

# LSU Northeast Research Station

## Sequential applications of Permit for weed control in drill-seeded rice.

Trial ID: SJ06R003  
Location:

Protocol ID: SJ06R003  
Study Director:  
Investigator: Bill Williams

### General Trial Information

Investigator: Bill Williams

#### Conclusions:

Command applied preemergence followed by a broadleaf weed and/or sedge program just before permanent flood has become the standard weed control program for drill-seeded rice. Regiment alone or Regiment plus Permit is a popular program following Command because of excellent broadleaf weed and sedge control, as well as fair to good control of escaped barnyardgrass. In this trial all treatments, except for the non-treated controls, received 1.33 pt/A Command applied preemergence. Regiment alone at 0.5 oz/A and Regiment plus Permit at several rates applied just before flood were used as the standards. Permit at 0.33, 0.5, 0.66, and 1 oz/A was also applied 2 weeks before planting with Roundup to evaluate its utility in burndown programs for rice. In general, mixing Roundup with Permit improved barnyardgrass at 25 days after application. Roundup and Command were used at planting so the effects of Permit on in-season barnyardgrass control could not be determined. However, preplant Permit applications did improve early-season sesbania and sedge control. Depending on rate up to two weeks worth of residual sesbania and sedge control was observed following preplant applications of Permit. Follow-up treatments were still required for season long control weed control. Overall, the best weed control and rice yields (150 to 155 bu/A) were observed when 0.5 to 1.0 oz/a Permit was applied preplant and followed by Command PRE and Regiment just before flood. Command PRE followed by Regiment or Regiment plus 0.66 oz/A Permit resulted in just 119 and 109 bu/A of rice, respectively.

### Crop Description

**Crop 1:** QRYSA Oryza sativa Common rice  
**Variety:** Trainasse **Description:** 5/24/06  
**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 **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:** Hemp sesbania

**Pest 4 Type:** W **Code:** CNPPA Caperonia palustris  
**Common Name:** Texasweed

**Pest 5 Type:** W **Code:** CYPPIR Cyperus iria  
**Common Name:** Rice flatsedge

**Pest 6 Type:** W **Code:** COMDI Commelina diffusa  
**Common Name:** Spreading dayflower

**Pest 7 Type:** W **Code:** ECLAL Eclipta alba  
**Common Name:** Eclipta

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**Pest 8 Type:** W    **Code:** CYPES    Cyperus esculentus  
**Common Name:** Yellow Nutsedge

### 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:** Randomized Complete Block

### Maintenance

No.	Date	Maintenance Treatment Name	Rate	Unit
1.	5/25/06	Roundup allied to entire test.	1	QT/A
2.	6/27/06	Prilled urea	300	LB/A

### Soil Description

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

### Moisture Conditions

**Overall Moisture Conditions:** Dry  
**Closest Weather Station:** Northest Research Station    **Distance:** 0.25    **Unit:** MI

No.	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

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## Application Description

	A	B	C
Application Date:	4/28/06	5/25/06	6/23/06
Time of Day:	8:00	10:00	11:00
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	7-14 DPP	PRE	3 DPF
Application Placement:	BROFOL	BROSOI	BROFOL
Air Temperature, Unit:	67 F	72 F	94 F
% Relative Humidity:	52	68	44
Wind Velocity, Unit:	5 MPH	3 MPH	0 MPH
Wind Direction:	N	N	
Soil Temperature, Unit:	68 F	81 F	96 F
Soil Moisture:	DRY	DRY	DRY
% Cloud Cover:	40	30	30

## Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ORYSA BRIC	ORYSA BRIC	ORYSA BRIC
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	NA	NA	1-2 T 100
Height, Unit:			8 IN
Height Minimum, Maximum:			7 8

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## Pest Stage At Each Application

	A	B	C
<b>Pest 1 Code, Disc., Scale:</b>	ECHCG W	ECHCG W	ECHCG W
<b>Stage Majority, Percent:</b>	N/A	1-2 60	3 TILL 100
<b>Height, Unit:</b>		1 IN	6 IN
<b>Height Minimum, Maximum:</b>		1 1	6 6
<b>Pest 2 Code, Disc., Scale:</b>	LEFPA W	LEFPA W	LEFPA W
<b>Stage Majority, Percent:</b>	N/A	NA	3 TILL 100
<b>Height, Unit:</b>			4 IN
<b>Height Minimum, Maximum:</b>			4 4
<b>Pest 3 Code, Disc., Scale:</b>	SEBEX W	SEBEX W	SEBEX W
<b>Stage Majority, Percent:</b>	N/A	1 lf 60	--
<b>Height, Unit:</b>		0.5 IN	6 IN
<b>Height Minimum, Maximum:</b>		0.5 1	6 6
<b>Pest 4 Code, Disc., Scale:</b>	CNPPA W	CNPPA W	CNPPA W
<b>Stage Majority, Percent:</b>	N/A	NA	6-8 LF 100
<b>Height, Unit:</b>			6 IN
<b>Height Minimum, Maximum:</b>			6 6
<b>Pest 5 Code, Disc., Scale:</b>	CYPIR W	CYPIR W	CYPIR W
<b>Stage Majority, Percent:</b>	N/A	runner 100	4 LF 100
<b>Height, Unit:</b>		3 IN	2.5 IN
<b>Height Minimum, Maximum:</b>		3 3	2.5 2.5
<b>Pest 6 Code, Disc., Scale:</b>	COMDI W	COMDI W	COMDI W
<b>Stage Majority, Percent:</b>	N/A	4 lf 100	RUNNER 100
<b>Height, Unit:</b>		2 IN	3 IN
<b>Height Minimum, Maximum:</b>		2 2	3 3
<b>Pest 7 Code, Disc., Scale:</b>	ECLAL W	ECLAL W	ECLAL W
<b>Stage Majority, Percent:</b>	N/A		4 LF 100
<b>Height, Unit:</b>		9 IN	2 IN
<b>Height Minimum, Maximum:</b>		9 9	2 2
<b>Pest 8 Code, Disc., Scale:</b>	CYPES W	CYPES W	CYPES W
<b>Stage Majority, Percent:</b>	N/A	N/A	
<b>Height, Unit:</b>			9 IN
<b>Height Minimum, Maximum:</b>			9 9

## Application Equipment

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

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			W Weed ECHCG Common barn>	ECHCG Common barn>	ECHCG Common barn>	ECHCG Common barn>	ECHCG Common barn>	ECHCG Common barn>	
Pest Type									
Pest Code									
Pest Name									
Crop Code									
BBCH Scale									
Crop Name									
Part Rated			PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	
Rating Date			5/23/06	5/31/06	6/10/06	6/15/06	6/22/06	6/30/06	
Rating Data Type			CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	
Rating Unit			%	%	%	%	%	%	
Days After First/Last Applic.			25 25	33 6	43 16	48 21	55 28	63 7	
Trt-Eval Interval			25 DA-A	6 DA-B	16 DA-B	21 DA-B	28 DA-B	7 DA-C	
ARM Action Codes									
Number of Decimals									
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6
1	Roundup Weathermax	22	oz/a	98.3 a	95.0 a	93.3 a	91.7 a	85.0 a	90.0 a
	Permit	0.33	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Kinetic	0.25	% v/v						
2	Roundup Weathermax	22	oz/a	98.3 a	95.0 a	93.3 a	90.0 a	80.0 a	78.3 b
	Permit	0.5	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Kinetic	0.25	% v/v						
3	Roundup Weathermax	22	oz/a	98.3 a	95.0 a	93.3 a	90.0 a	80.0 a	91.7 a
	Permit	0.66	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Kinetic	0.25	% v/v						
4	Roundup Weathermax	22	oz/a	98.3 a	85.0 b	91.7 a	91.7 a	80.0 a	91.7 a
	Permit	1.0	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Kinetic	0.25	% v/v						
5	Roundup Weathermax	22	oz/a	95.0 a	95.0 a	93.3 a	91.7 a	83.3 a	90.0 a
	Permit	0.33	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Permit	1	oz/a						
	Kinetic	0.25	% v/v						
6	Roundup Weathermax	22	oz/a	98.3 a	95.0 a	93.3 a	91.7 a	86.7 a	90.0 a
	Permit	0.5	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Permit	0.83	oz/a						
	Kinetic	0.25	% v/v						
7	Roundup Weathermax	22	oz/a	98.3 a	95.0 a	93.3 a	93.3 a	81.7 a	90.0 a
	Permit	1.0	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Permit	0.33	oz/a						
	Kinetic	0.25	% v/v						
8	Roundup Weathermax	22	oz/a	80.0 b	95.0 a	93.3 a	93.3 a	85.0 a	91.7 a
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Permit	0.33	oz/a						
	Kinetic	0.25	% v/v						

## LSU Northeast Research Station

Pest Type	W Weed	ECHCG	ECHCG	ECHCG	ECHCG	ECHCG		
Pest Code	ECHCG	ECHCG	ECHCG	ECHCG	ECHCG	ECHCG		
Pest Name	Common barn>	Common barn>	Common barn>	Common barn>	Common barn>	Common barn>		
Crop Code								
BBCH Scale								
Crop Name								
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P		
Rating Date	5/23/06	5/31/06	6/10/06	6/15/06	6/22/06	6/30/06		
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL		
Rating Unit	%	%	%	%	%	%		
Days After First/Last Applic.	25 25	33 6	43 16	48 21	55 28	63 7		
Trt-Eval Interval	25 DA-A	6 DA-B	16 DA-B	21 DA-B	28 DA-B	7 DA-C		
ARM Action Codes								
Number of Decimals								
Trt Treatment								
No. Name	Rate	Unit	1	2	3	4	5	6
9 Roundup Weathermax	22 oz/a		81.7 b	95.0 a	93.9 a	90.0 a	81.7 a	90.0 a
Command	1.33 pt/a							
Regiment	0.5 oz/a							
Permit	0.66 oz/a							
Kinetic	0.25 % v/v							
10 Roundup Weathermax	22 oz/a		80.0 b	95.0 a	93.3 a	91.7 a	83.3 a	88.3 a
Command	1.33 pt/a							
Regiment	0.5 oz/a							
Kinetic	0.25 % v/v							
11 Roundup Weathermax	22 oz/a		80.0 b	95.0 a	91.7 a	88.3 a	76.7 a	91.7 a
Command	1.33 pt/a							
Regiment	0.5 oz/a							
Permit	0.5 oz/a							
Kinetic	0.25 % v/v							
12 Roundup Weathermax	22 oz/a		80.0 b	91.7 a	0.0 b	0.0 b	0.0 b	0.0 c
13 Roundup Weathermax	22 oz/a		91.7 a	95.0 a	91.7 a	88.3 a	82.0 a	90.0 a
Permit	1.33 oz/a							
Command	1.33 pt/a							
Regiment	0.5 oz/a							
Kinetic	0.25 % v/v							
14 Roundup Weathermax	22 oz/a		98.3 a	95.0 a	91.7 a	91.7 a	83.3 a	90.0 a
Permit	0.66 oz/a							
Command	1.33 pt/a							
Regiment	0.5 oz/a							
Permit	0.66 oz/a							
Kinetic	0.25 % v/v							
15 Roundup Weathermax	22 oz/a		80.0 b	95.0 a	91.7 a	93.3 a	83.3 a	91.7 a
Command	1.33 pt/a							
Regiment	0.5 oz/a							
Permit	1.0 oz/a							
Kinetic	0.25 % v/v							
16 Roundup Weathermax	22 oz/a		80.0 b	95.0 a	93.3 a	90.0 a	80.0 a	91.7 a
Command	1.33 pt/a							
Regiment	0.5 oz/a							
Permit	1.33 oz/a							
Kinetic	0.25 % v/v							
LSD (P=.05)			4.29	3.73	3.01	6.10	9.16	5.60
Standard Deviation			2.58	2.24	1.80	3.66	5.49	3.36
CV			2.87	2.37	2.07	4.28	7.13	3.99
Bartlett's X2			2.846	2.012	0.0	11.715	18.207	2.582
P(Bartlett's X2)			0.97	0.156	1.00	0.469	0.198	1.00
Replicate F			3.848	1.667	22.605	10.558	7.870	21.923
Replicate Prob(F)			0.0325	0.2059	0.0001	0.0003	0.0019	0.0001
Treatment F			35.665	4.000	498.535	116.987	42.607	136.665
Treatment Prob(F)			0.0001	0.0006	0.0001	0.0001	0.0001	0.0001

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.

## LSU Northeast Research Station

Pest Type			W Weed					
Pest Code		ECHCG	SEBEX	SEBEX	SEBEX	SEBEX	SEBEX	
Pest Name		Common barn>	Hemp sesban>	Hemp sesban>	Hemp sesban>	Hemp sesban>	Hemp sesban>	
Crop Code								
BBCH Scale								
Crop Name								
Part Rated		PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	
Rating Date		7/7/06	5/23/06	5/31/06	6/10/06	6/15/06	6/22/06	
Rating Data Type		CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	
Rating Unit		%	%	%	%	%	%	
Days After First/Last Applic.		70 14	25 25	33 6	43 16	48 21	55 28	
Trt-Eval Interval		14 DA-C	25 DA-A	6 DA-B	16 DA-B	21 DA-B	28 DA-B	
ARM Action Codes								
Number of Decimals								
Trt	Treatment	Rate						
No.	Name	Rate Unit	7	8	9	10	11	12
1	Roundup Weathermax	22 oz/a	80.0 c	98.3 a	95.0 a	93.3 a	70.0 b	30.0 e
	Permit	0.33 oz/a						
	Command	1.33 pt/a						
	Regiment	0.5 oz/a						
	Kinetic	0.25 % v/v						
2	Roundup Weathermax	22 oz/a	80.0 c	98.3 a	95.0 a	93.3 a	88.3 a	56.7 c
	Permit	0.5 oz/a						
	Command	1.33 pt/a						
	Regiment	0.5 oz/a						
	Kinetic	0.25 % v/v						
3	Roundup Weathermax	22 oz/a	85.0 b	98.3 a	95.0 a	93.3 a	81.7 a	56.7 c
	Permit	0.66 oz/a						
	Command	1.33 pt/a						
	Regiment	0.5 oz/a						
	Kinetic	0.25 % v/v						
4	Roundup Weathermax	22 oz/a	85.0 b	98.3 a	95.0 a	93.3 a	90.0 a	66.7 b
	Permit	1.0 oz/a						
	Command	1.33 pt/a						
	Regiment	0.5 oz/a						
	Kinetic	0.25 % v/v						
5	Roundup Weathermax	22 oz/a	85.0 b	95.0 a	95.0 a	91.7 a	78.3 a	53.3 cd
	Permit	0.33 oz/a						
	Command	1.33 pt/a						
	Regiment	0.5 oz/a						
	Permit	1 oz/a						
	Kinetic	0.25 % v/v						
6	Roundup Weathermax	22 oz/a	80.0 c	98.3 a	95.0 a	93.3 a	81.7 a	46.7 d
	Permit	0.5 oz/a						
	Command	1.33 pt/a						
	Regiment	0.5 oz/a						
	Permit	0.83 oz/a						
	Kinetic	0.25 % v/v						
7	Roundup Weathermax	22 oz/a	85.0 b	98.3 a	95.0 a	93.3 a	86.7 a	46.7 d
	Permit	1.0 oz/a						
	Command	1.33 pt/a						
	Regiment	0.5 oz/a						
	Permit	0.33 oz/a						
	Kinetic	0.25 % v/v						
8	Roundup Weathermax	22 oz/a	85.0 b	90.0 a	95.0 a	73.3 b	0.0 c	0.0 f
	Command	1.33 pt/a						
	Regiment	0.5 oz/a						
	Permit	0.33 oz/a						
	Kinetic	0.25 % v/v						
9	Roundup Weathermax	22 oz/a	80.0 c	80.0 b	95.0 a	73.3 b	0.0 c	0.0 f
	Command	1.33 pt/a						
	Regiment	0.5 oz/a						
	Permit	0.66 oz/a						
	Kinetic	0.25 % v/v						
10	Roundup Weathermax	22 oz/a	85.0 b	83.3 b	95.0 a	70.0 b	0.0 c	0.0 f
	Command	1.33 pt/a						
	Regiment	0.5 oz/a						
	Permit	0.33 oz/a						
	Kinetic	0.25 % v/v						

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Pest Type		W Weed					
Pest Code	ECHCG	SEBEX	SEBEX	SEBEX	SEBEX	SEBEX	
Pest Name	Common barn>	Hemp sesban>	Hemp sesban>	Hemp sesban>	Hemp sesban>	Hemp sesban>	
Crop Code							
BBCH Scale							
Crop Name							
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	
Rating Date	7/7/06	5/23/06	5/31/06	6/10/06	6/15/06	6/22/06	
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	
Rating Unit	%	%	%	%	%	%	
Days After First/Last Applic.	70 14	25 25	33 6	43 16	48 21	55 28	
Trt-Eval Interval	14 DA-C	25 DA-A	6 DA-B	16 DA-B	21 DA-B	28 DA-B	
ARM Action Codes							
Number of Decimals							
Trt Treatment							
No. Name							
Rate							
Unit							
11 Roundup Weathermax	22 oz/a	90.0 a	80.0 b	95.0 a	73.3 b	0.0 c	0.0 f
Command	1.33 pt/a						
Regiment	0.5 oz/a						
Permit	0.5 oz/a						
Kinetic	0.25 % v/v						
12 Roundup Weathermax	22 oz/a	0.0 d	80.0 b	95.0 a	73.3 b	0.0 c	0.0 f
13 Roundup Weathermax	22 oz/a	80.0 c	93.3 a	90.0 b	91.7 a	88.3 a	75.0 a
Permit	1.33 oz/a						
Command	1.33 pt/a						
Regiment	0.5 oz/a						
Kinetic	0.25 % v/v						
14 Roundup Weathermax	22 oz/a	85.0 b	98.3 a	95.0 a	93.3 a	90.0 a	53.3 cd
Permit	0.66 oz/a						
Command	1.33 pt/a						
Regiment	0.5 oz/a						
Permit	0.66 oz/a						
Kinetic	0.25 % v/v						
15 Roundup Weathermax	22 oz/a	90.0 a	80.0 b	95.0 a	70.0 b	0.0 c	0.0 f
Command	1.33 pt/a						
Regiment	0.5 oz/a						
Permit	1.0 oz/a						
Kinetic	0.25 % v/v						
16 Roundup Weathermax	22 oz/a	90.0 a	80.0 b	95.0 a	70.0 b	0.0 c	0.0 f
Command	1.33 pt/a						
Regiment	0.5 oz/a						
Permit	1.33 oz/a						
Kinetic	0.25 % v/v						
LSD (P=.05)	0.00	5.51	0.00	5.11	7.63	6.55	
Standard Deviation	0.00	3.31	0.00	3.07	4.58	3.93	
CV	0.0	3.65	0.0	3.66	9.7	12.97	
Bartlett's X2	0.0	8.814	0.0	5.252	5.87	0.648	
P(Bartlett's X2)	.	0.55	.	0.949	0.438	0.999	
Replicate F	0.000	5.571	0.000	12.454	2.910	4.955	
Replicate Prob(F)	1.0000	0.0088	1.0000	0.0001	0.0699	0.0138	
Treatment F	0.000	19.390	0.000	37.609	268.085	164.834	
Treatment Prob(F)	1.0000	0.0001	1.0000	0.0001	0.0001	0.0001	

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.

## LSU Northeast Research Station

Pest Type	SEBEX	SEBEX	SEBEX	W Weed CYPIR	CYPIR	CYPIR			
Pest Code	Hemp sesban>	Hemp sesban>	Hemp sesban>	Rice flatse>	Rice flatse>	Rice flatse>			
Pest Name									
Crop Code									
BBCH Scale									
Crop Name									
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P			
Rating Date	6/30/06	7/7/06	7/21/06	5/31/06	6/15/06	6/22/06			
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Unit	%	%	%	%	%	%			
Days After First/Last Applic.	63 7	70 14	84 28	33 6	48 21	55 28			
Trt-Eval Interval	7 DA-C	14 DA-C	28 DA-C	6 DA-B	21 DA-B	28 DA-B			
ARM Action Codes									
Number of Decimals									
Trt No.	Treatment Name	Rate	Unit	13	14	15	16	17	18
1	Roundup Weathermax	22	oz/a	95.0	95.0	93.3	95.0	0.0	0.0
	Permit	0.33	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Kinetic	0.25	% v/v						
2	Roundup Weathermax	22	oz/a	85.0	95.0	91.7	95.0	0.0	0.0
	Permit	0.5	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Kinetic	0.25	% v/v						
3	Roundup Weathermax	22	oz/a	93.3	95.0	93.3	95.0	83.3	83.3
	Permit	0.66	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Kinetic	0.25	% v/v						
4	Roundup Weathermax	22	oz/a	93.3	95.0	93.3	95.0	83.3	83.3
	Permit	1.0	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Kinetic	0.25	% v/v						
5	Roundup Weathermax	22	oz/a	91.7	95.0	93.3	95.0	0.0	0.0
	Permit	0.33	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Permit	1	oz/a						
	Kinetic	0.25	% v/v						
6	Roundup Weathermax	22	oz/a	91.7	95.0	93.3	95.0	80.0	80.0
	Permit	0.5	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Permit	0.83	oz/a						
	Kinetic	0.25	% v/v						
7	Roundup Weathermax	22	oz/a	91.7	95.0	93.3	95.0	80.0	80.0
	Permit	1.0	oz/a						
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Permit	0.33	oz/a						
	Kinetic	0.25	% v/v						
8	Roundup Weathermax	22	oz/a	91.7	95.0	93.3	0.0	0.0	0.0
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Permit	0.33	oz/a						
	Kinetic	0.25	% v/v						
9	Roundup Weathermax	22	oz/a	91.7	95.0	93.3	0.0	0.0	0.0
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Permit	0.66	oz/a						
	Kinetic	0.25	% v/v						
10	Roundup Weathermax	22	oz/a	91.7	95.0	93.3	0.0	0.0	0.0
	Command	1.33	pt/a						
	Regiment	0.5	oz/a						
	Permit	0.33	oz/a						
	Kinetic	0.25	% v/v						

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Pest Type	SEBEX	SEBEX	SEBEX	W Weed CYPIR	CYPIR	CYPIR
Pest Code	Hemp sesban>	Hemp sesban>	Hemp sesban>	Rice flatse>	Rice flatse>	Rice flatse>
Pest Name						
Crop Code						
BBCH Scale						
Crop Name						
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Date	6/30/06	7/7/06	7/21/06	5/31/06	6/15/06	6/22/06
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	%	%	%	%	%	%
Days After First/Last Applic.	63 7	70 14	84 28	33 6	48 21	55 28
Trt-Eval Interval	7 DA-C	14 DA-C	28 DA-C	6 DA-B	21 DA-B	28 DA-B
ARM Action Codes						
Number of Decimals						
Trt Treatment						
No. Name						
Rate						
Unit						
11 Roundup Weathermax	22 oz/a	91.7 a	95.0 a	93.3 a	0.0 b	0.0 c
Command	1.33 pt/a					
Regiment	0.5 oz/a					
Permit	0.5 oz/a					
Kinetic	0.25 % v/v					
12 Roundup Weathermax	22 oz/a	0.0 b	0.0 b	0.0 b	0.0 b	0.0 c
Permit	1.33 oz/a					
Command	1.33 pt/a					
Regiment	0.5 oz/a					
Kinetic	0.25 % v/v					
13 Roundup Weathermax	22 oz/a	91.7 a	95.0 a	90.0 a	93.3 a	90.0 a
Permit	1.33 oz/a					
Command	1.33 pt/a					
Regiment	0.5 oz/a					
Kinetic	0.25 % v/v					
14 Roundup Weathermax	22 oz/a	91.7 a	95.0 a	91.7 a	93.3 a	90.0 a
Permit	0.66 oz/a					
Command	1.33 pt/a					
Regiment	0.5 oz/a					
Permit	0.66 oz/a					
Kinetic	0.25 % v/v					
15 Roundup Weathermax	22 oz/a	91.7 a	95.0 a	91.7 a	0.0 b	0.0 c
Command	1.33 pt/a					
Regiment	0.5 oz/a					
Permit	1.0 oz/a					
Kinetic	0.25 % v/v					
16 Roundup Weathermax	22 oz/a	91.7 a	95.0 a	91.7 a	0.0 b	0.0 c
Command	1.33 pt/a					
Regiment	0.5 oz/a					
Permit	1.33 oz/a					
Kinetic	0.25 % v/v					
LSD (P=.05)	6.98	0.00	3.35	1.64	3.29	3.29
Standard Deviation	4.19	0.00	2.01	0.99	1.97	1.97
CV	4.87	0.0	2.31	1.85	6.23	6.23
Bartlett's X2	16.379	0.0	1.348	0.0	0.0	0.0
P(Bartlett's X2)	0.229	.	1.00	1.00	1.00	1.00
Replicate F	1.158	0.000	20.172	2.143	2.143	2.143
Replicate Prob(F)	0.3276	1.0000	0.0001	0.1349	0.1349	0.1349
Treatment F	90.549	0.000	400.517	7254.251	1380.572	1380.572
Treatment Prob(F)	0.0001	1.0000	0.0001	0.0001	0.0001	0.0001

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.

## LSU Northeast Research Station

Pest Type										
Pest Code		CYPIR	CYPIR	W Weed CYPES	CYPES	CYPES				
Pest Name		Rice flatse>	Rice flatse>	Yellow nuts>	Yellow nuts>	Yellow nuts>				
Crop Code							ORYSA	ORYSA		
BBCH Scale							BRIC	BRIC		
Crop Name							Common rice	Common rice		
Part Rated		PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	GRAIN C	GRAIN C		
Rating Date		6/30/06	7/21/06	5/31/06	6/22/06	6/30/06	9/20/06	9/20/06		
Rating Data Type		CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	YIELD	YIELD		
Rating Unit		%	%	%	%	%	Lb/Plot	BU		
Days After First/Last Applic.		63 7	84 28	33 6	55 28	63 7	145 89	145 89		
Trt-Eval Interval		7 DA-C	28 DA-C	6 DA-B	28 DA-B	7 DA-C	89 DA-C	89 DA-C		
ARM Action Codes								TY1		
Number of Decimals								0		
Trt No.	Treatment Name	Rate	Unit	19	20	21	22	23	24	25
1	Roundup Weathermax Permit	22 oz/a	oz/a	95.0 a	95.0 a	95.0 a	80.0 b	80.0 d	9.23 b-e	126 b-e
	Command	1.33 pt/a	pt/a							
	Regiment	0.5 oz/a	oz/a							
	Kinetic	0.25 % v/v	% v/v							
2	Roundup Weathermax Permit	22 oz/a	oz/a	95.0 a	95.0 a	95.0 a	90.0 a	80.0 d	11.03 a	150 a
	Command	1.33 pt/a	pt/a							
	Regiment	0.5 oz/a	oz/a							
	Kinetic	0.25 % v/v	% v/v							
3	Roundup Weathermax Permit	22 oz/a	oz/a	95.0 a	95.0 a	95.0 a	78.3 b	80.0 d	11.27 a	153 a
	Command	0.66 oz/a	oz/a							
	Regiment	1.33 pt/a	pt/a							
	Kinetic	0.5 oz/a	oz/a							
	Kinetic	0.25 % v/v	% v/v							
4	Roundup Weathermax Permit	22 oz/a	oz/a	95.0 a	95.0 a	95.0 a	90.0 a	86.7 bcd	11.40 a	155 a
	Command	1.0 oz/a	oz/a							
	Regiment	1.33 pt/a	pt/a							
	Kinetic	0.5 oz/a	oz/a							
	Kinetic	0.25 % v/v	% v/v							
5	Roundup Weathermax Permit	22 oz/a	oz/a	95.0 a	95.0 a	95.0 a	80.0 b	90.0 abc	10.80 ab	147 ab
	Command	0.33 oz/a	oz/a							
	Regiment	1.33 pt/a	pt/a							
	Permit	0.5 oz/a	oz/a							
	Permit	1 oz/a	oz/a							
	Kinetic	0.25 % v/v	% v/v							
6	Roundup Weathermax Permit	22 oz/a	oz/a	95.0 a	95.0 a	95.0 a	80.0 b	95.0 a	10.30 abc	140 abc
	Command	0.5 oz/a	oz/a							
	Regiment	1.33 pt/a	pt/a							
	Permit	0.5 oz/a	oz/a							
	Permit	0.83 oz/a	oz/a							
	Kinetic	0.25 % v/v	% v/v							
7	Roundup Weathermax Permit	22 oz/a	oz/a	95.0 a	95.0 a	95.0 a	83.3 b	95.0 a	10.63 ab	145 ab
	Command	1.0 oz/a	oz/a							
	Regiment	1.33 pt/a	pt/a							
	Permit	0.5 oz/a	oz/a							
	Permit	0.33 oz/a	oz/a							
	Kinetic	0.25 % v/v	% v/v							
8	Roundup Weathermax Command	22 oz/a	oz/a	95.0 a	95.0 a	80.0 b	0.0 c	91.7 ab	9.87 a-d	134 a-d
	Regiment	1.33 pt/a	pt/a							
	Permit	0.5 oz/a	oz/a							
	Permit	0.33 oz/a	oz/a							
	Kinetic	0.25 % v/v	% v/v							
9	Roundup Weathermax Command	22 oz/a	oz/a	95.0 a	95.0 a	80.0 b	0.0 c	90.0 abc	8.00 e	109 e
	Regiment	1.33 pt/a	pt/a							
	Permit	0.5 oz/a	oz/a							
	Permit	0.66 oz/a	oz/a							
	Kinetic	0.25 % v/v	% v/v							
10	Roundup Weathermax Command	22 oz/a	oz/a	95.0 a	95.0 a	80.0 b	0.0 c	73.3 e	8.77 cde	119 cde
	Regiment	1.33 pt/a	pt/a							
	Permit	0.5 oz/a	oz/a							
	Kinetic	0.25 % v/v	% v/v							

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Pest Type	CYPES	CYPES	W Weed CYPES	CYPES	CYPES	CYPES	CYPES			
Pest Code	CYPIR	CYPIR	W Weed CYPES	CYPES	CYPES	CYPES	CYPES			
Pest Name	Rice flatse>	Rice flatse>	Yellow nuts>	Yellow nuts>	Yellow nuts>	Yellow nuts>	Yellow nuts>			
Crop Code										
BBCH Scale										
Crop Name						ORYSA BRIC	ORYSA BRIC			
Part Rated	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	Common rice GRAIN C	Common rice GRAIN C			
Rating Date	6/30/06	7/21/06	5/31/06	6/22/06	6/30/06	9/20/06	9/20/06			
Rating Data Type	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	YIELD	YIELD			
Rating Unit	%	%	%	%	%	Lb/Plot	BU			
Days After First/Last Applic.	63 7	84 28	33 6	55 28	63 7	145 89	145 89			
Trt-Eval Interval	7 DA-C	28 DA-C	6 DA-B	28 DA-B	7 DA-C	89 DA-C	89 DA-C			
ARM Action Codes							TY1			
Number of Decimals							0			
Trt No.	Treatment Name	Rate	Unit	19	20	21	22	23	24	25
11	Roundup Weathermax Command	22 oz/a	oz/a	95.0 a	95.0 a	80.0 b	0.0 c	83.3 cd	9.90 a-d	135 a-d
	Regiment	1.33 pt/a	pt/a							
	Permit	0.5 oz/a	oz/a							
	Kinetic	0.5 oz/a	oz/a							
		0.25 % v/v	% v/v							
12	Roundup Weathermax	22 oz/a	oz/a	0.0 b	0.0 b	80.0 b	0.0 c	0.0 f	0.23 f	3 f
13	Roundup Weathermax Permit	22 oz/a	oz/a	95.0 a	95.0 a	95.0 a	90.0 a	80.0 d	10.03 a-d	137 a-d
	Command	1.33 pt/a	pt/a							
	Regiment	0.5 oz/a	oz/a							
	Kinetic	0.5 oz/a	oz/a							
		0.25 % v/v	% v/v							
14	Roundup Weathermax Permit	22 oz/a	oz/a	95.0 a	95.0 a	95.0 a	83.3 b	88.3 abc	9.67 a-d	132 a-d
	Command	0.66 oz/a	oz/a							
	Regiment	1.33 pt/a	pt/a							
	Permit	0.5 oz/a	oz/a							
	Kinetic	0.66 oz/a	oz/a							
		0.25 % v/v	% v/v							
15	Roundup Weathermax Command	22 oz/a	oz/a	95.0 a	95.0 a	80.0 b	0.0 c	90.0 abc	11.40 a	155 a
	Regiment	1.33 pt/a	pt/a							
	Permit	0.5 oz/a	oz/a							
	Kinetic	1.0 oz/a	oz/a							
		0.25 % v/v	% v/v							
16	Roundup Weathermax Command	22 oz/a	oz/a	95.0 a	95.0 a	80.0 b	0.0 c	90.0 abc	8.57 de	117 de
	Regiment	1.33 pt/a	pt/a							
	Permit	0.5 oz/a	oz/a							
	Kinetic	1.33 oz/a	oz/a							
		0.25 % v/v	% v/v							
LSD (P=.05)		0.00		0.00	0.00	0.00	3.69	4.48	1.088	14.8
Standard Deviation		0.00		0.00	0.00	0.00	2.21	2.69	0.652	8.9
CV		0.0		0.0	0.0	0.0	4.69	3.32	6.91	6.91
Bartlett's X2		0.0		0.0	0.0	0.0	1.018	1.884	17.656	17.656
P(Bartlett's X2)		.		.	.	.	0.601	0.757	0.281	0.281
Replicate F		0.000		0.000	0.000	0.000	0.319	1.154	0.866	0.861
Replicate Prob(F)		1.0000		1.0000	1.0000	1.0000	0.7292	0.3290	0.4311	0.4331
Treatment F		0.000		0.000	0.000	0.000	1139.681	208.923	50.023	50.007
Treatment Prob(F)		1.0000		1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	0.0001

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 = 13.62308\*[C24]