

LSU Northeast Research Station

Effect of preplant and preemergence applications of Permit on rice weed control and yield.

Trial ID: SJ07R001 Protocol ID: SJ07R001
 Location: Study Director:
 Investigator: Bill Williams

General Trial Information

Investigator: Bill Williams

Crop Description

Crop 1: ORYSA Oryza sativa Common rice
 BBCH Scale: BRIC
 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: ECHCG Echinochloa crus-galli
 Common Name: Common barnyardgrass
 Pest 2 Type: W Code: SEBEX Sesbania exaltata
 Common Name: Coffeebean
 Pest 3 Type: W Code: GLXMA Glycine max
 Common Name: Soybean

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: Factorial

Field Prep./Maintenance:

Trial was oversprayed with 22 oz/A Roundup Weathermax plus 1 pt/A Command on May 9 (PRE). Trial was oversprayed with 0.5 oz/A Regiment plus 0.5 oz/A Permit on June 25 (3PF).

Soil Description

Description Name: Sharkey Clay
 % 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	B
Application Date:	9/May/07	23/May/07
Time of Day:		2:00
Application Method:	SPRAY	SPRAY
Application Timing:	10DPP	PRE
Application Placement:	BROSOI	BROSOI
Air Temperature, Unit:	88 F	90 F
% Relative Humidity:	45	34
Wind Velocity, Unit:	4 MPH	5 MPH
Wind Direction:	E	S
Soil Temperature, Unit:	90 F	88 F
Soil Moisture:	DAMP	DAMP
% Cloud Cover:	10	

Crop Stage At Each Application

	A	B
Crop 1 Code, BBCH Scale:	ORYSA	BRICORYSA BRIC
Stage Scale Used:	N/A	N/A

Pest Stage At Each Application

	A	B
Pest 1 Code, Disc., Scale:	ECHCG	WECHCG W
Stage Majority, Percent:	2 LF	
Stage Minimum, Percent:	.5"	
Stage Maximum, Percent:	.5"	
Pest 2 Code, Disc., Scale:	SEBEX	WSEBEX W
Stage Majority, Percent:	2 LF	
Stage Minimum, Percent:	.5"	
Stage Maximum, Percent:	.5"	
Pest 3 Code, Disc., Scale:	GLXMA	WGLXMA W
Stage Minimum, Percent:	.5"	
Stage Maximum, Percent:	.5"	

Application Equipment

	A	B
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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

LSU Northeast Research Station

Effect of preplant and preemergence applications of Permit on rice weed control and yield.

Trial ID: SJ07R001

Protocol ID: SJ07R001

Location:

Study Director:

Investigator: Bill Williams

Pest Type					
Pest Code	SOYBEAN	SOYBEAN	SOYBEAN	SOYBEAN	SOYBEAN
Crop Code					
Crop Name					
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Date	30/May/07	8/Jun/07	19/Jun/07	17/Jul/07	17/Aug/07
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Number of Subsamples					
Crop Stage					
Crop Stage Scale					
Pest Stage					
Pest Density, Unit					
Footnote Number					
Assessed By					
Rating Timing					
Trt-Eval Interval	7 DA-B	16 DA-B	27 DA-B	55 DA-B	86 DA-B
ARM Action Codes					
Number of Decimals					

Trt	Treatment	Rate	Growth						
No.	Name	Unit	Stage	1	2	3	4	5	
1	10 -14 DBP Permit	0	OZ/A	0	b0	b0	b93	a95	a
2	10 -14 DBP Permit	0.5	OZ/A	87	a90	a77	a93	a95	a
3	10 -14 DBP Permit	0.66	OZ/A	87	a87	a78	a93	a95	a
4	Preemergence Permit	0	OZ/A	0	b0	b53	a93	a95	a
5	Preemergence Permit	0.5	OZ/A	88	a92	a87	a93	a95	a
6	Preemergence Permit	0.66	OZ/A	88	a92	a77	a93	a95	a
LSD (P=.10)				8.5	3.8	26.5	0.0	0.0	
Standard Deviation				5.8	2.6	17.9	0.0	0.0	
CV				9.9	4.3	28.94	0.0	0.0	
Grand Mean				58.33	60.0	61.94	93.33	95.0	
Bartlett's X2				0.28	1.291	15.359	0.0	0.0	
P(Bartlett's X2)				0.964	0.524	0.004*	1.00	.	

Replicate F	0.500	2.500	2.597	0.000	0.000
Replicate Prob(F)	0.6209	0.1317	0.1235	1.0000	1.0000
Treatment F	183.800	973.500	9.754	0.000	0.000
Treatment Prob(F)	0.0001	0.0001	0.0013	1.0000	1.0000

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Pest Type					
Pest Code	SOYBEAN SOYBEAN SOYBEAN SOYBEAN SOYBEAN				
Crop Code					
Crop Name					
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Date	30/May/07	8/Jun/07	19/Jun/07	17/Jul/07	17/Aug/07
Rating Data Type	CONTROL CONTROL CONTROL CONTROL CONTROL				
Rating Unit	%	%	%	%	%
Number of Subsamples					
Crop Stage					
Crop Stage Scale					
Pest Stage					
Pest Density, Unit					
Footnote Number					
Assessed By					
Rating Timing					
Trt-Eval Interval	7 DA-B	16 DA-B	27 DA-B	55 DA-B	86 DA-B
ARM Action Codes					
Number of Decimals					

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	BARNYARDBARNYARDBARNYARDBARNYARDBARNYARD							
Pest Code	BARNYARDBARNYARDBARNYARDBARNYARDBARNYARD							
Crop Code	BARNYARDBARNYARDBARNYARDBARNYARDBARNYARD							
Crop Name	BARNYARDBARNYARDBARNYARDBARNYARDBARNYARD							
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P			
Rating Date	30/May/07	8/Jun/07	19/Jun/07	17/Jul/07	17/Aug/07			
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Unit	%	%	%	%	%			
Number of Subsamples								
Crop Stage								
Crop Stage Scale								
Pest Stage								
Pest Density, Unit								
Footnote Number								
Assessed By								
Rating Timing								
Trt-Eval Interval	7 DA-B	16 DA-B	27 DA-B	55 DA-B	86 DA-B			
ARM Action Codes								
Number of Decimals								
Trt Treatment	Rate	Growth						
No.Name	RateUnit	Stage	6	7	8	9	10	
1 10 -14 DBP Permit	0 OZ/A		77	b87	a53	c95	a95	a
2 10 -14 DBP Permit	0.5 OZ/A		90	a88	a75	b93	a93	a
3 10 -14 DBP Permit	0.66 OZ/A		90	a88	a73	b95	a95	a
4 Preemergence Permit	0 OZ/A		77	b90	a53	c93	a93	a
5 Preemergence Permit	0.5 OZ/A		90	a90	a85	a93	a93	a
6 Preemergence Permit	0.66 OZ/A		90	a90	a77	b93	a93	a
LSD (P=.10)			4.4	3.5	4.6	3.5	3.5	
Standard Deviation			3.0	2.4	3.1	2.4	2.4	
CV			3.48	2.65	4.49	2.51	2.51	
Grand Mean			85.56	88.89	69.44	93.89	93.89	
Bartlett's X2			0.0	1.291	0.691	0.0	0.0	
P(Bartlett's X2)			.	0.524	0.983	.	.	
Replicate F			2.500	4.000	19.000	1.000	1.000	
Replicate Prob(F)			0.1317	0.0529	0.0004	0.4019	0.4019	
Treatment F			16.000	1.000	53.029	0.400	0.400	
Treatment Prob(F)			0.0002	0.4651	0.0001	0.8382	0.8382	

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	YELLOW	YELLOW	YELLOW	YELLOW	YELLOW
Crop Code					
Crop Name					
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Date	30/May/07	8/Jun/07	19/Jun/07	17/Jul/07	17/Aug/07
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%
Number of Subsamples					
Crop Stage					
Crop Stage Scale					
Pest Stage					
Pest Density, Unit					
Footnote Number					
Assessed By					
Rating Timing					
Trt-Eval Interval	7 DA-B	16 DA-B	27 DA-B	69 DA-A	100 DA-A
ARM Action Codes					
Number of Decimals					

Trt	Treatment	Rate	Growth							
No.	Name	Rate	Unit	Stage	11	12	13	14	15	
1	10 -14 DBP Permit	0	OZ/A		53	b80	b63	b93	a95	a
2	10 -14 DBP Permit	0.5	OZ/A		80	a95	a92	a93	a95	a
3	10 -14 DBP Permit	0.66	OZ/A		90	a95	a92	a93	a95	a
4	Preemergence Permit	0	OZ/A		53	b77	b63	b93	a95	a
5	Preemergence Permit	0.5	OZ/A		83	a93	a92	a93	a95	a
6	Preemergence Permit	0.66	OZ/A		83	a93	a92	a93	a95	a
LSD (P=.10)					7.4	4.4	4.2	0.0	0.0	
Standard Deviation					5.0	3.0	2.8	0.0	0.0	
CV					6.73	3.35	3.45	0.0	0.0	
Grand Mean					73.89	88.89	82.22	93.33	95.0	
Bartlett's X2					0.538	1.291	2.386	0.0	0.0	
P(Bartlett's X2)					0.97	0.524	0.794	1.00	.	
Replicate F					3.427	0.625	7.414	0.000	0.000	
Replicate Prob(F)					0.0735	0.5549	0.0106	1.0000	1.0000	
Treatment F					32.045	23.125	79.724	0.000	0.000	
Treatment Prob(F)					0.0001	0.0001	0.0001	1.0000	1.0000	

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.

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Pest Type	SESBANIA SESBANIA SESBANIA SESBANIA SESBANIA						
Pest Code							
Crop Code							
Crop Name							
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P		
Rating Date	30/May/07	8/Jun/07	19/Jun/07	17/Jul/07	17/Aug/07		
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit	%	%	%	%	%		
Number of Subsamples							
Crop Stage							
Crop Stage Scale							
Pest Stage							
Pest Density, Unit							
Footnote Number							
Assessed By							
Rating Timing							
Trt-Eval Interval	7 DA-B	30 DA-A	41 DA-A	69 DA-A	100 DA-A		
ARM Action Codes							
Number of Decimals							
Trt Treatment	Rate	Growth					
No. Name	Rate Unit	Stage	16	17	18	19	20
1 10 -14 DBP Permit	0 OZ/A		95	a73	b0	b93	a95 a
2 10 -14 DBP Permit	0.5 OZ/A		88	b93	a85	a93	a95 a
3 10 -14 DBP Permit	0.66 OZ/A		93	a93	a87	a93	a95 a
4 Preemergence Permit	0 OZ/A		95	a73	b0	b93	a95 a
5 Preemergence Permit	0.5 OZ/A		95	a95	a77	a93	a95 a
6 Preemergence Permit	0.66 OZ/A		95	a95	a78	a93	a95 a
LSD (P=.10)			2.6	4.4	7.5	0.0	0.0
Standard Deviation			1.7	3.0	5.1	0.0	0.0
CV			1.87	3.42	9.29	0.0	0.0
Grand Mean			93.61	87.22	54.44	93.33	95.0
Bartlett's X2			0.0	1.617	0.361	0.0	0.0
P(Bartlett's X2)			.	0.656	0.948	1.00	.
Replicate F			0.455	4.375	0.870	0.000	0.000
Replicate Prob(F)			0.6472	0.0432	0.4486	1.0000	1.0000
Treatment F			7.000	39.250	210.478	0.000	0.000
Treatment Prob(F)			0.0047	0.0001	0.0001	1.0000	1.0000

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.

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Pest Type					
Pest Code		RICE	RICE		
Crop Code					
Crop Name					
Part Rated		GRAIN	CGRAIN	C	
Rating Date		8/Oct/07	8/Oct/07		
Rating Data Type		Yield	YIELD		
Rating Unit		lb/plt	BU		
Number of Subsamples					
Crop Stage					
Crop Stage Scale					
Pest Stage					
Pest Density, Unit					
Footnote Number					
Assessed By					
Rating Timing					
Trt-Eval Interval					
ARM Action Codes				TY1	
Number of Decimals				0	
Trt Treatment	Rate	Growth			
No.Name	RateUnit	Stage	21	22	
1	10 -14 DBP		7	b 116	b
	Permit	0 OZ/A			
2	10 -14 DBP		9	a 138	a
	Permit	0.5 OZ/A			
3	10 -14 DBP		9	a 138	a
	Permit	0.66 OZ/A			
4	Preemergence		7	b 116	b
	Permit	0 OZ/A			
5	Preemergence		9	a 137	a
	Permit	0.5 OZ/A			
6	Preemergence		9	a 138	a
	Permit	0.66 OZ/A			
LSD (P=.10)			0.7	10.7	
Standard Deviation			0.5	7.2	
CV			5.55	5.55	
Grand Mean			8.38	130.51	
Bartlett's X2			3.447	3.448	
P(Bartlett's X2)			0.631	0.631	
Replicate F			0.639	0.640	
Replicate Prob(F)			0.5479	0.5476	
Treatment F			7.544	7.545	
Treatment Prob(F)			0.0036	0.0036	

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.

Column 22: TY1 = 15.58333*[21]