% UAN	0.25 % v/v	
		2 % v/v	95 a
13	Command Regiment	1.33 pt/a	5.10 a
	Permit	0.5 oz/a	
	Kinetic	0.25 oz/a	
		0.25 % v/v	74 a
14	Command Regiment	1.33 pt/a	5.87 a
	Permit	0.5 oz/a	
	Kinetic	0.25 oz/a	
	32% UAN	0.25 % v/v	85 a
15	Command Regiment	1.33 pt/a	6.17 a
	Permit	0.5 oz/a	
	Kinetic	0.5 oz/a	
		0.25 % v/v	89 a
16	Command Regiment	1.33 pt/a	5.70 a
	Permit	0.5 oz/a	
	Kinetic	0.5 oz/a	
	32% UAN	0.25 % v/v	83 a
	LSD (P=.05)		2.954 42.8
	Standard Deviation		1.772 25.7
	CV		31.65 31.65
	Bartlett's X2		14.458 14.458
	P(Bartlett's X2)		0.491 0.491
	Replicate F		1.543 1.543
	Replicate Prob(F)		0.2302 0.2302
	Treatment F		0.981 0.981
	Treatment Prob(F)		0.4970 0.4970

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 = 14.48333*[10]