

# LSU Northeast Research Station

## Preemergence broadleaf weed control in rice with DE-750 and Grasp.

Trial ID: SJ07R018      Protocol ID: SJ07R018  
 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

**Crop 2:** 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

**Harvested Width, Unit:** 5 FT      **Harvest Equipment:** Small plot combine  
**Harvested Length, Unit:** 12 FT  
**% Standard Moisture:** 12.0

### 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 - Middle  
**% Sand:** 20      **% OM:** 1.99      **Texture:** Clay  
**% Silt:** 30      **pH:** 7.97      **Soil Name:** Sharkey  
**% Clay:** 50      **CEC:** 22.4      **Fert. Level:** EXCELLENT

### Moisture and Weather Conditions

**Overall Moisture Conditions:** Dry  
**Closest Weather Station:** Northeast Research Station      **Distance:** 0.25      **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:** 23/May/07  
**Time of Day:** 11:00  
**Application Method:** Spray  
**Application Timing:** PRE  
**Application Placement:** BROSOI  
**Air Temperature, Unit:** 84 F  
**% Relative Humidity:** 55  
**Wind Velocity, Unit:** 7 MPH  
**Wind Direction:** E  
**Soil Temperature, Unit:** 80 F  
**Soil Moisture:** moist  
**% Cloud Cover:** 10

**Crop Stage At Each Application**

**A**

**Crop 1 Code, BBCH Scale:** ORYSA BRIC  
**Stage Scale Used:** N/A  
**Crop 2 Code, BBCH Scale:** ORYSA BRIC  
**Stage Scale Used:** BBCH

**Pest Stage At Each Application**

**A**

**Stage Majority, Percent:** N/A

**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 GPA  
**Mix Size, Unit:** 0.5 Liters  
**Propellant:** CO2

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## Preemergence broadleaf weed control in rice with DE-750 and Grasp.

Trial ID: SJ07R018

Protocol ID: SJ07R018

Location:

Study Director:

Investigator: Bill Williams

Pest Type	GLXMA									
Pest Code										
Crop Code	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA					
Part Rated	PLATOT	CPLATOT	CPLATOT	CPLATOT	CPLATOT	CPLATOT P				
Rating Date	1/Jun/07	6/Jun/07	11/Jun/07	20/Jun/07	18/Jul/07	31/May/07				
Rating Data Type	PHYGEN	PHYGEN	PHYGEN	PHYGEN	PHYGEN	Control				
Rating Unit	%	%	%	%	%	%				
Trt-Eval Interval	Emergence	5 DAE	10 DAE	4 WAT	8WAT	1 WAT				
Trt Treatment	Rate	Growth								
No.	Name	Rate Unit	Stage	1	2	3	4	5	6	
1	Command	0.8	PT/A PRE	0	a0	a0	a0	a0	a0	g
2	Command	0.8	PT/A PRE	0	a0	a0	a0	a0	a33	f
	DE-750	0.5	OZ/APRE							
3	Command	0.8	PT/A PRE	0	a0	a0	a0	a0	a53	d
	DE-750	1	OZ/APRE							
4	Command	0.8	PT/A PRE	0	a0	a0	a2	a0	a67	c
	DE-750	1.5	OZ/APRE							
5	Command	0.8	PT/A PRE	0	a0	a0	a2	a0	a78	b
	DE-750	2	OZ/APRE							
6	Command	0.8	PT/A PRE	0	a0	a0	a0	a0	a90	a
	DE-750	4	OZ/APRE							
7	Command	0.8	PT/A PRE	0	a0	a0	a0	a0	a43	e
	Grasp	1	OZ/APRE							
8	Command	0.8	PT/A PRE	0	a0	a0	a2	a0	a73	bc
	DE-750	1	OZ/APRE							
	Grasp	1	OZ/APRE							
9	Command	0.8	PT/A PRE	0	a0	a0	a2	a0	a63	c
	DE-750	1.5	OZ/APRE							
	Grasp	1	OZ/APRE							
10	Command	0.8	PT/A PRE	0	a0	a0	a0	a0	a68	c
	DE-750	2	OZ/APRE							
	Grasp	1	OZ/APRE							
11	nontreated			0	a0	a0	a0	a0	a0	g
LSD (P=.10)				0.0	0.0	0.0	2.1	0.0	7.1	
Standard Deviation				0.0	0.0	0.0	1.5	0.0	5.1	
CV				0.0	0.0	0.0	240.31	0.0	9.79	
Grand Mean				0.0	0.0	0.0	0.61	0.0	51.82	
Bartlett's X2				0.0	0.0	0.0	0.0	0.0	1.477	
P(Bartlett's X2)				.	.	.	.	.	0.983	

Replicate F	0.000	0.000	0.000	5.714	0.000	0.353
Replicate Prob(F)	1.0000	1.0000	1.0000	0.0109	1.0000	0.7069
Treatment F	0.000	0.000	0.000	1.000	0.000	105.241
Treatment Prob(F)	1.0000	1.0000	1.0000	0.4755	1.0000	0.0001

# LSU Northeast Research Station

Pest Type								
Pest Code						GLXMA		
Crop Code	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA			
Part Rated	PLATOT	CPLATOT	CPLATOT	CPLATOT	CPLATOT	CPLATOT P		
Rating Date	1/Jun/07	6/Jun/07	11/Jun/07	20/Jun/07	18/Jul/07	31/May/07		
Rating Data Type	PHYGEN	PHYGEN	PHYGEN	PHYGEN	PHYGEN	Control		
Rating Unit	%	%	%	%	%	%		
Trt-Eval Interval	Emergence	5 DAE	10 DAE	4 WAT	8WAT	1 WAT		
Trt Treatment	Rate	Growth						
No.Name	RateUnit	Stage	1	2	3	4	5	6

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	GLXMA	GLXMA	GLXMA	SEBEX	SEBEX	SEBEX				
Crop Code										
Part Rated	PLATOT	PPLATOT	PPLATOT	PPLATOT	PPLATOT	PPLATOT				
Rating Date	6/Jun/07	20/Jun/07	18/Jul/07	31/May/07	6/Jun/07	20/Jun/07				
Rating Data Type	Control	Control	Control	Control	Control	Control				
Rating Unit	%	%	%	%	%	%				
Trt-Eval Interval	2 WAT	4 WAT	8 WAT	1 WAT	2 WAT	4 WAT				
Trt Treatment	Rate	Growth								
No.	Name	Rate Unit	Stage	7	8	9	10	11	12	
1	Command	0.8	PT/A PRE	0	d 0	c 93	a 0	b 0	c 0	b
2	Command	0.8	PT/A PRE	67	c 73	b 93	a 92	a 90	b 93	a
	DE-750	0.5	OZ/A PRE							
3	Command	0.8	PT/A PRE	77	b 83	a 93	a 93	a 93	a 88	a
	DE-750	1	OZ/A PRE							
4	Command	0.8	PT/A PRE	80	ab 87	a 93	a 93	a 95	a 93	a
	DE-750	1.5	OZ/A PRE							
5	Command	0.8	PT/A PRE	83	ab 85	a 93	a 93	a 95	a 93	a
	DE-750	2	OZ/A PRE							
6	Command	0.8	PT/A PRE	83	ab 92	a 93	a 93	a 95	a 92	a
	DE-750	4	OZ/A PRE							
7	Command	0.8	PT/A PRE	70	c 77	b 93	a 92	a 93	a 92	a
	Grasp	1	OZ/A PRE							
8	Command	0.8	PT/A PRE	80	ab 87	a 93	a 93	a 95	a 92	a
	DE-750	1	OZ/A PRE							
	Grasp	1	OZ/A PRE							
9	Command	0.8	PT/A PRE	80	ab 87	a 93	a 90	a 95	a 92	a
	DE-750	1.5	OZ/A PRE							
	Grasp	1	OZ/A PRE							
10	Command	0.8	PT/A PRE	87	a 85	a 93	a 93	a 95	a 92	a
	DE-750	2	OZ/A PRE							
	Grasp	1	OZ/A PRE							
11	nontreated			0	d 0	c 0	b 0	b 0	c 0	b
LSD (P=.10)				4.8	5.7	1.2	3.6	1.6	3.1	
Standard Deviation				3.4	4.1	0.9	2.6	1.2	2.2	
CV				5.35	5.92	1.03	3.39	1.52	2.88	
Grand Mean				64.24	68.64	84.85	75.76	76.97	75.15	
Bartlett's X2				0.0	2.56	0.0	6.351	0.0	0.0	
P(Bartlett's X2)				.	0.959	1.00	0.608	.	1.00	
Replicate F				4.103	2.615	100.000	15.287	2.222	5.968	
Replicate Prob(F)				0.0321	0.0980	0.0001	0.0001	0.1344	0.0093	
Treatment F				264.615	213.725	3136.000	639.104	3191.000	883.000	
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	

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Pest Type			SEBEX		ORYSA				
Pest Code			SEBEX			ORYSA	ORYSA	ORYSA	
Crop Code			PLATOT	PPLATOT	PGRAIN	CGRAIN	CGRAIN	C	
Part Rated			18/Jul/07	18/Aug/07	9/Oct/07	9/Oct/07	9/Oct/07		
Rating Date			Control	Control	YIELD	Moisture	YIELD		
Rating Data Type			%	%	lb/plt	%	BU		
Rating Unit			8 WAT	87 DA-A	139 DA-A	139 DA-A	139 DA-A		
Trt-Eval Interval									
Trt Treatment	Rate	Growth							
No.	Name	Rate Unit	Stage	13	14	15	16	17	
1	Command	0.8	PT/A PRE	93	a 95	a 8	ab 17	a 116	ab
2	Command	0.8	PT/A PRE	93	a 95	a 8	ab 16	a 117	ab
	DE-750	0.5	OZ/A PRE						
3	Command	0.8	PT/A PRE	93	a 95	a 9	a 17	a 130	a
	DE-750	1	OZ/A PRE						
4	Command	0.8	PT/A PRE	93	a 95	a 8	ab 16	a 118	ab
	DE-750	1.5	OZ/A PRE						
5	Command	0.8	PT/A PRE	93	a 92	b 7	b 17	a 105	b
	DE-750	2	OZ/A PRE						
6	Command	0.8	PT/A PRE	93	a 92	b 5	c 17	a 77	c
	DE-750	4	OZ/A PRE						
7	Command	0.8	PT/A PRE	93	a 95	a 7	b 17	a 103	b
	Grasp	1	OZ/A PRE						
8	Command	0.8	PT/A PRE	93	a 95	a 8	ab 17	a 124	ab
	DE-750	1	OZ/A PRE						
	Grasp	1	OZ/A PRE						
9	Command	0.8	PT/A PRE	93	a 95	a 8	ab 17	a 118	ab
	DE-750	1.5	OZ/A PRE						
	Grasp	1	OZ/A PRE						
10	Command	0.8	PT/A PRE	93	a 95	a 6	c 17	a 86	c
	DE-750	2	OZ/A PRE						
	Grasp	1	OZ/A PRE						
11	nontreated			0	b 0	c 2	d 17	a 23	d
LSD (P=.10)				1.2	1.6	0.9	0.9	13.2	
Standard Deviation				0.9	1.2	0.6	0.6	9.4	
CV				1.03	1.36	9.11	3.67	9.27	
Grand Mean				84.85	85.76	6.64	16.71	101.43	
Bartlett's X2				0.0	0.0	6.564	9.636	5.949	
P(Bartlett's X2)				1.00	.	0.766	0.473	0.82	
Replicate F				100.000	2.222	1.681	2.310	1.880	
Replicate Prob(F)				0.0001	0.1344	0.2114	0.1251	0.1787	
Treatment F				3136.000	1783.667	32.614	0.615	31.733	
Treatment Prob(F)				0.0001	0.0001	0.0001	0.7839	0.0001	

Means followed by same letter do not significantly differ (P=.10, Student-Newman-Keuls)

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Column 17:  $TY1 = 16.13333 * [15] * (100 - [16]) / 88$