

## LSU Northeast Research Station

Effect of Beyond rate and timing on red rice control in Clearfield rice.

Trial ID: MR05R107  
Location:Study Dir.:  
Investigator: Bill Williams**GENERAL TRIAL INFORMATION**

Investigator: Bill Williams

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

Conclusions: Beyond at 5 oz/A was very effective at controlling red rice from PI to PI + 10 days.

**CROP AND WEED DESCRIPTION**

Weed Code Common Name Scientific Name

1. ORYSA Rice, red Oryza sativa

Crop 1: ORYSA RICE

Variety: CL161

Planting Date: 5/23/05

Planting Method: DRILLED

Rate: 90 LB/A

Depth: 0.25 IN

Row Spacing: 8 IN

Spacing Within Row: 5 IN

Soil Moisture: Dry

**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: RANDOMIZED COMPLETE BLOCK

**SOIL DESCRIPTION**

% Sand: 14

% OM: 1.3

Texture: Silt loam

% Silt: 70

pH: 5.8

Soil Name: Gigger silt loam

% Clay: 16

CEC: 5.8

Fert. Level: EXCELLENT

**MOISTURE CONDITIONS**

Date	Time	Amount	Unit	Type	Interval	Unit
1. 5/27/05				Flush		
2. 6/3/05				Flush		
3. 6/13/05				Flush		
4. 6/20/05				Flush		
5. 6/28/05		300 lb Urea	fb	Permanent flood		

Overall Moisture Conditions: Dry

Closest Weather Station: Macon Ridge Research Station

Distance: 0

Unit: mi

**APPLICATION DESCRIPTION**

	A	B	C	D	E	F
Application Date:	5/23/05	6/22/05	6/22/05	7/15/05	7/25/05	8/2/05
Time of Day:	1:00	2:00	10:00	11:30	11:30	10:00
Application Method:	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
Application Timing:	OPRE	2-4T	03DPF	PI	PI+10	PI+17
Applic. Placement:	BROSOI	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	92 F	87 F	87 F	85 F	81 F	96 F
% Relative Humidity:	48	74	74	75	81	70
Wind Velocity, Unit:	0 MPH	2 E	2 E	3 SW	0 MPH	2 S
Soil Temp., Unit:	90 F	86 F	85 F	83 F	81 F	95 F
Soil Moisture:	DRY	V.wet	v.wet	Flooded	Flooded	Flooded
% Cloud Cover:	0	70	70	0	60	10

## LSU Northeast Research Station

**CROP STAGE AT EACH APPLICATION**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>Crop 1 Code, Stage:</b>	ORYSA na	ORYSA 5lf-1T	ORYSA 5lf-1T	ORYSA PI
<b>Stage Scale:</b>	na	6-8"	6-8"	31"
	<b>E</b>	<b>F</b>		
<b>Crop 1 Code, Stage:</b>	ORYSA 1 N	ORYSA E. boot		
<b>Stage Scale:</b>	34"	36 "		

**WEED STAGE AT EACH APPLICATION**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>Weed 1 Code, Stage:</b>	ORYSA	ORYSA 2-4 T	ORYSA 2-4 T	ORYSA 1 N
<b>Stage Scale:</b>	n/a	8-10"	8-10"	36"
	<b>E</b>	<b>F</b>		
<b>Weed 1 Code, Stage:</b>	ORYSA E boot	ORYSA L. Boot		
<b>Stage Scale:</b>	38"	38"		

**APPLICATION EQUIPMENT**

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

LSU Northeast Research Station

Effect of Beyond rate and timing on red rice control in Clearfield rice.

Trial ID: MR05R107  
 Location:

Study Dir.:  
 Investigator: Bill Williams

Weed Code	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA
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	6/25/05	7/5/05	7/13/05	7/22/05	7/26/05
Trt-Eval Interval	3 DA-B	13 DA-B	21 DA-B	7 DA-D	11 DA-D
ARM Action Codes					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	1	2	3	4	5	
1	Command	1.33	PT/A	PRE	80	a 80	b 70	b 67	c 60	e
	NewPath	3	OZ/A	PRE						
	Regiment	0.5	OZ/A	3 DPF						
	Permit	0.5	OZ/A	3 DPF						
	Activator 90	0.25	% V/V	3 DPF						
2	Command	1.33	PT/A	PRE	80	a 95	a 95	a 82	b 83	cd
	NewPath	3	OZ/A	PRE						
	Regiment	0.5	OZ/A	3 DPF						
	Permit	0.5	OZ/A	3 DPF						
	Activator 90	0.25	% V/V	3 DPF						
3	Beyond	4	OZ/A	2-4 T						
	Herbimax	1	% V/V	2-4 T						
	Command	1.33	PT/A	PRE	80	a 95	a 95	a 92	a 90	b
	NewPath	3	OZ/A	PRE						
	Regiment	0.5	OZ/A	3 DPF						
4	Permit	0.5	OZ/A	3 DPF						
	Activator 90	0.25	% V/V	3 DPF						
	Beyond	5	OZ/A	2-4 T						
	Herbimax	1	% V/V	2-4 T						
	Command	1.33	PT/A	PRE	80	a 95	a 95	a 95	a 95	a
	NewPath	3	OZ/A	PRE						
	Regiment	0.5	OZ/A	3 DPF						
	Permit	0.5	OZ/A	3 DPF						
	Activator 90	0.25	% V/V	3 DPF						
	Beyond	6	OZ/A	2-4 T						
	Herbimax	1	% V/V	2-4 T						

LSU Northeast Research Station

Weed Code	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA
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	6/25/05	7/5/05	7/13/05	7/22/05	7/26/05
Trt-Eval Interval	3 DA-B	13 DA-B	21 DA-B	7 DA-D	11 DA-D
ARM Action Codes					
# Subsamples, Dec.					

Trt No.	Treatment Name	Rate	Unit	Grow Stg	1	2	3	4	5	d
5	Command	1.33	PT/A	PRE	80	a 80	b 70	b 67	c 80	d
	NewPath	3	OZ/A	PRE						
	Regiment	0.5	OZ/A	3 DPF						
	Permit	0.5	OZ/A	3 DPF						
	Activator 90	0.25	% V/V	3 DPF						
	Beyond	4	OZ/A	PI						
	Herbimax	1	% V/V	PI						
6	Command	1.33	PT/A	PRE	80	a 80	b 70	b 67	c 87	bc
	NewPath	3	OZ/A	PRE						
	Regiment	0.5	OZ/A	3 DPF						
	Permit	0.5	OZ/A	3 DPF						
	Activator 90	0.25	% V/V	3 DPF						
	Beyond	5	OZ/A	PI						
	Herbimax	1	% V/V	PI						
7	Command	1.33	PT/A	PRE	80	a 80	b 70	b 67	c 90	b
	NewPath	3	OZ/A	PRE						
	Regiment	0.5	OZ/A	3 DPF						
	Permit	0.5	OZ/A	3 DPF						
	Activator 90	0.25	% V/V	3 DPF						
	Beyond	6	OZ/A	PI						
	Herbimax	1	% V/V	PI						
8	Command	1.33	PT/A	PRE	80	a 80	b 70	b 67	c 60	e
	NewPath	3	OZ/A	PRE						
	Regiment	0.5	OZ/A	3 DPF						
	Permit	0.5	OZ/A	3 DPF						
	Activator 90	0.25	% V/V	3 DPF						
	Beyond	4	OZ/A	PI + 10						
	Herbimax	1	% V/V	PI + 10						
9	Command	1.33	PT/A	PRE	80	a 80	b 70	b 67	c 60	e
	NewPath	3	OZ/A	PRE						
	Regiment	0.5	OZ/A	3 DPF						
	Permit	0.5	OZ/A	3 DPF						
	Activator 90	0.25	% V/V	3 DPF						
	Beyond	5	OZ/A	PI + 10						
	Herbimax	1	% V/V	PI + 10						

LSU Northeast Research Station

Weed Code	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA
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	6/25/05	7/5/05	7/13/05	7/22/05	7/26/05
Trt-Eval Interval	3 DA-B	13 DA-B	21 DA-B	7 DA-D	11 DA-D
ARM Action Codes					
# Subsamples, Dec.					

Trt	Treatment	Rate	Unit	Grow	Stg	1	2	3	4	5	
10	Command	1.33	PT/A	PRE	80		a 80	b 70	b 67	c 60	e
	NewPath	3	OZ/A	PRE							
	Regiment	0.5	OZ/A	3 DPF							
	Permit	0.5	OZ/A	3 DPF							
	Activator 90	0.25	% V/V	3 DPF							
	Beyond	6	OZ/A	PI + 10							
	Herbimax	1	% V/V	PI + 10							
11	Command	1.33	PT/A	PRE	80		a 80	b 70	b 67	c 60	e
	NewPath	3	OZ/A	PRE							
	Regiment	0.5	OZ/A	3 DPF							
	Permit	0.5	OZ/A	3 DPF							
	Activator 90	0.25	% V/V	3 DPF							
	Beyond	4	OZ/A	PI + 17							
	Herbimax	1	% V/V	PI + 17							
12	Command	1.33	PT/A	PRE	80		a 80	b 70	b 67	c 60	e
	NewPath	3	OZ/A	PRE							
	Regiment	0.5	OZ/A	3 DPF							
	Permit	0.5	OZ/A	3 DPF							
	Activator 90	0.25	% V/V	3 DPF							
	Beyond	5	OZ/A	PI + 17							
	Herbimax	1	% V/V	PI + 17							
13	Command	1.33	PT/A	PRE	80		a 80	b 70	b 67	c 60	e
	NewPath	3	OZ/A	PRE							
	Regiment	0.5	OZ/A	3 DPF							
	Permit	0.5	OZ/A	3 DPF							
	Activator 90	0.25	% V/V	3 DPF							
	Beyond	6	OZ/A	PI + 17							
	Herbimax	1	% V/V	PI + 17							

LSD (P=.05)	0.0	0.0	0.0	5.8	3.7
Bartlett's X2	0.0	0.0	0.0	2.03	0.0
P(Bartlett's X2)	.	.	.	0.998	1.00

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	ORYSA	ORYSA		
Crop Code			ORYSA	Moisture
Part Rated	PLATOT P	PLATOT P	GRAIN C	GRAIN C
Rating Data Type	CONTROL	CONTROL	lb/plot	YIELD
Rating Unit	%	%	12% mst	BU
Rating Date	8/10/05	8/20/05	10/4/05	10/4/05
Trt-Eval Interval	16 DA-E	18 DA-F		
ARM Action Codes				TY1
# Subsamples, Dec.				0

Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	6	7	8	9
1	Command	1.33	PT/A	PRE	50	f	0	f 1 e 20 e
	NewPath	3	OZ/A	PRE				
	Regiment	0.5	OZ/A	3 DPF				
	Permit	0.5	OZ/A	3 DPF				
	Activator 90	0.25	% V/V	3 DPF				
2	Command	1.33	PT/A	PRE	85	d	63	d 4 b 67 b
	NewPath	3	OZ/A	PRE				
	Regiment	0.5	OZ/A	3 DPF				
	Permit	0.5	OZ/A	3 DPF				
	Activator 90	0.25	% V/V	3 DPF				
	Beyond	4	OZ/A	2-4 T				
	Herbimax	1	% V/V	2-4 T				
3	Command	1.33	PT/A	PRE	88	bcd	72	c 5 a 86 a
	NewPath	3	OZ/A	PRE				
	Regiment	0.5	OZ/A	3 DPF				
	Permit	0.5	OZ/A	3 DPF				
	Activator 90	0.25	% V/V	3 DPF				
	Beyond	5	OZ/A	2-4 T				
	Herbimax	1	% V/V	2-4 T				
4	Command	1.33	PT/A	PRE	90	abc	82	b 5 a 84 a
	NewPath	3	OZ/A	PRE				
	Regiment	0.5	OZ/A	3 DPF				
	Permit	0.5	OZ/A	3 DPF				
	Activator 90	0.25	% V/V	3 DPF				
	Beyond	6	OZ/A	2-4 T				
	Herbimax	1	% V/V	2-4 T				
5	Command	1.33	PT/A	PRE	93	a	68	cd 3 c 42 c
	NewPath	3	OZ/A	PRE				
	Regiment	0.5	OZ/A	3 DPF				
	Permit	0.5	OZ/A	3 DPF				
	Activator 90	0.25	% V/V	3 DPF				
	Beyond	4	OZ/A	PI				
	Herbimax	1	% V/V	PI				

LSU Northeast Research Station

Weed Code	ORYSA	ORYSA	ORYSA	Moisture
Crop Code	PLATOT P	PLATOT P	GRAIN C	GRAIN C
Part Rated	CONTROL	CONTROL	lb/plot	YIELD
Rating Data Type	%	%	12% mst	BU
Rating Unit	8/10/05	8/20/05	10/4/05	10/4/05
Trt-Eval Interval	16 DA-E	18 DA-F		
ARM Action Codes				TY1
# Subsamples, Dec.				0
Trt	Treatment	Rate	Grow	
No.	Name	Rate Unit	Stg	6 7 8 9
6	Command	1.33 PT/A	PRE	93 a 82 b 5 a 82 a
	NewPath	3 OZ/A	PRE	
	Regiment	0.5 OZ/A	3 DPF	
	Permit	0.5 OZ/A	3 DPF	
	Activator 90	0.25 % V/V	3 DPF	
	Beyond	5 OZ/A	PI	
	Herbimax	1 % V/V	PI	
7	Command	1.33 PT/A	PRE	92 ab 92 a 5 a 81 a
	NewPath	3 OZ/A	PRE	
	Regiment	0.5 OZ/A	3 DPF	
	Permit	0.5 OZ/A	3 DPF	
	Activator 90	0.25 % V/V	3 DPF	
	Beyond	6 OZ/A	PI	
	Herbimax	1 % V/V	PI	
8	Command	1.33 PT/A	PRE	72 e 92 a 2 cd 39 cd
	NewPath	3 OZ/A	PRE	
	Regiment	0.5 OZ/A	3 DPF	
	Permit	0.5 OZ/A	3 DPF	
	Activator 90	0.25 % V/V	3 DPF	
	Beyond	4 OZ/A	PI + 10	
	Herbimax	1 % V/V	PI + 10	
9	Command	1.33 PT/A	PRE	87 cd 95 a 5 a 81 a
	NewPath	3 OZ/A	PRE	
	Regiment	0.5 OZ/A	3 DPF	
	Permit	0.5 OZ/A	3 DPF	
	Activator 90	0.25 % V/V	3 DPF	
	Beyond	5 OZ/A	PI + 10	
	Herbimax	1 % V/V	PI + 10	
10	Command	1.33 PT/A	PRE	93 a 93 a 5 a 83 a
	NewPath	3 OZ/A	PRE	
	Regiment	0.5 OZ/A	3 DPF	
	Permit	0.5 OZ/A	3 DPF	
	Activator 90	0.25 % V/V	3 DPF	
	Beyond	6 OZ/A	PI + 10	
	Herbimax	1 % V/V	PI + 10	

LSU Northeast Research Station

Weed Code	ORYSA	ORYSA	ORYSA	Moisture
Crop Code	PLATOT P	PLATOT P	GRAIN C	GRAIN C
Part Rated	CONTROL	CONTROL	lb/plot	YIELD
Rating Data Type	%	%	12% mst	BU
Rating Unit	8/10/05	8/20/05	10/4/05	10/4/05
Trt-Eval Interval	16 DA-E	18 DA-F		
ARM Action Codes				TY1
# Subsamples, Dec.				0
Trt Treatment	Rate	Grow		
No. Name	Rate Unit	Stg	6	7
11 Command	1.33 PT/A	PRE	50	f 57
NewPath	3 OZ/A	PRE		e 2
Regiment	0.5 OZ/A	3 DPF		de 30
Permit	0.5 OZ/A	3 DPF		de
Activator 90	0.25 % V/V	3 DPF		
Beyond	4 OZ/A	PI + 17		
Herbimax	1 % V/V	PI + 17		
12 Command	1.33 PT/A	PRE	50	f 73
NewPath	3 OZ/A	PRE		c 5
Regiment	0.5 OZ/A	3 DPF		a 84
Permit	0.5 OZ/A	3 DPF		a
Activator 90	0.25 % V/V	3 DPF		
Beyond	5 OZ/A	PI + 17		
Herbimax	1 % V/V	PI + 17		
13 Command	1.33 PT/A	PRE	50	f 83
NewPath	3 OZ/A	PRE		b 5
Regiment	0.5 OZ/A	3 DPF		a 85
Permit	0.5 OZ/A	3 DPF		a
Activator 90	0.25 % V/V	3 DPF		
Beyond	6 OZ/A	PI + 17		
Herbimax	1 % V/V	PI + 17		
LSD (P=.05)		4.8	6.2	0.6
Bartlett's X2		2.542	5.566	9.057
P(Bartlett's X2)		0.924	0.85	0.698

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 9: TY1 = 16.13333\*[8]