

# Rice Weed and Pest Management Project

## *2006 Annual Research Report*



**Experiment Station**

Vance H. Watson, Director

**Mississippi Agricultural & Forestry Experiment Station**

Robert H. Foglesong, President • Mississippi State University • Vance H. Watson, Vice President

# **RICE WEED AND PEST MANAGEMENT PROJECT**

## **2006 ANNUAL RESEARCH REPORT**

**Jason A. Bond, Timothy W. Walker, Nathan W. Buehring,  
L. Chris Vaughn, and L. Scott Lanford  
Delta Research and Extension Center  
Mississippi Agricultural and Forestry Experiment Station  
Stoneville, MS 38776**

## Table of Contents

Introduction ..... iv

Methods for 2006 Rice Weed and Pest Management Research ..... vi

### Rice Weed Management Research

06-WS-01	Newpath Rate and Timing Combinations.....	1
06-WS-02	Newpath Plus Residual Herbicide Rate and Timing Combinations.....	8
06-WS-03	Tolerance of Rice Varieties to Grasp Herbicide.....	15
06-WS-06	Grasp Postflood Efficacy .....	19
06-WS-07	Preflood and Postflood Clincher SF Efficacy.....	26
06-WS-09	Regiment and Adjuvant Combinations.....	40
06-WS-10	Regiment and Ricestar HT Combinations .....	47
06-WS-11	Regiment and Permit Combinations.....	61
06-WS-12	V-10142 Application Rate and Timing .....	68
06-WS-13	Early Postemergence IR5878 Weed Control Programs.....	80
06-WS-14	Rice Tolerance to Postflood Grasp Applications.....	94
06-WS-15	Prowl Timing.....	103
06-WS-16	Postemergence Applications of DPX-KF081 .....	107
06-WS-17	Rice Tolerance to DPX-KF081 Applications .....	115
06-WS-18	Mid Postemergence IR5878 Weed Control Programs.....	119
06-WS-19	Ricestar HT Programs in Clearfield Rice .....	130
06-WS-20	Ricestar HT Programs in Conventional Rice.....	135
06-WS-22	Newpath Plus Prowl H2O Combinations .....	140
06-WS-23	Rice Tolerance to Midseason Regiment Applications.....	145

## Rice Disease Management Research

06-WS-24	Quadris, Quilt, and Tilt Programs in Rice .....	148
6906	Fungicide Program Evaluation .....	152

## Appendices

Appendix I	Abbreviations.....	156
	Abbreviations Used in Rice Weed Control Research .....	157
	Common Rice Weeds of Mississippi.....	158
Appendix II	List of Chemicals.....	159
	List of Herbicides .....	160
	List of Fungicides .....	161
	List of Spray Adjuvants .....	161
Appendix III	Rainfall Data.....	162
	Rainfall Data for the Delta Research and Extension Center in 2006 .....	163

## **Introduction**

This report summarizes the 2006 rice weed and pest management experiments conducted at the Mississippi State University Delta Research and Extension Center at Stoneville, MS. This information is prepared for the use of industry cooperators, colleagues at other universities, and other interested persons. The interpretation of these data may change after additional experimentation. The information presented is not an endorsement or recommendation, is intended for private use, and may not be reproduced without permission.

Many of the herbicide treatments used in these tests may not be labeled for use, or may not be recommended by Mississippi State University. Always refer to each herbicide label, Mississippi's Weed Control Guidelines (Publication 1532), and Mississippi's Rice Growers Guide (Publication 2255) for recommendations.

Spraying methods are outlined for each individual experiment. Abbreviations, Bayer weed codes, rainfall data, and a list of all chemicals used in this research are listed in the Appendices.

Trade names were used throughout this report for clarity. Where trade names were unavailable, the herbicides are listed by experimental number. Herbicide rates are expressed as units of active ingredient (ai), acid equivalent (ae), or product amount.

The authors gratefully acknowledge the following for their assistance in this research:

Joe E. Street, Head  
Delta Research and Extension Center

James T. Robbins, Gabe L. Sciumbato, and the staff of the  
Mississippi State University Delta Research and Extension Center

The Mississippi Rice Promotion Board funded substantial portions of the research reported in this publication.

Gary Fioranelli, Cleveland (Chairman)  
Gipson Carter, Rolling Fork (Vice-Chairman)  
Terry Murrell, Avon (Secretary)  
James Allison, Sarah  
Curtis Berry, Robinsonville  
Nolen Canon, Jr., Tunica  
Donald Gant, Merigold  
Bill Griffith, Boyle  
Randy Howarth, Cleveland  
Rex Morgan, Cleveland  
Doug Simmons, Hollandale  
Gibb Steele, Hollandale

The experiments described in this report were also supported by commercial gifts or grants. The following organizations provided financial support and/or have supplied pesticides or seed for establishment and maintenance of this research:

BASF Corporation  
Bayer CropScience  
Dow AgroSciences LLC  
DuPont Crop Protection  
Helena Chemical Company  
Isagro USA, Inc.  
Jimmy Sanders, Inc.  
RiceCo LLC  
RiceTec, Inc.  
Syngenta Crop Protection  
Valent USA Corporation

The support of the Rice Weed and Pest Management Project at the Delta Research and Extension Center by these organizations is greatly appreciated.

## **Methods for 2006 Rice Weed and Pest Management Research**

Crop injury and herbicide efficacy were visually estimated on a scale of 0 to 100% where 0 indicates no crop injury or no weed control and 100 is equal to crop death or complete weed control. The ratings were tabulated and means computed for each weed species having sufficient density and distribution in the experimental area. Rice yield was determined by harvesting the four center rows of each plot.

Data presented in this report are summarized and statistically analyzed with the Agriculture Research Manager software program by Gylling Data Management, Inc., Brookings, South Dakota.

**Mississippi State University Delta Research and Extension Center**  
**Newpath Rate and Timing Combinations**

Trial ID: 06-WS-01

Location: DREC - Red Rice Area

**Objective:**

To determine the effectiveness of single and sequential applications of Newpath for control of barnyardgrass, red rice, and Amazon sprangletop.

**Conclusions:**

This experiment was designed to evaluate different combinations of Newpath rates applied to 1- to 2-leaf rice (EPOST), 3- to 4-leaf rice (MPOST), or 4-leaf to 1-tiller rice (LPOST). Up to 12 FL OZ/A was applied in single and/or split applications. Weeds evaluated included barnyardgrass (ECHCG), Amazon sprangletop (LEFPA), and red rice (ORYSA). The Beyond treatments were not applied and the experiment was not harvested because LEFPA infestation was severe and LEFPA control from most treatments was poor. ECHCG and ORYSA were controlled at least 85 and 83%, respectively, by all treatments 15 days following LPOST application. All treatments including sequential applications of Newpath controlled these species at least 90% 15 days following LPOST applications. For control of ECHCG and ORYSA, single applications of Newpath at 8 FL OZ/A were generally less effective than single applications of Newpath at 12 FL OZ/A or sequential applications of Newpath at 4 or 6 FL OZ/A. At 15 day following LPOST application, only sequential applications of Newpath at 4 or 6 FL OZ/A controlled LEFPA greater than 65%. Other herbicides should be included in a Clearfield rice weed control program where LEFPA is troublesome.

**Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> CL 131	<b>Description:</b> Clearfield variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 18-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 73 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 25-May-06

**Pest Description**

**Pest 1 Type:** W **Code:** ECHCG *Echinochloa crus-galli*  
**Common Name:** Barnyardgrass

**Pest 2 Type:** W **Code:** LEFPA *Leptochloa panicoides*  
**Common Name:** Amazon sprangletop

**Pest 3 Type:** W **Code:** ORYSA *Oryza sativa*  
**Common Name:** Red rice

**Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Stale seedbed
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> F Fair

**Maintenance**

No .	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	16-May-06	Glystar Plus	4	L	1	QT/A
2.	12-Jun-06	Aim	2	EC	1.67	FL OZ/A
3.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
4.	15-Jun-06	Urea (46:0:0)	46	GR	325	LB/A

**Mississippi State University Delta Research and Extension Center**  
**Newpath Rate and Timing Combinations**

Trial ID: 06-WS-01

Location: DREC - Red Rice Area

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 2 **Unit:** MI

	Date	Type
1.	23-May-06	Flush
2.	7-Jun-06	Flush
3.	16-Jun-06	Flood

**Application Description**

	A	B	C
<b>Application Date:</b>	3-Jun-06	9-Jun-06	15-Jun-06
<b>Time of Day:</b>	11:00 am	8:30 am	12:30 pm
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	EPOST	MPOST	LPOST
<b>Application Placement:</b>	Foliar	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB	JAB
<b>Air Temperature, Unit:</b>	86 F	92 F	96 F
<b>% Relative Humidity:</b>	50	60	54
<b>Wind Velocity, Unit:</b>	1 MPH	0 MPH	0 MPH
<b>Wind Direction:</b>	NW		
<b>Dew Presence (Y/N):</b>	N	Y	N
<b>Soil Temperature, Unit:</b>	76 F	78 F	
<b>Soil Moisture:</b>	Excessive	Excessive	Adequate
<b>% Cloud Cover:</b>	0	0	25

**Crop Stage At Each Application**

	A	B	C
<b>Crop 1 Code:</b>	ORYSA	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	2 leaf	4 leaf	2 tiller
<b>Stage Minimum, Percent:</b>	2 leaf	3 leaf	1 tiller
<b>Stage Maximum, Percent:</b>	3 leaf	4 leaf	2 tiller
<b>Height, Unit:</b>	5 IN	6 IN	8 IN
<b>Height Minimum, Maximum:</b>	4 6	5 7	7 9

**Mississippi State University Delta Research and Extension Center**  
**Newpath Rate and Timing Combinations**

Trial ID: 06-WS-01

Location: DREC - Red Rice Area

**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>	2 leaf	3 leaf	1 til
<b>Stage Minimum, Percent:</b>	1 leaf	2 leaf	4 leaf
<b>Stage Maximum, Percent:</b>	2 leaf	3 leaf	1 till
<b>Height, Unit:</b>	2 IN	2 IN	4 IN
<b>Height Minimum, Maximum:</b>	1 2	3 3	3 4
<b>Density, Unit:</b>	18 FT2	18 FT2	10 FT2
<b>Pest 2 Code, Disc., Scale:</b>	LEFPA W	LEFPA W	LEFPA W
<b>Stage Majority, Percent:</b>		1 leaf	3 leaf
<b>Stage Minimum, Percent:</b>		1 leaf	2 leaf
<b>Stage Maximum, Percent:</b>		2 leaf	3 leaf
<b>Height, Unit:</b>		2 IN	4 IN
<b>Height Minimum, Maximum:</b>		1 2	4 5
<b>Density, Unit:</b>		5 FT2	15 FT2
<b>Pest 3 Code, Disc., Scale:</b>	ORYSA W	ORYSA W	ORYSA W
<b>Stage Majority, Percent:</b>	2 leaf	4 leaf	4 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	3 leaf	4 leaf
<b>Stage Maximum, Percent:</b>	3 leaf	5 leaf	1 til
<b>Height, Unit:</b>	3 IN	5 IN	5 IN
<b>Height Minimum, Maximum:</b>	2 4	4 5	4 5
<b>Density, Unit:</b>	12 FT2	7 FT2	8 FT2

**Application Equipment**

	A	B	C
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	36 PSI	29 PSI	25 PSI
<b>Nozzle Type:</b>	XR	XR	DG
<b>Nozzle Size:</b>	110015VS	11001VS	110015VS
<b>Nozzle Spacing, Unit:</b>	20 IN	16 IN	16 IN
<b>Nozzles/Row:</b>	3	4	4
<b>Boom Length, Unit:</b>	60 IN	64 IN	64 IN
<b>Ground Speed, Unit:</b>	3 MPH	2 MPH	3 MPH
<b>Carrier:</b>	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA

**Date      By      Notes**

15-Jun-06 JAB Amazon sprangletop emerged after application A (EPOST).

9-Jun-06 JAB Weed counts and sizes recorded from plots not receiving sequential Newpath applications.

30-Jun-06 JAB Beyond was not applied because plots had become overgrown with Amazon sprangletop.

**Mississippi State University Delta Research and Extension Center**  
**Newpath Rate and Timing Combinations**

Trial ID: 06-WS-01

Location: DREC - Red Rice Area

Pest Code	Rating Date	Rating Data Type	Rating Unit	Days After First/Last Applic.	Trt-Eval Interval	15-Jun-06	Rice Injury %	23-Jun-06	Rice Injury %	30-Jun-06	Rice Injury %	ECHCG 15-Jun-06 Control %	ECHCG 23-Jun-06 Control %	ECHCG 30-Jun-06 Control %	ORYSA 15-Jun-06 Control %
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	1	2	3	4	5	6	7	
1	Nontreated							0 a	0 a	0 a	0 c	0 g	0 d	0 c	
2	Newpath Agri-Dex	2 AS L	4 FL OZ/A EPOST	19.2	FL OZ/A EPOST	A		0 a	0 a	0 a	96 a	96 ab	97 a	86 ab	
	Newpath Agri-Dex	2 AS L	4 FL OZ/A MPOST	19.2	FL OZ/A MPOST	B									
3	Newpath Agri-Dex	2 AS L	6 FL OZ/A EPOST	19.2	FL OZ/A EPOST	A		0 a	0 a	0 a	96 a	96 ab	98 a	88 ab	
	Newpath Agri-Dex	2 AS L	6 FL OZ/A MPOST	19.2	FL OZ/A MPOST	B									
4	Newpath Agri-Dex	2 AS L	4 FL OZ/A EPOST	19.2	FL OZ/A EPOST	A		0 a	0 a	0 a	98 a	99 a	99 a	88 ab	
	Newpath Agri-Dex	2 AS L	4 FL OZ/A MPOST	19.2	FL OZ/A MPOST	B									
	Newpath Agri-Dex	2 AS L	4 FL OZ/A LPOST	19.2	FL OZ/A LPOST	C									
	Newpath Agri-Dex	2 AS L	19.2 FL OZ/A LPOST	19.2	FL OZ/A LPOST	C									
5	Newpath Agri-Dex	2 AS L	4 FL OZ/A EPOST	19.2	FL OZ/A EPOST	A		0 a	0 a	0 a	95 ab	96 ab	97 a	88 ab	
	Newpath Agri-Dex	2 AS L	4 FL OZ/A MPOST	19.2	FL OZ/A MPOST	B									
	Beyond Agri-Dex	1 AS L	5 FL OZ/A PD+14 d	19.2	FL OZ/A PD+14 d	D									
6	Newpath Agri-Dex	2 AS L	6 FL OZ/A EPOST	19.2	FL OZ/A EPOST	A		0 a	0 a	0 a	96 a	97 a	98 a	90 a	
	Newpath Agri-Dex	2 AS L	6 FL OZ/A MPOST	19.2	FL OZ/A MPOST	B									
	Beyond Agri-Dex	1 AS L	5 FL OZ/A PD+14 d	19.2	FL OZ/A PD+14 d	D									
7	Newpath Agri-Dex	2 AS L	4 FL OZ/A EPOST	19.2	FL OZ/A EPOST	A		0 a	0 a	0 a	94 ab	98 a	97 a	86 ab	
	Newpath Agri-Dex	2 AS L	4 FL OZ/A MPOST	19.2	FL OZ/A MPOST	B									
	Newpath Agri-Dex	2 AS L	4 FL OZ/A LPOST	19.2	FL OZ/A LPOST	C									
	Beyond Agri-Dex	1 AS L	5 FL OZ/A PD+14 d	19.2	FL OZ/A PD+14 d	D									
8	Newpath Agri-Dex	2 AS L	4 FL OZ/A EPOST	19.2	FL OZ/A EPOST	A		0 a	0 a	0 a	95 ab	95 abc	94 ab	91 a	
	Newpath Agri-Dex	2 AS L	4 FL OZ/A MPOST	19.2	FL OZ/A MPOST	B									
	Newpath Agri-Dex	2 AS L	4 FL OZ/A PD+14 d	19.2	FL OZ/A PD+14 d	D									
	Beyond Agri-Dex	1 AS L	5 FL OZ/A PD+14 d	19.2	FL OZ/A PD+14 d	D									
9	Newpath Agri-Dex	2 AS L	8 FL OZ/A EPOST	19.2	FL OZ/A EPOST	A		0 a	0 a	0 a	90 b	86 de	89 bc	88 ab	
10	Newpath Agri-Dex	2 AS L	8 FL OZ/A MPOST	19.2	FL OZ/A MPOST	B			0 a	0 a		85 de	95 ab		
11	Newpath Agri-Dex	2 AS L	8 FL OZ/A LPOST	19.2	FL OZ/A LPOST	C			0 a	0 a		83 ef	85 c		
12	Newpath Agri-Dex	2 AS L	8 FL OZ/A EPOST	19.2	FL OZ/A EPOST	A		0 a	0 a	0 a	96 a	89 cde	89 bc	88 ab	
	Newpath Agri-Dex	1 AS L	5 FL OZ/A PD+14 d	19.2	FL OZ/A PD+14 d	D									

**Mississippi State University Delta Research and Extension Center**  
**Newpath Rate and Timing Combinations**

Trial ID: 06-WS-01

Location: DREC - Red Rice Area

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								15-Jun-06 Rice Injury % 12 0 12 DA-A	23-Jun-06 Rice Injury % 20 8 14 DA-B	30-Jun-06 Rice Injury % 27 15 15 DA-C	ECHCG 15-Jun-06 Control % 12 0 12 DA-A	ECHCG 23-Jun-06 Control % 20 8 14 DA-B	ECHCG 30-Jun-06 Control % 27 15 15 DA-C	ORYSA 15-Jun-06 Control % 12 0 12 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	1	2	3	4	5	6	7
13	Newpath Agri-Dex	2 AS L	8 FL OZ/A 19.2 FL OZ/A	MPOST MPOST	B B			0 a	0 a			85 de	94 ab	
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2 FL OZ/A	PD+14 d PD+14 d	D D									
14	Newpath Agri-Dex	2 AS L	8 FL OZ/A 19.2 FL OZ/A	LPOST LPOST	C C			0 a	0 a			78 f	95 ab	
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2 FL OZ/A	PD+14 d PD+14 d	D D									
15	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	EPOST EPOST	A A			0 a	0 a	0 a	93 ab	90 bcd	94 ab	83 b
16	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	MPOST MPOST	B B			0 a	0 a			86 de	85 c	
17	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	LPOST LPOST	C C			0 a	0 a			88 de	95 ab	
18	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	EPOST EPOST	A A			0 a	0 a	0 a	94 ab	90 bcd	93 ab	91 a
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2 FL OZ/A	PD+14 d PD+14 d	D D									
19	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	MPOST MPOST	B B			0 a	0 a			90 bcd	95 ab	
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2 FL OZ/A	PD+14 d PD+14 d	D D									
20	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	LPOST LPOST	C C			0 a	0 a			84 def	96 ab	
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2 FL OZ/A	PD+14 d PD+14 d	D D									
Standard Deviation CV								0.0	0.0	0.0	3.5	4.2	4.6	3.8
								0.0	0.0	0.0	4.02	4.93	5.17	4.72

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Newpath Rate and Timing Combinations**

Trial ID: 06-WS-01

Location: DREC - Red Rice Area

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								ORYSA 23-Jun-06 Control % 20 8 14 DA-B	ORYSA 30-Jun-06 Control % 27 15 15 DA-C	LEFPA 23-Jun-06 Control % 20 8 14 DA-B	LEFPA 30-Jun-06 Control % 27 15 15 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Unit	Appl Stage				
1	Nontreated							0 h	0 e	0 h	0 h
2	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A EPOST	FL OZ/A EPOST	A A		91 ab	97 ab	75 ab	72 abc
	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A MPOST	FL OZ/A MPOST	B B					
3	Newpath Agri-Dex	2 AS L	6 FL OZ/A 19.2	FL OZ/A EPOST	FL OZ/A EPOST	A A		91 ab	98 a	83 a	89 a
	Newpath Agri-Dex	2 AS L	6 FL OZ/A 19.2	FL OZ/A MPOST	FL OZ/A MPOST	B B					
4	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A EPOST	FL OZ/A EPOST	A A		95 a	99 a	89 a	87 a
	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A MPOST	FL OZ/A MPOST	B B					
	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A MPOST	FL OZ/A MPOST	B B					
5	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A EPOST	FL OZ/A EPOST	A A		85 abc	97 ab	75 ab	78 ab
	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A MPOST	FL OZ/A MPOST	B B					
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2	FL OZ/A PD+14 d	FL OZ/A PD+14 d	D D					
6	Newpath Agri-Dex	2 AS L	6 FL OZ/A 19.2	FL OZ/A EPOST	FL OZ/A EPOST	A A		88 ab	98 a	86 a	89 a
	Newpath Agri-Dex	2 AS L	6 FL OZ/A 19.2	FL OZ/A MPOST	FL OZ/A MPOST	B B					
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2	FL OZ/A PD+14 d	FL OZ/A PD+14 d	D D					
7	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A EPOST	FL OZ/A EPOST	A A		93 a	97 ab	84 a	87 a
	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A MPOST	FL OZ/A MPOST	B B					
	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A MPOST	FL OZ/A MPOST	C B					
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2	FL OZ/A PD+14 d	FL OZ/A PD+14 d	D D					
8	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A EPOST	FL OZ/A EPOST	A A		86 ab	90 bcd	73 ab	70 a-d
	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A MPOST	FL OZ/A MPOST	B B					
	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2	FL OZ/A PD+14 d	FL OZ/A PD+14 d	D D					
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2	FL OZ/A PD+14 d	FL OZ/A PD+14 d	D D					
9	Newpath Agri-Dex	2 AS L	8 FL OZ/A 19.2	FL OZ/A EPOST	FL OZ/A EPOST	A A		81 a-d	88 cd	45 cd	50 c-f
10	Newpath Agri-Dex	2 AS L	8 FL OZ/A 19.2	FL OZ/A MPOST	FL OZ/A MPOST	B B		69 def	91 abc	39 cde	53 c-f
11	Newpath Agri-Dex	2 AS L	8 FL OZ/A 19.2	FL OZ/A LPOST	FL OZ/A LPOST	C C		63 fg	88 cd	30 def	45 ef
12	Newpath Agri-Dex	2 AS L	8 FL OZ/A 19.2	FL OZ/A EPOST	FL OZ/A EPOST	A A		88 ab	93 abc	40 cde	49 def
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2	FL OZ/A PD+14 d	FL OZ/A PD+14 d	D D					

**Mississippi State University Delta Research and Extension Center**  
**Newpath Rate and Timing Combinations**

Trial ID: 06-WS-01

Location: DREC - Red Rice Area

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								ORYSA 23-Jun-06 Control % 20 8 14 DA-B	ORYSA 30-Jun-06 Control % 27 15 15 DA-C	LEFPA 23-Jun-06 Control % 20 8 14 DA-B	LEFPA 30-Jun-06 Control % 27 15 15 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	8	9	10	11
13	Newpath Agri-Dex	2 AS L	8 FL OZ/A 19.2 FL OZ/A	MPOST MPOST	B B	72 c-f	83 d	12 fgh	21 g		
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2 FL OZ/A	PD+14 d PD+14 d	D D						
14	Newpath Agri-Dex	2 AS L	8 FL OZ/A 19.2 FL OZ/A	LPOST LPOST	C C	50 g	88 cd	5 gh	20 g		
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2 FL OZ/A	PD+14 d PD+14 d	D D						
15	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	EPOST EPOST	A A	86 ab	93 abc	48 cd	65 b-e		
16	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	MPOST MPOST	B B	70 def	83 d	25 d-g	35 fg		
17	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	LPOST LPOST	C C	66 ef	91 abc	38 cde	61 b-e		
18	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	EPOST EPOST	A A	90 ab	93 abc	58 bc	75 ab		
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2 FL OZ/A	PD+14 d PD+14 d	D D						
19	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	MPOST MPOST	B B	78 b-e	95 abc	54 bc	69 a-d		
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2 FL OZ/A	PD+14 d PD+14 d	D D						
20	Newpath Agri-Dex	2 AS L	12 FL OZ/A 19.2 FL OZ/A	LPOST LPOST	C C	60 fg	92 abc	20 e-h	51 c-f		
	Beyond Agri-Dex	1 AS L	5 FL OZ/A 19.2 FL OZ/A	PD+14 d PD+14 d	D D						
Standard Deviation CV								8.7 11.61	4.7 5.38	14.5 29.71	13.7 23.55

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

# Mississippi State University Delta Research and Extension Center

## Newpath Plus Residual Herbicide Rate and Timing Combinations

Trial ID: 06-WS-02

Location: DREC - Red Rice Area

### Objective:

To evaluate residual herbicides in combination with Newpath at a DPRE or EPOST application timing.

### Conclusions:

This experiment was conducted to document the benefit of residual herbicides in a Clearfield rice production system and to determine the proper application timing [delayed-preemergence (DPRE) or applied to 1- to 2-leaf rice (EPOST)] for these residual herbicides when applied in tank mixture with Newpath and followed with a second Newpath application at 3- to 4-leaf rice (MPOST). Weeds evaluated included barnyardgrass (ECHCG), red rice (ORYSA), and Amazon sprangletop (LEFPA). ECHCG was controlled at least 92% 11 days following DPRE application. ECHCG was not controlled by the EPOST residual herbicides until Newpath MPOST was applied. By 27 days after Newpath MPOST, ECHCG control from DPRE or EPOST residual herbicides followed by Newpath MPOST was at least 94%. ORYSA was also controlled at least 90% by all treatments 27 days following Newpath MPOST. In general, LEFPA was controlled less when residual herbicides were applied in tank mixture with Newpath EPOST compared with DPRE applications. Prowl EC or Prowl H2O provided best residual control of LEFPA. In areas where LEFPA is troublesome, residual herbicides should be applied prior to LEFPA emergence in a Clearfield rice production system.

### Crop Description

**Crop 1:** ORYSA *Oryza sativa* Rice  
**Variety:** CL131 **Description:** Clearfield variety  
**BBCH Scale:** BRIC **Planting Date:** 18-May-06  
**Planting Method:** Drill **Rate, Unit:** 80 LB/A  
**Depth, Unit:** 1 IN  
**Row Spacing, Unit:** 8 IN  
**Seed Bed:** Smooth **Soil Temperature, Unit:** 73 F  
**Soil Moisture:** Adequate **Emergence Date:** 25-May-06

### Pest Description

**Pest 1 Type:** W **Code:** ECHCG *Echinochloa crus-galli*  
**Common Name:** Barnyardgrass

**Pest 2 Type:** W **Code:** ORYSA *Oryza sativa*  
**Common Name:** Red rice

**Pest 3 Type:** W **Code:** LEFPA *Leptochloa panicoides*  
**Common Name:** Amazon sprangletop

### Site and Design

**Plot Width, Unit:** 5.33 FT **Site Type:** Field  
**Plot Length, Unit:** 15 FT **Tillage Type:** Conventional  
**Replications:** 4 **Study Design:** Randomized Complete Block  
**% Slope:** 0.1 **Soil Drainage:** F Fair

### Maintenance

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	16-May-06	GlyStar Plus	4	L	1	QT/A
2.	12-Jun-06	Aim	2	EC	1.67	FL OZ/A
3.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
4.	15-Jun-06	Urea (46:0:0)	46	GR	325	LB/A

# Mississippi State University Delta Research and Extension Center Newpath Plus Residual Herbicide Rate and Timing Combinations

Trial ID: 06-WS-02

Location: DREC - Red Rice Area

## Soil Description

% Sand: 11 % OM: 2.1 Texture: Silty clay  
 % Silt: 30 pH: 8.2 Soil Name: Sharkey  
 % Clay: 59 CEC: 34.2 Fert. Level: Excellent

## Additional Measured Elements

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

## Moisture Conditions

Overall Moisture Conditions: Below Normal

Closest Weather Station: MSU-DREC

Distance: 2 Unit: MI

	Date	Type
1.	23-May-06	Flush
2.	7-Jun-06	Flush
3.	16-Jun-06	Flood
4.	5-Sep-06	Drain

## Application Description

	A	B	C
Application Date:	23-May-06	3-Jun-06	9-Jun-06
Time of Day:	2:30 pm	11:00 am	8:30 am
Application Method:	Broadcast	Broadcast	Broadcast
Application Timing:	DPRE	EPOST	MPOST
Application Placement:	Soil	Foliar	Foliar
Applied By:	JAB	JAB	JAB
Air Temperature, Unit:	94 F	86 F	92 C
% Relative Humidity:	72	60	60
Wind Velocity, Unit:	1 MPH	2 MPH	0 KPH
Wind Direction:	SW	NW	
Dew Presence (Y/N):	N	N	Y
Soil Temperature, Unit:	72 F	76 F	77 F
Soil Moisture:	Adequate	Excessive	Excessive
% Cloud Cover:	50	0	0

## Crop Stage At Each Application

	A	B	C
Crop 1 Code:	ORYSA	ORYSA	ORYSA
Stage Majority, Percent:		2 leaf	4 leaf
Stage Minimum, Percent:		2 leaf	3 leaf
Stage Maximum, Percent:		3 leaf	4 leaf
Height, Unit:		5 IN	8 IN
Height Minimum, Maximum:		4 6	7 8

**Mississippi State University Delta Research and Extension Center  
Newpath Plus Residual Herbicide Rate and Timing Combinations**

Trial ID: 06-WS-02

Location: DREC - Red Rice Area

**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>		1 leaf	2 leaf
<b>Stage Minimum, Percent:</b>		1 leaf	2 leaf
<b>Stage Maximum, Percent:</b>		2 leaf	3 leaf
<b>Height, Unit:</b>		1 IN	3 IN
<b>Height Minimum, Maximum:</b>		1 1	2 3
<b>Density, Unit:</b>		15 FT2	3 FT2
<b>Pest 2 Code, Disc., Scale:</b>	ORYSA W	ORYSA W	ORYSA W
<b>Stage Majority, Percent:</b>		2 leaf	4 leaf
<b>Stage Minimum, Percent:</b>		1 leaf	3 leaf
<b>Stage Maximum, Percent:</b>		3 leaf	4 leaf
<b>Height, Unit:</b>		3 IN	6 IN
<b>Height Minimum, Maximum:</b>		2 4	5 6
<b>Density, Unit:</b>		12 FT2	3 FT2
<b>Pest 3 Code, Disc., Scale:</b>	LEFPA	LEFPA	LEFPA
<b>Stage Majority, Percent:</b>			2 leaf
<b>Stage Minimum, Percent:</b>			2 leaf
<b>Stage Maximum, Percent:</b>			3 leaf
<b>Height, Unit:</b>			3 IN
<b>Height Minimum, Maximum:</b>			2 3
<b>Density, Unit:</b>			16 FT2

**Application Equipment**

	A	B	C
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	39 PSI	36 PSI	29 PSI
<b>Nozzle Type:</b>	AI	XR	XR
<b>Nozzle Size:</b>	1100155VS	110015VS	11001VS
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	16 IN
<b>Boom Length, Unit:</b>	60 IN	60 IN	64 IN
<b>Boom Height, Unit:</b>	16 IN	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	2 MPH
<b>Carrier:</b>	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA

**Date      By      Notes**

27-Sep-06 JAB      Experiment was not harvested due to Amazon sprangletop infestations.

**Mississippi State University Delta Research and Extension Center**  
**Newpath Plus Residual Herbicide Rate and Timing Combinations**

Trial ID: 06-WS-02

Location: DREC - Red Rice Area

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								3-Jun-06 Rice Injury % 11 0 11 DA-A	9-Jun-06 Rice Injury % 17 0 6 DA-B	ECHCG 3-Jun-06 Control % 11 0 11 DA-A	ECHCG 9-Jun-06 Control % 17 0 6 DA-B	ECHCG 23-Jun-06 Control % 31 14 14 DA-C	ECHCG 6-Jul-06 Control % 44 27 27 DA-C	ECHCG 8-Aug-06 Control % 77 60 60 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	8	9	10	11	12
1	Nontreated							0 a	0 a	0 b	0 e	0 c	0 d	0 c
2	Command Newpath Agri-Dex	3 ME 2 AS L	17 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	DPRE A A			0 a	0 a	95 a	95 a	96 a	96 abc	98 a	
3	Command Newpath Agri-Dex	3 ME 2 AS L	17 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A	DPRE A A			1 a	0 a	94 a	96 a	96 a	98 ab	98 a	
4	Facet Newpath Agri-Dex	75 DF 2 AS L	0.5 LB/A 4 FL OZ/A 19.2 FL OZ/A	DPRE A A			0 a	0 a	93 a	93 a	95 ab	97 ab	98 a	
5	Facet Newpath Agri-Dex	75 DF 2 AS L	0.5 LB/A 6 FL OZ/A 19.2 FL OZ/A	DPRE A A			2 a	0 a	95 a	93 a	94 b	98 ab	98 a	
6	Clearpath Newpath Agri-Dex	75 DF 2 AS L	0.5 LB/A 4 FL OZ/A 19.2 FL OZ/A	DPRE A A			2 a	0 a	93 a	89 a	95 ab	96 abc	97 ab	
7	Clearpath Newpath Agri-Dex	75 DF 2 AS L	0.5 LB/A 6 FL OZ/A 19.2 FL OZ/A	DPRE A A			5 a	0 a	92 a	96 a	95 ab	98 ab	98 a	
8	Prowl EC Newpath Agri-Dex	3.3 EC 2 AS L	38.8 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	DPRE A A			3 a	0 a	93 a	95 a	95 ab	99 a	98 a	
9	Prowl EC Newpath Agri-Dex	3.3 EC 2 AS L	38.8 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A	DPRE A A			1 a	0 a	93 a	93 a	95 ab	98 ab	98 a	
10	Prowl H2O Newpath Agri-Dex	3.8 CS 2 AS L	33.7 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	DPRE A A			0 a	0 a	94 a	95 a	94 b	98 ab	98 a	
11	Prowl H2O Newpath Agri-Dex	3.8 CS 2 AS L	33.7 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A	DPRE A A			0 a	0 a	94 a	75 b	95 ab	99 a	99 a	

**Mississippi State University Delta Research and Extension Center**  
**Newpath Plus Residual Herbicide Rate and Timing Combinations**

Trial ID: 06-WS-02

Location: DREC - Red Rice Area

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								3-Jun-06 Rice Injury % 11 0 11 DA-A	9-Jun-06 Rice Injury % 17 0 6 DA-B	ECHCG 3-Jun-06 Control % 11 0 11 DA-A	ECHCG 9-Jun-06 Control % 17 0 6 DA-B	ECHCG 23-Jun-06 Control % 31 14 14 DA-C	ECHCG 6-Jul-06 Control % 44 27 27 DA-C	ECHCG 8-Aug-06 Control % 77 60 60 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Growth Rate Unit	Appl Stage	Code	1	2	8	9	10	11	12
12	Command Newpath Agri-Dex	3 ME 2 AS L	ME AS L	17 4 19.2	FL OZ/A FL OZ/A FL OZ/A	EPOST EPOST EPOST	B B B		0 a		54 cd	95 ab	96 abc	97 ab
13	Command Newpath Agri-Dex	3 ME 2 AS L	ME AS L	17 6 19.2	FL OZ/A FL OZ/A FL OZ/A	EPOST EPOST EPOST	B B B		0 a		60 c	95 ab	96 abc	98 a
14	Facet Newpath Agri-Dex	75 DF 2 AS L	DF AS L	0.413 4 19.2	LB/A FL OZ/A FL OZ/A	EPOST EPOST EPOST	B B B		0 a		48 d	95 ab	95 bc	95 b
15	Facet Newpath Agri-Dex	75 DF 2 AS L	DF AS L	0.413 6 19.2	LB/A FL OZ/A FL OZ/A	EPOST EPOST EPOST	B B B		0 a		48 d	95 ab	97 ab	98 a
16	Clearpath Agri-Dex	75 DF L	DF L	0.5 19.2	LB/A FL OZ/A	EPOST EPOST	B B		0 a		43 d	94 b	94 c	96 ab
17	Clearpath Newpath Agri-Dex	75 DF 2 AS L	DF AS L	0.5 2 19.2	LB/A FL OZ/A FL OZ/A	EPOST EPOST EPOST	B B B		0 a		50 cd	95 ab	97 ab	97 ab
18	Prowl EC Newpath Agri-Dex	3.3 EC 2 AS L	EC AS L	38.8 4 19.2	FL OZ/A FL OZ/A FL OZ/A	EPOST EPOST EPOST	B B B		0 a		44 d	95 ab	97 ab	97 ab
19	Prowl EC Newpath Agri-Dex	3.3 EC 2 AS L	EC AS L	38.8 6 19.2	FL OZ/A FL OZ/A FL OZ/A	EPOST EPOST EPOST	B B B		0 a		44 d	95 ab	97 ab	99 a
20	Prowl H2O Newpath Agri-Dex	3.8 CS 2 AS L	CS AS L	33.7 4 19.2	FL OZ/A FL OZ/A FL OZ/A	EPOST EPOST EPOST	B B B		0 a		53 cd	95 ab	97 ab	96 ab
21	Prowl H2O Newpath Agri-Dex	3.8 CS 2 AS L	CS AS L	33.7 6 19.2	FL OZ/A FL OZ/A FL OZ/A	EPOST EPOST EPOST	B B B		0 a		46 d	95 ab	97 ab	97 ab
Standard Deviation CV								2.2 181.08	0.0 0.0	2.4 2.89	7.6 11.39	1.1 1.24	1.8 1.99	1.7 1.87

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Newpath Plus Residual Herbicide Rate and Timing Combinations**

Trial ID: 06-WS-02

Location: DREC - Red Rice Area

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								ORYSA 3-Jun-06 Control % 11 0 11 DA-A	ORYSA 9-Jun-06 Control % 17 0 6 DA-B	ORYSA 23-Jun-06 Control % 31 14 14 DA-C	ORYSA 6-Jul-06 Control % 44 27 27 DA-C	ORYSA 8-Aug-06 Control % 77 60 60 DA-C	LEFPA 23-Jun-06 Control % 31 14 14 DA-C	LEFPA 6-Jul-06 Control % 44 27 27 DA-C	LEFPA 8-Aug-06 Control % 77 60 60 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	13	14	15	16	17	18	19	20
1	Nontreated							0 c	0 d	0 d	0 d	0 b	0 e	0 g	0 h
2	Command Newpath Agri-Dex Newpath Agri-Dex	3 ME 2 AS L 2 AS L	17 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	DPRE DPRE DPRE MPOST MPOST	A A A C C		83 ab	81 ab	93 ab	93 abc	93 a	92 a	85 abc	51 cde	
3	Command Newpath Agri-Dex Newpath Agri-Dex	3 ME 2 AS L 2 AS L	17 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A	DPRE DPRE DPRE MPOST MPOST	A A A C C		85 ab	86 a	91 abc	94 abc	95 a	93 a	84 abc	54 bcd	
4	Facet Newpath Agri-Dex Newpath Agri-Dex	75 DF 2 AS L 2 AS L	0.5 LB/A 4 FL OZ/A 19.2 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	DPRE DPRE DPRE MPOST MPOST	A A A C C		84 ab	86 a	90 abc	94 abc	95 a	80 abc	69 cde	41 de	
5	Facet Newpath Agri-Dex Newpath Agri-Dex	75 DF 2 AS L 2 AS L	0.5 LB/A 6 FL OZ/A 19.2 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A	DPRE DPRE DPRE MPOST MPOST	A A A C C		89 a	83 ab	91 abc	93 abc	93 a	81 abc	75 b-e	45 cde	
6	Clearpath Newpath Agri-Dex Newpath Agri-Dex	75 DF 2 AS L 2 AS L	0.5 LB/A 4 FL OZ/A 19.2 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	DPRE DPRE DPRE MPOST MPOST	A A A C C		80 ab	83 ab	93 ab	93 abc	91 a	88 ab	80 a-e	45 cde	
7	Clearpath Newpath Agri-Dex Newpath Agri-Dex	75 DF 2 AS L 2 AS L	0.5 LB/A 6 FL OZ/A 19.2 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A	DPRE DPRE DPRE MPOST MPOST	A A A C C		76 b	74 ab	95 a	95 ab	96 a	89 ab	85 abc	70 abc	
8	Prowl EC Newpath Agri-Dex Newpath Agri-Dex	3.3 EC 2 AS L 2 AS L	38.8 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	DPRE DPRE DPRE MPOST MPOST	A A A C C		81 ab	86 a	94 a	96 a	95 a	93 a	95 a	79 ab	
9	Prowl EC Newpath Agri-Dex Newpath Agri-Dex	3.3 EC 2 AS L 2 AS L	38.8 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A	DPRE DPRE DPRE MPOST MPOST	A A A C C		85 ab	81 ab	94 a	95 ab	91 a	93 a	90 ab	81 a	
10	Prowl H2O Newpath Agri-Dex Newpath Agri-Dex	3.8 CS 2 AS L 2 AS L	33.7 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	DPRE DPRE DPRE MPOST MPOST	A A A C C		81 ab	85 a	94 a	95 ab	96 a	94 a	95 a	80 a	
11	Prowl H2O Newpath Agri-Dex Newpath Agri-Dex	3.8 CS 2 AS L 2 AS L	33.7 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A 6 FL OZ/A 19.2 FL OZ/A	DPRE DPRE DPRE MPOST MPOST	A A A C C		85 ab	66 b	95 a	95 ab	92 a	94 a	94 a	86 a	

**Mississippi State University Delta Research and Extension Center**  
**Newpath Plus Residual Herbicide Rate and Timing Combinations**

Trial ID: 06-WS-02

Location: DREC - Red Rice Area

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								ORYSA 3-Jun-06 Control % 11 0 11 DA-A	ORYSA 9-Jun-06 Control % 17 0 6 DA-B	ORYSA 23-Jun-06 Control % 31 14 14 DA-C	ORYSA 6-Jul-06 Control % 44 27 27 DA-C	ORYSA 8-Aug-06 Control % 77 60 60 DA-C	LEFPA 23-Jun-06 Control % 31 14 14 DA-C	LEFPA 6-Jul-06 Control % 44 27 27 DA-C	LEFPA 8-Aug-06 Control % 77 60 60 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	13	14	15	16	17	18	19	20
12	Command Newpath Agri-Dex	3 ME 2 AS L	ME AS L	17 4 19.2	FL OZ/A EPOST FL OZ/A	EPOST B EPOST B		40 c	91 abc	93 abc	93 a	74 bc	64 e	25 e-h	
13	Command Newpath Agri-Dex	3 ME 2 AS L 2 AS L	ME AS L AS L	17 6 19.2 4 19.2	FL OZ/A EPOST FL OZ/A EPOST FL OZ/A	EPOST B EPOST B MPOST C		46 c	94 a	95 ab	95 a	90 a	79 a-e	46 cde	
14	Facet Newpath Agri-Dex	75 DF 2 AS L 2 AS L	DF AS L AS L	0.413 4 19.2 4 19.2	LB/A FL OZ/A FL OZ/A EPOST FL OZ/A	EPOST B EPOST B EPOST B		35 c	88 c	90 c	94 a	39 d	20 f	13 fgh	
15	Facet Newpath Agri-Dex	75 DF 2 AS L 2 AS L	DF AS L AS L	0.413 6 19.2 6 19.2	LB/A FL OZ/A FL OZ/A MPOST C	EPOST B EPOST B MPOST C		34 c	93 ab	95 ab	94 a	80 abc	73 cde	43 cde	
16	Clearpath Agri-Dex	75 DF L 2 AS L	DF L AS L	0.5 19.2 4 19.2	LB/A FL OZ/A FL OZ/A MPOST C	EPOST B EPOST B MPOST C		33 c	89 bc	91 bc	95 a	30 d	18 f	5 gh	
17	Clearpath Newpath Agri-Dex	75 DF 2 AS L 2 AS L	DF AS L AS L	0.5 2 19.2 6 19.2	LB/A FL OZ/A FL OZ/A MPOST C	EPOST B EPOST B MPOST C		41 c	94 a	93 abc	96 a	70 c	66 de	40 de	
18	Prowl EC Newpath Agri-Dex	3.3 EC 2 AS L 2 AS L	EC AS L AS L	38.8 4 19.2 4 19.2	FL OZ/A FL OZ/A FL OZ/A MPOST C	EPOST B EPOST B EPOST B		33 c	94 a	94 abc	95 a	86 ab	64 e	29 d-g	
19	Prowl EC Newpath Agri-Dex	3.3 EC 2 AS L 2 AS L	EC AS L AS L	38.8 6 19.2 6 19.2	FL OZ/A FL OZ/A FL OZ/A MPOST C	EPOST B EPOST B MPOST C		36 c	94 a	95 ab	95 a	89 ab	81 a-d	50 cde	
20	Prowl H2O Newpath Agri-Dex	3.8 CS 2 AS L 2 AS L	CS AS L AS L	33.7 4 19.2 4 19.2	FL OZ/A FL OZ/A FL OZ/A MPOST C	EPOST B EPOST B EPOST B		36 c	94 a	93 abc	94 a	91 a	75 b-e	38 def	
21	Prowl H2O Newpath Agri-Dex	3.8 CS 2 AS L 2 AS L	CS AS L AS L	33.7 6 19.2 6 19.2	FL OZ/A FL OZ/A FL OZ/A MPOST C	EPOST B EPOST B MPOST C		31 c	94 a	95 ab	96 a	90 a	81 a-d	43 cde	
Standard Deviation CV								5.4 7.17	10.4 18.49	2.9 3.29	2.6 2.9	3.0 3.37	9.6 12.29	10.3 14.74	16.9 36.87

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

# Mississippi State University Delta Research and Extension Center

## Tolerance of Rice Varieties to Grasp Herbicide

Trial ID: 06-WS-03

Location: DREC

**Objective:**

To determine crop safety of five long-grain rice varieties to EPOST applications of Grasp herbicide.

**Conclusions:**

Grasp has been shown in previous years to cause injury to rice roots. However, this injury has generally not been reflected in final rice yields. This experiment was conducted to determine if differences in Grasp sensitivity exist among rice varieties. Visual injury was greatest for Cocodrie and least for CL131 and XL723 29 days following application of Grasp at 4 FL OZ/A (twice the labeled rate). Root injury was evident on all varieties, but root injury was greatest on Cocodrie and Cheniere. Maturity was delayed 2 to 3 days on Cocodrie, Cheniere, and CL131. However, by the end of the season, yields were equivalent for the same variety when treated or not treated with Grasp. Although injury to shoots and roots was observed following Grasp application, this injury did not reduce yield in 2006.

**Crop Description**

**Crop 1:** ORYSA *Oryza sativa*

Rice

**Variety:** Various

**BBCH Scale:** BRIC

**Planting Date:** 4-May-06

**Planting Method:** Drill

**Rate, Unit:** 80 LB/A

**Depth, Unit:** 1 IN

**Row Spacing, Unit:** 8 IN

**Seed Bed:** Smooth

**Soil Temperature, Unit:** 71 F

**Soil Moisture:** Adequate

**Emergence Date:** 13-May-06

**Harvest Date:** 12-Sep-06

**Harvest Equipment:** Mitsubishi VM-13

**Harvested Width, Unit:** 2.67 FT

**Harvested Length, Unit:** 15 FT

**% Standard Moisture:** 12.0

**Site and Design**

**Plot Width, Unit:** 5.33 FT **Site Type:** Field

**Plot Length, Unit:** 15 FT **Tillage Type:** Conventional

**Replications:** 4 **Study Design:** Randomized Complete Block (Factorial treatment arrangement)

**% Slope:** 0.1 **Soil Drainage:** G Good

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	4-May-06	Command	3	ME	1.33	PT/A
2.	4-May-06	Aim	2	EC	1	FL OZ/A
3.	4-May-06	Agri-Dex		L	1	QT/A
4.	1-Jun-06	Super Wham	4	EC	4	QT/A
5.	1-Jun-06	Facet	75	DF	0.67	QT/A
6.	1-Jun-06	Permit	75	DG	1	OZ/A
7.	1-Jun-06	Agri-Dex		L	1	QT/A

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Mississippi State University Delta Research and Extension Center**  
**Tolerance of Rice Varieties to Grasp Herbicide**

Trial ID: 06-WS-03

Location: DREC

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	3-Jun-06	Flood
3.	31-Aug-06	Drain

**Application Description**

	A
<b>Application Date:</b>	25-May-06
<b>Time of Day:</b>	6:30
<b>Application Method:</b>	Broadcast
<b>Application Timing:</b>	EPOST
<b>Application Placement:</b>	Foliar
<b>Applied By:</b>	JAB
<b>Air Temperature, Unit:</b>	75 F
<b>% Relative Humidity:</b>	86
<b>Wind Velocity, Unit:</b>	1 MPH
<b>Wind Direction:</b>	NW
<b>Dew Presence (Y/N):</b>	Y
<b>Soil Temperature, Unit:</b>	74 F
<b>Soil Moisture:</b>	Wet
<b>% Cloud Cover:</b>	10

**Crop Stage At Each Application**

	A
<b>Crop 1 Code:</b>	ORYSA
<b>Stage Scale Used:</b>	BBCH
<b>Stage Majority, Percent:</b>	3 leaf
<b>Stage Minimum, Percent:</b>	2 leaf
<b>Stage Maximum, Percent:</b>	3 leaf
<b>Height, Unit:</b>	4 IN
<b>Height Minimum, Maximum:</b>	3 4

**Mississippi State University Delta Research and Extension Center**  
**Tolerance of Rice Varieties to Grasp Herbicide**

Trial ID: 06-WS-03

Location: DREC

**Application Equipment**

	A
<b>Appl. Equipment:</b>	CO2 backpack
<b>Operating Pressure, Unit:</b>	40 PSI
<b>Nozzle Type:</b>	AI
<b>Nozzle Size:</b>	110015VS
<b>Nozzle Spacing, Unit:</b>	20 IN
<b>Nozzles/Row:</b>	3
<b>Boom Length, Unit:</b>	60 IN
<b>Boom Height, Unit:</b>	18 IN
<b>Ground Speed, Unit:</b>	3 MPH
<b>Carrier:</b>	Water
<b>Spray Volume, Unit:</b>	15 GPA

**Mississippi State University Delta Research and Extension Center**  
**Tolerance of Rice Varieties to Grasp Herbicide**

Trial ID: 06-WS-03

Location: DREC

Crop Name							Rice 23-Jun-06	Rice 23-Jun-06	Rice 50% Head DAE	Rice 12-Sep-06 Yield bu/A
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage				
1	Cocodrie Grasp Agri-Dex	2 L	SC 0	FL OZ/A FL OZ/A	EPOST EPOST			79 cd	157 bcd	
2	Cocodrie Grasp Agri-Dex	2 L	SC 0	3.96 48	FL OZ/A FL OZ/A	EPOST EPOST	14 a	60 a	82 ab	139 de
3	Cheneire Grasp Agri-Dex	2 L	SC 0	FL OZ/A FL OZ/A	EPOST EPOST			81 bc	160 bc	
4	Cheneire Grasp Agri-Dex	2 L	SC 0	3.96 48	FL OZ/A FL OZ/A	EPOST EPOST	10 ab	53 a	83 a	167 b
5	CL161 Grasp Agri-Dex	2 L	SC 0	FL OZ/A FL OZ/A	EPOST EPOST			83 a	135 e	
6	CL161 Grasp Agri-Dex	2 L	SC 0	3.96 48	FL OZ/A FL OZ/A	EPOST EPOST	5 c	23 b	83 a	145 cde
7	CL131 Grasp Agri-Dex	2 L	SC 0	FL OZ/A FL OZ/A	EPOST EPOST			79 d	135 e	
8	CL131 Grasp Agri-Dex	2 L	SC 0	3.96 48	FL OZ/A FL OZ/A	EPOST EPOST	8 bc	31 b	81 bc	143 cde
9	XL723 Grasp Agri-Dex	2 L	SC 0	FL OZ/A FL OZ/A	EPOST EPOST			79 cd	188 a	
10	XL723 Grasp Agri-Dex	2 L	SC 0	3.96 48	FL OZ/A FL OZ/A	EPOST EPOST	9 bc	20 b	79 cd	172 ab
Standard Deviation							2.6	12.9	1.2	12.7
CV							29.13	34.61	1.43	8.25

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

# Mississippi State University Delta Research and Extension Center

## Grasp Postflood Efficacy

Trial ID: 06-WS-06

Location: DREC

### **Objective:**

To evaluate postflood weed control programs containing Grasp alone and/or in tank mixtures with other herbicides.

### **Conclusions:**

This experiment simulated a salvage situation following rice flooding. Weeds evaluated included hemp sesbania (SEBEX), barnyardgrass (ECHCG), and browntop millet (PANRA). SEBEX was controlled at least 80% by all postflood treatments. Grasp at 2.5 FL OZ/A applied in tank mixture with Permit, Londax, or Stam M-4 or Grasp at 2.5 FL OZ/A followed by Clincher, Facet plus Stam M-4, or Regiment controlled SEBEX at least 93% 28 days after application. Only Grasp followed by Clincher, Regiment alone, or sequential applications of Clincher controlled ECHCG >80% 28 days following the application. Clincher was needed to control PANRA at least 80% 28 days after application. Of interest, Clincher at 15 FL OZ/A followed by Grasp at 2.5 FL OZ/A controlled PANRA 88%; however, Grasp (2.5 FL OZ/A) followed by Clincher (15 FL OZ/A) controlled PANRA only 48%. Data indicate that herbicide combinations are currently available to effectively control weeds in a postflood salvage situation.

### **Crop Description**

**Crop 1:** ORYSA *Oryza sativa*

Rice

**Variety:** Coccodrie

**Description:** Conventional variety

**BBCH Scale:** BRIC

**Planting Date:** 15-May-06

**Planting Method:** Drill

**Rate, Unit:** 80 LB/A

**Depth, Unit:** 1 IN

**Row Spacing, Unit:** 8 IN

**Seed Bed:** Smooth **Soil Temperature, Unit:** 72 F

**Soil Moisture:** Adequate **Emergence Date:** 23-May-06

**Harvest Date:** 20-Sep-06

**Harvest Equipment:** Mitsubishi VM-13

**Harvested Width, Unit:** 2.66 FT

**Harvested Length, Unit:** 15 FT

**% Standard Moisture:** 12.0

### **Pest Description**

**Pest 1 Type:** W **Code:** SEBEX *Sesbania exaltata*

**Common Name:** Hemp Sesbania

**Pest 2 Type:** W **Code:** ECHCG *Echinochloa crus-galli*

**Common Name:** barnyardgrass

**Pest 3 Type:** W **Code:** PANRA *Brachiaria ramosa*

**Common Name:** Browntop millet

### **Site and Design**

**Plot Width, Unit:** 5.33 FT **Site Type:** Field

**Plot Length, Unit:** 15 FT **Tillage Type:** Conventional

**Replications:** 4 **Study Design:** Randomized Complete Block

**% Slope:** 0.1 **Soil Drainage:** G Good

### **Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
2.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A

### **Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Mississippi State University Delta Research and Extension Center**  
**Grasp Postflood Efficacy**

Trial ID: 06-WS-06

Location: DREC

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** IN

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Application Description**

	A	B	C
<b>Application Date:</b>	16-May-06	23-Jun-06	3-Jul-06
<b>Time of Day:</b>	7:30 am	8:00 am	7:30 am
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	PRE	7d PTFLD	10-14 DAB
<b>Application Placement:</b>	Soil	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB, LCV	JAB, LCV
<b>Air Temperature, Unit:</b>	70 F	86 F	89 F
<b>% Relative Humidity:</b>	54	68	80
<b>Wind Velocity, Unit:</b>	4 MPH	4 MPH	0 MPH
<b>Wind Direction:</b>	NW	W	None
<b>Dew Presence (Y/N):</b>	N	Y	Y
<b>Soil Temperature, Unit:</b>	68 F	-	-
<b>Soil Moisture:</b>	Adequate	Flood	Flood
<b>% Cloud Cover:</b>	50	0	10

**Crop Stage At Each Application**

	A	B	C
<b>Crop 1 Code:</b>	ORYSA	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>		4 tiller	7 tiller
<b>Stage Minimum, Percent:</b>		3 tiller	7 tiller
<b>Stage Maximum, Percent:</b>		4 tiller	8 tiller
<b>Height, Unit:</b>		13 IN	24 IN
<b>Height Minimum, Maximum:</b>		11 13	20 24

**Mississippi State University Delta Research and Extension Center**  
**Grasp Postflood Efficacy**

Trial ID: 06-WS-06

Location: DREC

**Pest Stage At Each Application**

	A	B	C
<b>Pest 1 Code, Disc., Scale:</b>	SEBEX W	SEBEX W	SEBEX W
<b>Stage Majority, Percent:</b>		10 lf	11 lf
<b>Stage Minimum, Percent:</b>		8 lf	9 lf
<b>Stage Maximum, Percent:</b>		11 lf	13 lf
<b>Height, Unit:</b>		13 IN	21 IN
<b>Height Minimum, Maximum:</b>		10 18	18 24
<b>Density, Unit:</b>		5 FT2	4 FT2
<b>Pest 2 Code, Disc., Scale:</b>	ECHCG W	ECHCG W	ECHCG W
<b>Stage Majority, Percent:</b>		6 til	9 til
<b>Stage Minimum, Percent:</b>		4 til	9 til
<b>Stage Maximum, Percent:</b>		10 til	10 til
<b>Height, Unit:</b>		15 IN	15 IN
<b>Height Minimum, Maximum:</b>		8 15	12 18
<b>Density, Unit:</b>		4 FT2	4 FT2
<b>Pest 3 Code, Disc., Scale:</b>	PANRA W	PANRA W	PANRA W
<b>Stage Majority, Percent:</b>		6 til	9 til
<b>Stage Minimum, Percent:</b>		5 til	9 til
<b>Stage Maximum, Percent:</b>		7 til	10 til
<b>Height, Unit:</b>		12 IN	14 IN
<b>Height Minimum, Maximum:</b>		8 12	12 16
<b>Density, Unit:</b>		3 FT2	3 FT2

**Application Equipment**

	A	B	C
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	38 PSI	24 PSI	24 PSI
<b>Nozzle Type:</b>	AI	XR	TT
<b>Nozzle Size:</b>	110015VS	11001VS	11001
<b>Nozzle Spacing, Unit:</b>	20 IN	16 IN	16 IN
<b>Boom Length, Unit:</b>	60 IN	64 IN	64 IN
<b>Boom Height, Unit:</b>	16 IN	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	2 MPH	2 MPH
<b>Carrier:</b>	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA

**Mississippi State University Delta Research and Extension Center**  
**Grasp Postflood Efficacy**

Trial ID: 06-WS-06

Location: DREC

Pest Code							30-Jun-06	Rice Injury %	SEBEX	SEBEX	SEBEX	ECHCG		
							Rice Injury %	Control %	7-Jul-06	Control %	21-Jul-06	30-Jun-06		
Trt	Treatment	Form No.	Form Conc	Other Type	Other Rate	Growth Unit	Appl Stage	Code	7 DA-B	14 DA-B	7 DA-B	14 DA-B	28 DA-B	7 DA-B
1	Nontreated								0 b	0 b	0 g	0 d	0 d	0 d
2	Command Grasp Agri-Dex	3 2 L	ME SC L	0.8 2.3 48	PT/A FL OZ/A FL OZ/A	PRE 7-10 d 7-10 d	PTFLD B PTFLD B	A	0 b	0 b	65 e	89 ab	86 abc	23 c
3	Command Grasp Agri-Dex	3 2 L	ME SC L	0.8 2.5 48	PT/A FL OZ/A FL OZ/A	PRE 7-10 d 7-10 d	PTFLD B PTFLD B	A	0 b	0 b	71 cde	84 ab	80 c	38 bc
4	Command Grasp Agri-Dex	3 2 L	ME SC L	0.8 2.8 48	PT/A FL OZ/A FL OZ/A	PRE 7-10 d 7-10 d	PTFLD B PTFLD B	A	0 b	0 b	75 b-e	90 ab	85 bc	45 abc
5	Command Grasp Clincher SF Agri-Dex	3 2 2.38 L	ME SC EC L	0.8 2.5 15 48	PT/A FL OZ/A FL OZ/A FL OZ/A	PRE 7-10 d 7-10 d 7-10 d	PTFLD B PTFLD B PTFLD B	A	0 b	0 b	73 cde	90 ab	85 bc	53 ab
6	Command Grasp Facet Agri-Dex	3 2 75 L	ME SC DF L	0.8 2.5 0.5 48	PT/A FL OZ/A LB/A FL OZ/A	PRE 7-10 d 7-10 d 7-10 d	PTFLD B PTFLD B PTFLD B	A	0 b	0 b	53 f	88 ab	85 bc	35 bc
7	Command Grasp Grandstand R Agri-Dex	3 2 3 L	ME SC SL L	0.8 2.5 8 48	PT/A FL OZ/A FL OZ/A FL OZ/A	PRE 7-10 d 7-10 d 7-10 d	PTFLD B PTFLD B PTFLD B	A	0 b	0 b	70 cde	86 ab	84 bc	40 abc
8	Command Grasp Permit Agri-Dex	3 2 75 L	ME SC WG L	0.8 2.5 0.5 48	PT/A FL OZ/A OZ PR/A FL OZ/A	PRE 7-10 d 7-10 d 7-10 d	PTFLD B PTFLD B PTFLD B	A	0 b	0 b	79 bcd	89 ab	95 a	38 bc
9	Command Grasp Londax Agri-Dex	3 2 60 L	ME SC DF L	0.8 2.5 0.75 48	PT/A FL OZ/A OZ PR/A FL OZ/A	PRE 7-10 d 7-10 d 7-10 d	PTFLD B PTFLD B PTFLD B	A	0 b	0 b	80 bc	90 ab	90 ab	38 bc
10	Command Grasp Stam M-4 Agri-Dex	3 2 4 L	ME SC SL L	0.8 2.5 4 48	PT/A FL OZ/A QT/A FL OZ/A	PRE 7-10 d 7-10 d 7-10 d	PTFLD B PTFLD B PTFLD B	A	0 b	0 b	85 ab	71 bc	95 a	50 ab
11	Command Grasp Agri-Dex Clincher SF	3 2 2.38 L	ME SC EC L	0.8 2.5 15 48	PT/A FL OZ/A FL OZ/A FL OZ/A	PRE 7-10 d 7-10 d 10-14 DAB 10-14 DAB	PTFLD B PTFLD B C C	A	0 b	0 b	70 cde	89 ab	95 a	40 abc
12	Command Clincher SF Agri-Dex Grasp Agri-Dex	3 2.38 2 L	ME EC SC L	0.8 15 2.5 48	PT/A FL OZ/A FL OZ/A FL OZ/A	PRE 7-10 d 7-10 d 10-14 DAB 10-14 DAB	PTFLD B PTFLD B C C	A	0 b	0 b	0 g	63 c	80 c	58 ab
13	Command Clincher SF Agri-Dex Clincher SF Agri-Dex	3 2.38 2.38 L	ME EC EC L	0.8 15 10 48	PT/A FL OZ/A FL OZ/A FL OZ/A	PRE 7-10 d 7-10 d 10-14 DAB 10-14 DAB	PTFLD B PTFLD B C C	A	0 b	0 b	0 g			63 a
14	Command Facet Stam M-4	3 75 4	ME DF SL	0.8 0.5 4	PT/A LB/A QT/A	PRE 7-10 d 7-10 d	PTFLD B PTFLD B	A	0 b	0 b	93 a	95 a	95 a	50 ab

**Mississippi State University Delta Research and Extension Center**  
**Grasp Postflood Efficacy**

Trial ID: 06-WS-06

Location: DREC

Pest Code							30-Jun-06	7-Jul-06	SEBEX	SEBEX	SEBEX	ECHCG	
Rating Date							Rice Injury %	Rice Injury %	Control %	Control %	Control %	30-Jun-06	
Rating Data Type							45 7	52 4	45 7	52 4	66 18	45 7	
Rating Unit							7 DA-B	14 DA-B	7 DA-B	14 DA-B	28 DA-B	7 DA-B	
Days After First/Last Applic.													
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	1	2	4	5	6	7
15	Command Clincher SF	3 2.38	ME EC	0.8 15	PT/A FL OZ/A	PRE 7-10 d	PTFLD B	0 b	0 b	0 g	0 d	0 d	58 ab
	Agri-Dex	L		48	FL OZ/A	7-10 d	PTFLD B						
16	Command Regiment	3 80	ME WP	0.8 0.6	PT/A OZ PR/A	PRE 7-10 d	PTFLD B	4 a	3 a	68 de	89 ab	93 ab	56 ab
	Dyne-A-Pak	AJ		19.2	FL OZ/A	7-10 d	PTFLD B						
17	Command	3	ME	0.8	PT/A	PRE	A	0 b	0 b	0 g	0 d	0 d	58 ab
Standard Deviation							0.2	0.5	7.5	13.1	5.6	14.2	
CV							117.8	309.09	14.57	18.81	7.82	32.6	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Grasp Postflood Efficacy**

Trial ID: 06-WS-06

Location: DREC

Pest Code	ECHCG 7-Jul-06	ECHCG 21-Jul-06	PANRA 7-Jul-06	PANRA 21-Jul-06		20-Sep-06
Rating Date	Control %	Control %	Control %	Control %	50% Head DAE	Yield bu/A
Rating Data Type	52 4 14 DA-B	66 18 28 DA-B	52 4 14 DA-B	66 18 28 DA-B		
Rating Unit						
Days After First/Last Applic.						
Trt-Eval Interval						
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Growth Stage	Appl Code
1	Nontreated					
2	Command Grasp Agri-Dex	3 ME 2 SC L	0.8 PT/A 2.3 FL OZ/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD	A	80 d
3	Command Grasp Agri-Dex	3 ME 2 SC L	0.8 PT/A 2.5 FL OZ/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD	A	83 ab
4	Command Grasp Agri-Dex	3 ME 2 SC L	0.8 PT/A 2.8 FL OZ/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD	A	85 ab
5	Command Grasp Clincher SF Agri-Dex	3 ME 2 SC 2.38 EC L	0.8 PT/A 2.5 FL OZ/A 15 FL OZ/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD 7-10 d PTFLD	A	89 ab
6	Command Grasp Facet Agri-Dex	3 ME 2 SC 75 DF L	0.8 PT/A 2.5 FL OZ/A 0.5 LB/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD	A	84 ab
7	Command Grasp Grandstand R Agri-Dex	3 ME 2 SC 3 SL L	0.8 PT/A 2.5 FL OZ/A 8 FL OZ/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD	A	74 bc
8	Command Grasp Permit Agri-Dex	3 ME 2 SC 75 WG L	0.8 PT/A 2.5 FL OZ/A 0.5 OZ PR/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD	A	81 ab
9	Command Grasp Londax Agri-Dex	3 ME 2 SC 60 DF L	0.8 PT/A 2.5 FL OZ/A 0.75 OZ PR/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD	A	81 ab
10	Command Grasp Stam M-4 Agri-Dex	3 ME 2 SC 4 SL L	0.8 PT/A 2.5 FL OZ/A 4 QT/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD	A	85 ab
11	Command Grasp Agri-Dex Clincher SF Agri-Dex	3 ME 2 SC L 2.38 EC L	0.8 PT/A 2.5 FL OZ/A 48 FL OZ/A 15 FL OZ/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD 7-10 d PTFLD 10-14 DAB 10-14 DAB	A B B C C	76 ab
12	Command Clincher SF Agri-Dex Grasp Agri-Dex	3 ME 2.38 EC L 2 SC L	0.8 PT/A 15 FL OZ/A 48 FL OZ/A 2.5 FL OZ/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD 7-10 d PTFLD 10-14 DAB 10-14 DAB	A B B C C	76 ab
13	Command Clincher SF Agri-Dex Clincher SF Agri-Dex	3 ME 2.38 EC L 2.38 EC L	0.8 PT/A 15 FL OZ/A 48 FL OZ/A 10 FL OZ/A 48 FL OZ/A	PRE 7-10 d PTFLD 7-10 d PTFLD 7-10 d PTFLD 10-14 DAB 10-14 DAB	A B B C C	88 ab
14	Command Facet Stam M-4	3 ME 75 DF 4 SL	0.8 PT/A 0.5 LB/A 4 QT/A	PRE 7-10 d PTFLD 7-10 d PTFLD	A B B	76 ab

**Mississippi State University Delta Research and Extension Center**  
**Grasp Postflood Efficacy**

Trial ID: 06-WS-06

Location: DREC

Pest Code	ECHCG	ECHCG	PANRA	PANRA		20-Sep-06
Rating Date	7-Jul-06	21-Jul-06	7-Jul-06	21-Jul-06	50% Head	Yield
Rating Data Type	Control	Control	Control	Control	DAE	bu/A
Rating Unit	%	%	%	%		
Days After First/Last Applic.	52 4	66 18	52 4	66 18		
Trt-Eval Interval	14 DA-B	28 DA-B	14 DA-B	28 DA-B		
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Growth Unit	Appl Stage Code
15	Command Clincher SF	3 2.38	ME EC	0.8 15	PT/A FL OZ/A	PRE 7-10 d
	Agri-Dex	L		48	FL OZ/A	PTFLD B
16	Command Regiment	3 80	ME WP	0.8 0.6	PT/A OZ PR/A	PRE 7-10 d
	Dyne-A-Pak	AJ		19.2	FL OZ/A	PTFLD B
17	Command	3	ME	0.8	PT/A	PRE A
	Standard Deviation					9.2
	CV					12.14
						8.5
						12.15
						8.7
						11.68
						12.4
						21.2
						0.6
						15.9
						0.78
						10.05

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

**Objective:**

To evaluate weed control programs containing Clincher SF applied pre- and/or postflood.

**Conclusions:**

Clincher SF was evaluated within various broad-spectrum weed control programs. Weeds evaluated included hemp sesbania (SEBEX), ivyleaf morningglory (IPOHE), pitted morningglory (IPOLA), barnyardgrass (ECHCG), browntop millet (PANRA), and Amazon sprangletop (LEFPA). At 14 days following the 7 days postflood (7 d PTFLD) applications, SEBEX, IPOHE, and IPOLA were controlled at least 90% by all treatments except Command PRE. All treatments that included Clincher SF controlled ECHCG and PANRA at least 93% at 14 days following the 7 d PTFLD application. LEFPA was a late-emerging problem in this experiment. LEFPA control was reduced when Clincher SF was applied following Grasp compared with Clincher SF applied to 1- to 3-leaf grass followed by Grandstand R 3 days preflood (3 d PRFLD) followed by Grasp 7 d PTFLD. Rice yield was reduced when only Grandstand R plus Permit was applied postemergence.

**Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cocodrie	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 72 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 23-May-06
<b>Harvest Date:</b> 21-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

**Pest Description**

**Pest 1 Type:** W **Code:** SEBEX *Sesbania exaltata*

**Common Name:** Hemp sesbania

**Pest 2 Type:** W **Code:** IPOHE *Ipomoea hederacea*

**Common Name:** Ivyleaf morningglory

**Pest 3 Type:** W **Code:** IPOLA *Ipomoea lacunosa*

**Common Name:** Pitted morningglory

**Pest 4 Type:** W **Code:** ECHCG *Echinochloa crus-galli*

**Common Name:** Common barnyardgrass

**Pest 5 Type:** W **Code:** PANRA *Brachiaria ramosa*

**Common Name:** Browntop millet

**Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Maintenance						
No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
2.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
3.	25-Jul-06	Ultra Blazer	2	L	1	PT/A

**Comment:** Ultra Blazer application on 25-Jul-06 was made to control hemp sesbania so that the experiment could be harvested.

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Application Description**

	A	B	C	D	E
<b>Application Date:</b>	16-May-06	5-Jun-06	12-Jun-06	23-Jun-06	3-Jul-06
<b>Time of Day:</b>	7:30 am	9:00 am	9:45 am	8:45 am	7:30 am
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	PRE	1-3 leaf	3 d PRFLD	7 d PTFLD	10 DAD
<b>Application Placement:</b>	Soil	Foliar	Foliar	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB	JAB	JAB, LCV	JAB, LCV
<b>Air Temperature, Unit:</b>	70 F	89 F	89 F	86 F	84 F
<b>% Relative Humidity:</b>	54	50	76	68	80
<b>Wind Velocity, Unit:</b>	4 MPH	3 MPH	4 MPH	4 MPH	0 MPH
<b>Wind Direction:</b>	NW	NE	NW	W	
<b>Dew Presence (Y/N):</b>	N	N	N	Y	Y
<b>Soil Temperature, Unit:</b>	68 F	78 F			
<b>Soil Moisture:</b>	Adequate	Adequate	Adequate	Flood	Flood
<b>% Cloud Cover:</b>	50	5	10	0	0

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

**Crop Stage At Each Application**

	A	B	C	D	E
<b>Crop 1 Code:</b>	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>		3 leaf	1 tiller	4 tiller	8 tiller
<b>Stage Minimum, Percent:</b>		3 leaf	1 tiller	3 tiller	9 tiller
<b>Stage Maximum, Percent:</b>		4 leaf	2 tiller	4 tiller	
<b>Height, Unit:</b>		7 IN	8 IN	12 IN	21 IN
<b>Height Minimum, Maximum:</b>		6 7	7 9	11 13	18 24

**Pest Stage At Each Application**

	A	B	C	D	E
<b>Pest 1 Code, Disc., Scale:</b>	SEBEX W				
<b>Stage Majority, Percent:</b>		3 lf	6 lf	6 lf	12 lf
<b>Stage Minimum, Percent:</b>		3 lf	5 lf	6 lf	10 lf
<b>Stage Maximum, Percent:</b>		4 lf	6 lf	7 lf	12 lf
<b>Height, Unit:</b>		3 IN	6 IN	8 IN	12 IN
<b>Height Minimum, Maximum:</b>		3 4	5 6	7 9	8 15
<b>Density, Unit:</b>		4 FT2	5 FT2	4 FT2	5 FT2
<b>Pest 2 Code, Disc., Scale:</b>	IPOHE W				
<b>Stage Majority, Percent:</b>		2 lf	5 lf		
<b>Stage Minimum, Percent:</b>		2 lf	4 lf		
<b>Stage Maximum, Percent:</b>		3 lf	6 lf		
<b>Height, Unit:</b>		2 IN	4 IN		
<b>Height Minimum, Maximum:</b>		1 2	3 4		
<b>Density, Unit:</b>		3 FT2	3 FT2		
<b>Pest 3 Code, Disc., Scale:</b>	IPOLA W				
<b>Stage Majority, Percent:</b>		2 lf	5 lf		
<b>Stage Minimum, Percent:</b>		2 lf	4 lf		
<b>Stage Maximum, Percent:</b>		3 lf	6 lf		
<b>Height, Unit:</b>		2 IN	4 IN		
<b>Height Minimum, Maximum:</b>		1 2	3 4		
<b>Density, Unit:</b>		3 FT2	3 FT2		
<b>Pest 4 Code, Disc., Scale:</b>	ECHCG W				
<b>Stage Majority, Percent:</b>		2 lf	4 lf	4 til	6 til
<b>Stage Minimum, Percent:</b>		1 lf	3 lf	4 til	5 til
<b>Stage Maximum, Percent:</b>		3 lf	4 lf	6 til	7 til
<b>Height, Unit:</b>		2 IN	3 IN	14 IN	15 IN
<b>Height Minimum, Maximum:</b>		1 3	2 3	12 15	12 15
<b>Density, Unit:</b>		4 FT2	4 FT2	2 FT2	2 FT2
<b>Pest 5 Code, Disc., Scale:</b>	PANRA W				
<b>Stage Majority, Percent:</b>		2 lf	4 lf	3 til	5 til
<b>Stage Minimum, Percent:</b>		1 lf	3 lf	3 til	4 til
<b>Stage Maximum, Percent:</b>		3 lf	4 lf	5 til	6 til
<b>Height, Unit:</b>		2 IN	3 IN	9 IN	11 IN
<b>Height Minimum, Maximum:</b>		1 2	2 3	8 10	10 12
<b>Density, Unit:</b>		4 FT2	4 FT2	2 FT2	2 FT2

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

**Application Equipment**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>Appl. Equipment:</b>	CO2 backpack				
<b>Operating Pressure, Unit:</b>	38 PSI	38 PSI	25 PSI	24 PSI	24 PSI
<b>Nozzle Type:</b>	AI	DG	DG	TT	TT
<b>Nozzle Size:</b>	110015VS	110015VS	110015VS	11001	11001
<b>Nozzle Spacing, Unit:</b>	20 IN	16 IN	16 IN	16 IN	16 IN
<b>Boom Length, Unit:</b>	60 IN	64 IN	64 IN	64 IN	64 IN
<b>Boom Height, Unit:</b>	16 IN	18 IN	18 IN	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH	2 MPH	2 MPH
<b>Carrier:</b>	Water	Water	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA				

**Date      By      Notes**

30-Jun-06 JAB Morningglory species were killed by floodwater.

30-Jun-06 JAB Weed populations were low in the first five drill passes of reps 3 and 4. Plots within this area were rated based on the weed pressure in these plots.

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							5-Jun-06 Rice Injury % 20 0 20 DA-A	12-Jun-06 Rice Injury % 27 0 7 DA-B	19-Jun-06 Rice Injury % 34 7 7 DA-C	30-Jun-06 Rice Injury % 45 7 7 DA-D	SEBEX 5-Jun-06 Control % 20 0 20 DA-A	SEBEX 19-Jun-06 Control % 34 7 7 DA-C	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4	8	9
1	Nontreated							0 a	0 b	0 a	0 c	0 a	0 f
2	Command	3 ME	1 PT/A	PRE	A			0 a	0 b	0 a	0 c	3 a	0 f
3	Command Clincher SF Agri-Dex Grandstand R Permit Agri-Dex	3 ME 2.38 EC L 3 SL 75 WG L	1 PT/A 10 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD	B B B C C C			2 a	0 a	1 bc		85 b	
4	Command Clincher SF Agri-Dex Grandstand R Permit Agri-Dex	3 ME 2.38 EC L 3 SL 75 WG L	1 PT/A 13.5 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD	B B B C C C			1 b	0 a	1 bc		83 bc	
5	Command Clincher SF Agri-Dex Grandstand R Permit Agri-Dex Clincher SF Agri-Dex	3 ME 2.38 EC L 3 SL 75 WG L 32 FL OZ/A L	1 PT/A 10 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A 15 FL OZ/A 32 FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	B B B C C C D D			0 b	0 a	0 c		84 b	
6	Facet Clincher SF Agri-Dex Grandstand R Permit Agri-Dex	75 DF 2.38 EC L 3 SL 75 WG L	0.5 LB/A 10 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD	B B B C C C			2 a	0 a	0 c		98 a	
7	Facet Clincher SF Agri-Dex Grandstand R Permit Agri-Dex	75 DF 2.38 EC L 3 SL 75 WG L	0.5 LB/A 13.5 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD	B B B C C C			2 ab	0 a	0 c		95 a	
8	Facet Clincher SF Agri-Dex Grandstand R Permit Agri-Dex Clincher SF Agri-Dex	75 DF 2.38 EC L 3 SL 75 WG L 2.38 EC L	0.5 LB/A 10 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A 15 FL OZ/A 32 FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	B B B C C C D D			0 b	0 a	2 b		96 a	
9	Command Grandstand R Permit Agri-Dex	3 ME 3 SL 75 WG L	1 PT/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 3 d PRFLD	A C C C			0 a	0 b	0 a	0 c	6 a	73 d
10	Command Grandstand R Permit Agri-Dex Clincher SF Agri-Dex	3 ME 3 SL 75 WG L 2.38 EC L	1 PT/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A 15 FL OZ/A 32 FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	A C C C D D			0 a	0 b	0 a	0 c	3 a	73 d

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							5-Jun-06 Rice Injury % 20 0 20 DA-A	12-Jun-06 Rice Injury % 27 0 7 DA-B	19-Jun-06 Rice Injury % 34 7 7 DA-C	30-Jun-06 Rice Injury % 45 7 7 DA-D	SEBEX 5-Jun-06 Control % 20 0 20 DA-A	SEBEX 19-Jun-06 Control % 34 7 7 DA-C	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	1	2	3	4	8	9
11	Command Grasp Agri-Dex Clincher SF Agri-Dex	3 2 L 2.38 L	ME SC FL OZ/A EC FL OZ/A	1 2 32 15 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	A C C D D	0 a	0 b	0 a	5 a	5 a	84 b
12	Command Clincher SF Agri-Dex Grandstand R Agri-Dex Grasp Agri-Dex	3 2.38 L 3 L 2 L	ME EC FL OZ/A SL FL OZ/A SC FL OZ/A	1 13.5 32 12 32 2.5 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	B B B C C D D		0 b	0 a	0 c		76 cd
13	Command Grandstand R Permit Agri-Dex Clincher SF Agri-Dex Clincher SF Agri-Dex	3 3 75 L 2.38 L 2.38 L	ME SL WG FL OZ/A EC FL OZ/A EC FL OZ/A	1 12 0.5 16 15 32 10 32	PT/A FL OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A DAD FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD 10 DAD 10 DAD	A C C C D D E E	0 a	0 b	0 a	0 c	9 a	64 e
Standard Deviation CV							0.0	0.9	0.0	1.1	4.9	4.5	
							0.0	172.05	0.0	180.56	116.62	6.39	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Pest Code							SEBEX 30-Jun-06	SEBEX 7-Jul-06	SEBEX 17-Jul-06	IPOHE 5-Jun-06	IPOHE 19-Jun-06	IPOHE 30-Jun-06	IPOHE 7-Jul-06
Rating Date	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %
Rating Data Type	45 7	52 4	62 14	20 0	34 7	45 7	52 4	52 4	52 4	52 4	52 4	52 4	52 4
Rating Unit	7 DA-D	14 DA-D	24 DA-D	20 DA-A	7 DA-C	7 DA-D	14 DA-D	14 DA-D	14 DA-D	14 DA-D	14 DA-D	14 DA-D	14 DA-D
Days After First/Last Applic.													
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Unit	Appl Stage	Code					
1	Nontreated								0 d	0 e	0 d	0 a	0 e
2	Command	3 ME	1 PT/A	PRE	A				0 d	0 e	0 d	19 a	0 e
3	Command Clincher SF	3 ME 2.38 EC	1 PT/A 10 FL OZ/A	1-3 lf grass	B	99 a	99 a				81 b	99 a	99 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
4	Command Clincher SF	3 ME 2.38 EC	1 PT/A 13.5 FL OZ/A	1-3 lf grass	B	98 a	98 ab	97 ab			75 bcd	99 a	99 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
5	Command Clincher SF	3 ME 2.38 EC	1 PT/A 10 FL OZ/A	1-3 lf grass	B	99 a	99 a	99 a			80 bc	99 a	99 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
6	Facet Clincher SF	75 DF 2.38 EC	0.5 LB/A 10 FL OZ/A	1-3 lf grass	B	99 a	99 a	99 a			97 a	99 a	99 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
7	Facet Clincher SF	75 DF 2.38 EC	0.5 LB/A 13.5 FL OZ/A	1-3 lf grass	B	99 a	99 a	99 a			94 a	99 a	99 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
8	Facet Clincher SF	75 DF 2.38 EC	0.5 LB/A 10 FL OZ/A	1-3 lf grass	B	99 a	99 a	99 a			96 a	99 a	99 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
9	Command Grandstand R	3 ME 3 SL	1 PT/A 12 FL OZ/A	PRE	A	91 b	90 d	89 c	16 a	79 bcd	97 ab	96 a	96 a
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
10	Command Grandstand R	3 ME 3 SL	1 PT/A 12 FL OZ/A	PRE	A	91 b	93 bcd	96 ab	11 a	75 bcd	99 a	98 a	98 a
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
	Clincher SF	2.38 EC	15 FL OZ/A	7 d PTFLD	D								
	Agri-Dex	L	32 FL OZ/A	7 d PTFLD	D								

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							SEBEX 30-Jun-06 Control %	SEBEX 7-Jul-06 Control %	SEBEX 17-Jul-06 Control %	IPOHE 5-Jun-06 Control %	IPOHE 19-Jun-06 Control %	IPOHE 30-Jun-06 Control %	IPOHE 7-Jul-06 Control %	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	10	11	12	13	14	15	16
11	Command Grasp Agri-Dex Clincher SF Agri-Dex	3 2 2.38 L	ME SC EC L	1 2 15 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	A C D D	90 bc	92 cd	91 bc	18 a	76 bcd	95 b	99 a
12	Command Clincher SF Agri-Dex Grandstand R Agri-Dex Grasp Agri-Dex	3 2.38 2 3.28 L L	ME EC SC SL L	1 13.5 2.5 32 12 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	B B C C D D	86 c	97 abc	97 ab		70 cd	96 b	99 a
13	Command Grandstand R Permit Agri-Dex Clincher SF Agri-Dex Clincher SF Agri-Dex	3 3 75 L 2.38 2.38 L	ME SL WG EC EC L	1 12 0.5 16 15 32 10 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A DAD DAD	PRE 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD 10 DAD 10 DAD	A C C D D E E	86 c	97 abc	98 a	21 a	69 d	97 ab	99 a
Standard Deviation CV								3.1 3.93	3.4 4.15	3.9 4.76	9.3 65.5	6.2 9.07	1.7 1.98	4.1 4.61

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Pest Code							IPOHE 17-Jul-06 Control % 62 14 24 DA-D	IPOLA 19-Jun-06 Control % 34 7 7 DA-C	IPOLA 30-Jun-06 Control % 45 7 7 DA-D	IPOLA 7-Jul-06 Control % 52 4 14 DA-D	IPOLA 17-Jul-06 Control % 62 14 24 DA-D	ECHCG 5-Jun-06 Control % 20 0 20 DA-A	ECHCG 19-Jun-06 Control % 34 7 7 DA-C	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	17	18	19	20	21	22	23
1	Nontreated							0 c	0 e	0 d	0 c	0 c	0 b	0 d
2	Command	3 ME	1 PT/A	PRE	A		25 b	0 e	53 c	30 b	25 b	94 a	65 c	
3	Clincher SF	3 EC 2.38	1 PT/A 10 FL OZ/A	1-3 lf grass 1-3 lf grass	B B		99 a	81 b	99 a	99 a	99 a			86 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B									
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C									
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C									
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C									
4	Clincher SF	3 EC 2.38	1 PT/A 13.5 FL OZ/A	1-3 lf grass 1-3 lf grass	B B		99 a	76 bcd	99 a	99 a	99 a			88 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B									
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C									
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C									
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C									
5	Clincher SF	3 EC 2.38	1 PT/A 10 FL OZ/A	1-3 lf grass 1-3 lf grass	B B		99 a	80 b	99 a	99 a	99 a			86 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B									
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C									
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C									
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C									
6	Facet	75 DF 2.38 EC	0.5 LB/A 10 FL OZ/A	1-3 lf grass 1-3 lf grass	B B		99 a	97 a	99 a	99 a	99 a			93 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B									
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C									
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C									
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C									
7	Facet	75 DF 2.38 EC	0.5 LB/A 13.5 FL OZ/A	1-3 lf grass 1-3 lf grass	B B		99 a	94 a	99 a	99 a	99 a			91 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B									
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C									
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C									
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C									
8	Facet	75 DF 2.38 EC	0.5 LB/A 10 FL OZ/A	1-3 lf grass 1-3 lf grass	B B		99 a	97 a	99 a	99 a	99 a			93 a
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B									
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C									
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C									
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C									
Clincher SF	2.38 EC	15 FL OZ/A	7 d PTFLD	D										
	Agri-Dex	L	32 FL OZ/A	7 d PTFLD	D									
9	Command	3 ME	1 PT/A	PRE	A		98 a	79 bc	96 ab	96 a	98 a	90 a	70 bc	
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C									
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C									
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C									
10	Command	3 ME	1 PT/A	PRE	A		98 a	75 bcd	99 a	98 a	98 a	90 a	68 c	
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C									
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C									
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C									
	Clincher SF	2.38 EC	15 FL OZ/A	7 d PTFLD	D									
	Agri-Dex	L	32 FL OZ/A	7 d PTFLD	D									

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Pest Code								IPOHE 17-Jul-06 Control %	IPOLA 19-Jun-06 Control %	IPOLA 30-Jun-06 Control %	IPOLA 7-Jul-06 Control %	IPOLA 17-Jul-06 Control %	ECHCG 5-Jun-06 Control %	ECHCG 19-Jun-06 Control %
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	17	18	19	20	21	22	23
11	Command Grasp Agri-Dex Clincher SF Agri-Dex	3 2 2.38 L	ME SC EC L	1 2 15 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	A C D D	99 a	76 bcd	95 b	99 a	99 a	91 a	76 b
12	Command Clincher SF Agri-Dex Grandstand R Agri-Dex Grasp Agri-Dex	3 2.38 2 3.2 2 L	ME EC SL L L L	1 13.5 2.5 12 32 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	B B B C D D	99 a	70 cd	97 ab	99 a	99 a		88 a
13	Command Grandstand R Permit Agri-Dex Clincher SF Agri-Dex Clincher SF Agri-Dex	3 3 75 L 2.38 2.38 L	ME SL WG L EC EC L	1 12 0.5 16 15 32 10 32	PT/A FL OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A DAD DAD	PRE 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD 10 DAD 10 DAD	A C C D D E E	99 a	69 d	96 ab	99 a	99 a	91 a	66 c
Standard Deviation								4.9	6.2	2.2	5.7	4.9	2.9	5.3
CV								5.73	8.94	2.48	6.6	5.73	3.84	7.17

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Pest Code							ECHCG 30-Jun-06	ECHCG 7-Jul-06	ECHCG 17-Jul-06	ECHCG 11-Aug-06	PANRA 5-Jun-06	PANRA 19-Jun-06	PANRA 30-Jun-06
Rating Date	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	
Rating Data Type	45 7	52 4	62 14	87 39	20 0	34 7	45 7	45 7	45 7	45 7	45 7	45 7	
Rating Unit	7 DA-D	14 DA-D	24 DA-D	49 DA-D	20 DA-A	7 DA-C	7 DA-D	7 DA-D	7 DA-D	7 DA-D	7 DA-D	7 DA-D	
Days After First/Last Applic.													
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Unit	Appl Stage	Code					
1	Nontreated								24	25	26	27	
2	Command	3 ME	1 PT/A	PRE	A				0 d	0 d	0 d	0 b	
3	Command Clincher SF	3 ME 2.38 EC	1 PT/A 10 FL OZ/A	1-3 lf grass	B				55 c	55 c	53 c	54 c	
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
4	Command Clincher SF	3 ME 2.38 EC	1 PT/A 13.5 FL OZ/A	1-3 lf grass	B				95 a	98 a	92 a	90 ab	
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
5	Command Clincher SF	3 ME 2.38 EC	1 PT/A 10 FL OZ/A	1-3 lf grass	B				97 a	99 a	98 a	96 a	
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
6	Facet Clincher SF	75 DF 2.38 EC	0.5 LB/A 10 FL OZ/A	1-3 lf grass	B				97 a	99 a	94 a	90 ab	
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
7	Facet Clincher SF	75 DF 2.38 EC	0.5 LB/A 13.5 FL OZ/A	1-3 lf grass	B				96 a	99 a	97 a	91 ab	
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
8	Facet Clincher SF	75 DF 2.38 EC	0.5 LB/A 10 FL OZ/A	1-3 lf grass	B				97 a	99 a	99 a	97 a	
	Agri-Dex	L	32 FL OZ/A	1-3 lf grass	B								
	Grandstand R	3 SL	12 FL OZ/A	3 d PRFLD	C								
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
	Clincher SF	15 FL OZ/A	7 d PTFLD	D									
	Agri-Dex	L	32 FL OZ/A	7 d PTFLD	D								
9	Command Grandstand R	3 ME 3 SL	1 PT/A 12 FL OZ/A	PRE 3 d PRFLD	A C				73 b	80 b	68 b	61 c	
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
10	Command Grandstand R	3 ME 3 SL	1 PT/A 12 FL OZ/A	PRE 3 d PRFLD	A C				79 b	93 a	91 a	83 b	
	Permit	75 WG	0.5 OZ/A	3 d PRFLD	C								
	Agri-Dex	L	16 FL OZ/A	3 d PRFLD	C								
	Clincher SF	15 FL OZ/A	7 d PTFLD	D									
	Agri-Dex	L	32 FL OZ/A	7 d PTFLD	D								

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							ECHCG 30-Jun-06 Control %	ECHCG 7-Jul-06 Control %	ECHCG 17-Jul-06 Control %	ECHCG 11-Aug-06 Control %	PANRA 5-Jun-06 Control %	PANRA 19-Jun-06 Control %	PANRA 30-Jun-06 Control %	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	24	25	26	27	28	29	30
11	Command Grasp Agri-Dex Clincher SF Agri-Dex	3 2 2.38 L	ME SC EC L	1 2 15 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	A C D D	78 b	93 a	88 a	88 ab	90 a	76 b	88 bc
7 DA-D	7 DA-D	14 DA-D	24 DA-D	49 DA-D	20 DA-A	7 DA-C	7 DA-D							
12	Command Clincher SF Agri-Dex Grandstand R Agri-Dex Grasp Agri-Dex	3 2.38 2.38 L 3 2 L	ME EC EC L SL L	1 13.5 13.5 32 12 32 2.5 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	B B B C C D D	91 a	99 a	99 a	96 a		88 a	95 ab
7 DA-D	14 DA-D	24 DA-D	49 DA-D	20 DA-A	7 DA-C	7 DA-D	7 DA-D							
13	Command Grandstand R Permit Agri-Dex Clincher SF Agri-Dex Clincher SF Agri-Dex	3 3 75 L 2.38 2.38 L	ME SL WG L EC EC L	1 12 0.5 16 15 32 10 32	PT/A FL OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD 10 DAD 10 DAD	A C C C D D E E	73 b	90 a	93 a	86 ab	90 a	69 b	86 c
7 DA-D	14 DA-D	24 DA-D	49 DA-D	20 DA-A	7 DA-C	7 DA-D	7 DA-D							
Standard Deviation				6.0	5.8	9.0	7.7	2.7	6.2	4.9				
CV				7.59	6.83	11.03	9.89	3.54	8.11	5.68				

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							PANRA 7-Jul-06 Control % 52 4 14 DA-D	PANRA 17-Jul-06 Control % 62 14 24 DA-D	LEFPA 11-Aug-06 Control % 87 39 49 DA-D	21-Sep-06 Yield bu/A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	31	32	33	36
1	Nontreated							0 c	0 d	0 e	84 d
2	Command	3 ME	1 PT/A	PRE	A		90 b	90 c	54 d	148 c	
3	Clincher SF Agri-Dex Grandstand R Permit Agri-Dex	2.38 EC L 3 SL 75 WG L	3 ME 10 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A	1 PT/A 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD	B B B C C		99 a	99 a	96 ab	177 a	
4	Command Clincher SF Agri-Dex Grandstand R Permit Agri-Dex	2.38 EC L 3 SL 75 WG L	3 ME 13.5 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A	1 PT/A 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD	B B B C C		99 a	98 a	95 ab	168 ab	
5	Command Clincher SF Agri-Dex Grandstand R Permit Agri-Dex Clincher SF Agri-Dex	2.38 EC L 3 SL 75 WG L 2.38 EC L	3 ME 10 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A 15 FL OZ/A 32 FL OZ/A	1 PT/A 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	B B B C C D D		99 a	99 a	97 ab	172 ab	
6	Facet Clincher SF Agri-Dex Grandstand R Permit Agri-Dex	75 DF 2.38 EC L 3 SL 75 WG L	0.5 LB/A 10 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD	B B B C C		99 a	99 a	90 ab	165 ab	
7	Facet Clincher SF Agri-Dex Grandstand R Permit Agri-Dex	75 DF 2.38 EC L 3 SL 75 WG L	0.5 LB/A 13.5 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD	B B B C C		99 a	99 a	94 ab	174 a	
8	Facet Clincher SF Agri-Dex Grandstand R Permit Agri-Dex Clincher SF Agri-Dex	75 DF 2.38 EC L 3 SL 75 WG L 2.38 EC L	0.5 LB/A 10 FL OZ/A 32 FL OZ/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A 15 FL OZ/A 32 FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	B B B C C C D D		99 a	99 a	97 ab	171 ab	
9	Command Grandstand R Permit Agri-Dex	3 ME 3 SL 75 WG L	1 PT/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 3 d PRFLD	A C C C		96 a	94 b	64 c	157 bc	
10	Command Grandstand R Permit Agri-Dex Clincher SF Agri-Dex	3 ME 3 SL 75 WG L 2.38 EC L	1 PT/A 12 FL OZ/A 0.5 OZ/A 16 FL OZ/A 15 FL OZ/A 32 FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	A C C C D D		98 a	98 a	90 ab	176 a	

**Mississippi State University Delta Research and Extension Center**  
**Preflood and Postflood Clincher SF Efficacy**

Trial ID: 06-WS-07

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							PANRA 7-Jul-06 Control % 52 4 14 DA-D	PANRA 17-Jul-06 Control % 62 14 24 DA-D	LEFPA 11-Aug-06 Control % 87 39 49 DA-D	21-Sep-06 Yield bu/A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	31	32	33	36
11	Command Grasp Agri-Dex Clincher SF Agri-Dex	3 2 L 2.38 L	ME SC FL OZ/A EC FL OZ/A	1 2 32 15 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD	A C C D D	98 a	98 a	86 b	172 ab
12	Command Clincher SF Agri-Dex Grandstand R Agri-Dex Grasp Agri-Dex	3 2.38 L 3 L 2 L	ME EC FL OZ/A SL FL OZ/A SC FL OZ/A	1 13.5 32 12 32 2.5 32	PT/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	1-3 lf grass 1-3 lf grass 1-3 lf grass 3 d PRFLD 3 d PRFLD 7 D PTFLD 7 D PTFLD	B B B C C D D	99 a	99 a	98 a	173 ab
13	Command Grandstand R Permit Agri-Dex Clincher SF Agri-Dex Clincher SF Agri-Dex	3 3 75 L 2.38 L 2.38 L	ME SL WG FL OZ/A EC FL OZ/A EC FL OZ/A	1 12 0.5 16 15 32 10 32	PT/A FL OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE 3 d PRFLD 3 d PRFLD 3 d PRFLD 7 d PTFLD 7 d PTFLD 10 DAD 10 DAD	A C C C D D E E	98 a	99 a	89 ab	164 ab
Standard Deviation CV							2.3 2.54	1.5 1.69	6.9 8.5	9.4 5.83	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

## Mississippi State University Delta Research and Extension Center Regiment and Adjuvant Combinations

Trial ID: 06-WS-09

Location: DREC

### **Objective:**

To determine the effectiveness of different adjuvant systems combined with Regiment.

### **Conclusions:**

Regiment in combination with Kinetic HV (organosilicone-based adjuvant) plus urea-ammonium nitrate (UAN) or Dyne-A-Pak (methylated seed oil plus UAN adjuvant) was compared with Stam M-4 plus Facet for efficacy against grass and broadleaf weeds. Weeds evaluated included hemp sesbania (SEBEX), ivyleaf morningglory (IPOHE), pitted morningglory (IPOLA), barnyardgrass (ECHCG), browntop millet (PANRA), and Amazon sprangletop (LEFPA). Rice injury was no more than 4% 14 days after application. By 21 days after application, control of SEBEX, IPOHE, and IPOLA was at least 95%. However, neither Regiment treatment controlled these species equivalent to Stam M-4 plus Facet until 21 days after treatment. Until 21 days after application, SEBEX control was higher from Regiment plus Kinetic HV and UAN compared with Regiment plus Dyne-A-Pak. All treatments controlled ECHCG at least 88% until 35 days after application. By 35 days after application, ECHCG control from Regiment plus Kinetic HV and UAN was higher than that from all other treatments. This data indicate that Kinetic HV and UAN is a slightly better adjuvant combination for Regiment than Dyne-A-Pak.

### **Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cocodrie	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 72 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 23-May-06
<b>Harvest Date:</b> 13-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 15	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

### **Pest Description**

<b>Pest 1 Type:</b> W	<b>Code:</b> SEBEX <i>Sesbania exaltata</i>
<b>Common Name:</b> Hemp sesbania	
<b>Pest 2 Type:</b> W	
<b>Code:</b> IPOHE <i>Ipomoea hederacea</i>	
<b>Common Name:</b> Ivyleaf morningglory	
<b>Pest 3 Type:</b> W	
<b>Code:</b> IPOLA <i>Ipomoea lacunosa</i>	
<b>Common Name:</b> Pitted morningglory	
<b>Pest 4 Type:</b> W	
<b>Code:</b> ECHCG <i>Echinochloa crus-galli</i>	
<b>Common Name:</b> Barnyardgrass	
<b>Pest 5 Type:</b> W	
<b>Code:</b> PANRA <i>Brachiaria ramosa</i>	
<b>Common Name:</b> Browntop millet	

### **Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Adjuvant Combinations**

Trial ID: 06-WS-09

Location: DREC

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
2.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
3.	25-Jul-06	Ultra Blazer	2	L	1	PT/A

**Comment:** Ultra Blazer application on 25-Jul-06 was made to control hemp sesbania so that the experiment could be harvested.

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Application Description**

	A	B
<b>Application Date:</b>	19-May-06	5-Jun-06
<b>Time of Day:</b>	7:00 am	2:30 pm
<b>Application Method:</b>	Broadcast	Broadcast
<b>Application Timing:</b>	DPRE	MPOST
<b>Application Placement:</b>	Soil	Foliar
<b>Applied By:</b>	JAB	JAB
<b>Air Temperature, Unit:</b>	68 F	94 F
<b>% Relative Humidity:</b>	54	50
<b>Wind Velocity, Unit:</b>	1 MPH	3 MPH
<b>Wind Direction:</b>	NE	NE
<b>Dew Presence (Y/N):</b>	N	N
<b>Soil Temperature, Unit:</b>	67 F	74 F
<b>Soil Moisture:</b>	Adequate	Adequate
<b>% Cloud Cover:</b>	50	5

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Adjuvant Combinations**

Trial ID: 06-WS-09

Location: DREC

**Crop Stage At Each Application**

	<b>A</b>	<b>B</b>
<b>Crop 1 Code:</b>	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	3 leaf	
<b>Stage Minimum, Percent:</b>	3 leaf	
<b>Stage Maximum, Percent:</b>	4 leaf	
<b>Height, Unit:</b>	7 IN	
<b>Height Minimum, Maximum:</b>	6 8	

**Pest Stage At Each Application**

	<b>A</b>	<b>B</b>
<b>Pest 1 Code, Disc., Scale:</b>	SEBEX W	SEBEX W
<b>Stage Majority, Percent:</b>		4 leaf
<b>Stage Minimum, Percent:</b>		3 leaf
<b>Stage Maximum, Percent:</b>		4 leaf
<b>Height, Unit:</b>		4 IN
<b>Height Minimum, Maximum:</b>		3 4
<b>Density, Unit:</b>		4 FT2
<b>Pest 2 Code, Disc., Scale:</b>	IPOHE W	IPOHE W
<b>Stage Majority, Percent:</b>		2 leaf
<b>Stage Minimum, Percent:</b>		2 leaf
<b>Stage Maximum, Percent:</b>		3 leaf
<b>Height, Unit:</b>		2 IN
<b>Height Minimum, Maximum:</b>		2 2
<b>Density, Unit:</b>		3 FT2
<b>Pest 3 Code, Disc., Scale:</b>	IPOLA W	IPOLA W
<b>Stage Majority, Percent:</b>		2 leaf
<b>Stage Minimum, Percent:</b>		2 leaf
<b>Stage Maximum, Percent:</b>		3 leaf
<b>Height, Unit:</b>		2 IN
<b>Height Minimum, Maximum:</b>		2 2
<b>Density, Unit:</b>		3 FT2
<b>Pest 4 Code, Disc., Scale:</b>	ECHCG W	ECHCG W
<b>Stage Majority, Percent:</b>		3 leaf
<b>Stage Minimum, Percent:</b>		2 leaf
<b>Stage Maximum, Percent:</b>		3 leaf
<b>Height, Unit:</b>		2 IN
<b>Height Minimum, Maximum:</b>		1 3
<b>Density, Unit:</b>		6 FT2
<b>Pest 5 Code, Disc., Scale:</b>	PANRA W	PANRA W
<b>Stage Majority, Percent:</b>		2 leaf
<b>Stage Minimum, Percent:</b>		2 leaf
<b>Stage Maximum, Percent:</b>		3 leaf
<b>Height, Unit:</b>		2 IN
<b>Height Minimum, Maximum:</b>		1 3
<b>Density, Unit:</b>		5 FT2

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Adjuvant Combinations**

Trial ID: 06-WS-09

Location: DREC

**Application Equipment**

	<b>A</b>	<b>B</b>
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	38 PSI	24 PSI
<b>Nozzle Type:</b>	AI	DG
<b>Nozzle Size:</b>	11015VS	11002VS
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN
<b>Nozzles/Row:</b>	3	3
<b>Boom Length, Unit:</b>	60 IN	60 IN
<b>Boom Height, Unit:</b>	16 IN	18
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH
<b>Carrier:</b>	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA

**Date      By      Notes**

19-Jun-06 JAB A large proportion of morningglory species and browntop millet were killed by floodwater.

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Adjuvant Combinations**

Trial ID: 06-WS-09

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								5-Jun-06 Rice Injury % 17 0 17 DA-A	12-Jun-06 Rice Injury % 24 7 7 DA-B	19-Jun-06 Rice Injury % 31 14 14 DA-B	SEBEX 5-Jun-06 Control % 17 0 17 DA-A	SEBEX 12-Jun-06 Control % 24 7 7 DA-B	SEBEX 19-Jun-06 Control % 31 14 14 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	7	8	9
1	Nontreated							0 a	0 c	0 c	0 a	0 d	0 c
2	Command Regiment Kinetic HV Urea-Ammonium nitrate	3 ME 80 WP SF L	0.8 PT/A 0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	DPRE MPOST MPOST MPOST	A B B B			0 a	2 b	4 a	0 a	89 b	94 a
3	Command Regiment Dyne-A-Pak	3 ME 80 WP AJ	0.8 PT/A 0.5 OZ/A 28.8 FL OZ/A	DPRE MPOST MPOST	A B B			0 a	0 c	3 b	5 a	80 c	87 b
4	Command Stam M-4 Facet	3 ME 4 SL 75 DF	0.8 PT/A 4 QT/A 0.5 LB/A	DPRE MPOST MPOST	A B B			0 a	5 a	0 c	5 a	98 a	97 a
Standard Deviation CV								0.0	0.9	0.6	4.1	3.9	2.1
								0.0	53.29	32.99	163.3	5.89	3.09

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								SEBEX 26-Jun-06 Control % 38 21 21 DA-B	SEBEX 3-Jul-06 Control % 45 28 28 DA-B	SEBEX 10-Jul-06 Control % 52 35 35 DA-B	IPOHE 5-Jun-06 Control % 17 0 17 DA-A	IPOHE 12-Jun-06 Control % 24 7 7 DA-B	IPOHE 19-Jun-06 Control % 31 14 14 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	10	11	12	13	14	15
1	Nontreated							0 b	0 b	0 b	0 a	0 c	0 c
2	Command Regiment Kinetic HV Urea-Ammonium nitrate	3 ME 80 WP SF L	0.8 PT/A 0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	DPRE MPOST MPOST MPOST	A B B B			97 a	97 a	97 a	4 a	73 b	90 b
3	Command Regiment Dyne-A-Pak	3 ME 80 WP AJ	0.8 PT/A 0.5 OZ/A 28.8 FL OZ/A	DPRE MPOST MPOST	A B B			95 a	96 a	99 a	3 a	68 b	88 b
4	Command Stam M-4 Facet	3 ME 4 SL 75 DF	0.8 PT/A 4 QT/A 0.5 LB/A	DPRE MPOST MPOST	A B B			97 a	99 a	99 a	5 a	98 a	98 a
Standard Deviation CV								2.4	3.0	2.3	3.6	3.5	2.2
								3.3	4.17	3.05	126.58	5.94	3.2

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Adjuvant Combinations**

Trial ID: 06-WS-09

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							IPOHE 26-Jun-06 Control % 38 21 21 DA-B	IPOHE 3-Jul-06 Control % 45 28 28 DA-B	IPOHE 10-Jul-06 Control % 52 35 35 DA-B	IPOLA 12-Jun-06 Control % 24 7 7 DA-B	IPOLA 19-Jun-06 Control % 31 14 14 DA-B	IPOLA 26-Jun-06 Control % 38 21 21 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	16	17	18	19	20	21
1	Nontreated							0 b	0 b	0 b	0 c	0 c	0 b
2	Command Regiment Kinetic HV Urea-Ammonium nitrate	3 ME 80 WP SF L	0.8 PT/A 0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	DPRE MPOST MPOST MPOST	A B B B	98 a	99 a	99 a	99 a	70 b	90 b	98 a	
3	Command Regiment Dyne-A-Pak	3 ME 80 WP AJ	0.8 PT/A 0.5 OZ/A 28.8 FL OZ/A	DPRE MPOST MPOST	A B B	98 a	99 a	99 a	99 a	66 b	90 b	98 a	
4	Command Stam M-4 Facet	3 ME 4 SL 75 DF	0.8 PT/A 4 QT/A 0.5 LB/A	DPRE MPOST MPOST	A B B	98 a	99 a	99 a	99 a	98 a	98 a	98 a	
Standard Deviation CV							0.0	0.0	0.0	2.7	2.0	0.0	
							0.0	0.0	0.0	4.56	2.94	0.0	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							IPOLA 3-Jul-06 Control % 45 28 28 DA-B	IPOLA 10-Jul-06 Control % 52 35 35 DA-B	ECHCG 5-Jun-06 Control % 17 0 17 DA-A	ECHCG 12-Jun-06 Control % 24 7 7 DA-B	ECHCG 19-Jun-06 Control % 31 14 14 DA-B	ECHCG 26-Jun-06 Control % 38 21 21 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	22	23	24	25	26	27
1	Nontreated							0 b	0 b	0 b	0 c	0 b	0 b
2	Command Regiment Kinetic HV Urea-Ammonium nitrate	3 ME 80 WP SF L	0.8 PT/A 0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	DPRE MPOST MPOST MPOST	A B B B	99 a	99 a	90 a	90 a	78 b	89 a	90 a	
3	Command Regiment Dyne-A-Pak	3 ME 80 WP AJ	0.8 PT/A 0.5 OZ/A 28.8 FL OZ/A	DPRE MPOST MPOST	A B B	99 a	99 a	90 a	80 b	88 a	88 a	88 a	
4	Command Stam M-4 Facet	3 ME 4 SL 75 DF	0.8 PT/A 4 QT/A 0.5 LB/A	DPRE MPOST MPOST	A B B	96 a	99 a	93 a	88 a	88 a	88 a	89 a	
Standard Deviation CV							3.5	0.0	2.8	4.1	2.1	3.6	
							4.77	0.0	4.06	6.67	3.16	5.35	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Adjuvant Combinations**

Trial ID: 06-WS-09

Location: DREC

Pest Code	ECHCG	ECHCG	PANRA	PANRA	PANRA								
Rating Date	3-Jul-06	10-Jul-06	5-Jun-06	19-Jun-06	26-Jun-06								
Rating Data Type	Control	Control	Control	Control	Control								
Rating Unit	%	%	%	%	%								
Days After First/Last Applic.	45 28	52 35	17 0	31 14	38 21								
Trt-Eval Interval	28 DA-B	35 DA-B	17 DA-A	14 DA-B	21 DA-B								
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Growth Unit	Appl Stage	Code						
1	Nontreated							28	29	30	31	32	33
2	Command Regiment Kinetic HV Urea-Ammonium nitrate	3 ME 80 WP SF L	ME WP OZ/A FL OZ/A	0.8 0.5 4.8 38.4	PT/A MPOST MPOST MPOST	A B B B	95 a		94 a	91 a	88 a	97 a	98 ab
3	Command Regiment Dyne-A-Pak	3 ME 80 WP AJ	ME WP FL OZ/A	0.8 0.5 28.8	PT/A MPOST MPOST	A B B	93 a		89 b	91 a	86 a	96 a	99 a
4	Command Stam M-4 Facet	3 ME 4 SL 75 DF	ME SL LB/A	0.8 4 0.5	PT/A QT/A MPOST	A B B	92 a		80 c	93 a	84 a	93 a	96 b
Standard Deviation								3.4	2.5	3.3	3.4	2.9	1.3
CV								4.84	3.81	4.85	5.34	4.09	1.82

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Pest Code	PANRA	LEFPA	LEFPA	13-Sep-06									
Rating Date	10-Jul-06	3-Jul-06	10-Jul-06	Yield									
Rating Data Type	Control	Control	Control	bu/A									
Rating Unit	%	%	%										
Days After First/Last Applic.	52 35	45 28	52 35										
Trt-Eval Interval	35 DA-B	28 DA-B	35 DA-B										
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Growth Unit	Appl Stage	Code						
1	Nontreated							34	35	36	39		
2	Command Regiment Kinetic HV Urea-Ammonium nitrate	3 ME 80 WP SF L	ME WP OZ/A FL OZ/A	0.8 0.5 4.8 38.4	PT/A MPOST MPOST MPOST	A B B B	98 a		88 a	86 b	173 a		
3	Command Regiment Dyne-A-Pak	3 ME 80 WP AJ	ME WP FL OZ/A	0.8 0.5 28.8	PT/A MPOST MPOST	A B B	98 a		89 a	86 b	174 a		
4	Command Stam M-4 Facet	3 ME 4 SL 75 DF	ME SL LB/A	0.8 4 0.5	PT/A QT/A MPOST	A B B	94 a		92 a	93 a	172 a		
Standard Deviation								3.6	3.0	2.6	10.7		
CV								4.92	4.45	3.98	7.28		

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

## Mississippi State University Delta Research and Extension Center Regiment and Ricestar HT Combinations

Trial ID: 06-WS-10

Location: DREC

### **Objective:**

To evaluate tank mixtures of Regiment and different rates of Ricestar HT applied at an EPOST or LPOST application timing for control of *Leptochloa* spp. and *Brachiaria* spp.

### **Conclusions:**

Regiment does not control *Leptochloa* spp. (Amazon sprangletop) or *Brachiaria* spp. (browntop millet). Furthermore, tank mixtures of Ricestar HT and other herbicides have historically been discouraged. This experiment was designed to determine a tank-mix rate of Ricestar HT to include with Regiment that would control *Leptochloa* spp. and *Brachiaria* spp. without reducing Regiment efficacy. Regiment in tank mixture with Ricestar HT at 10, 14, or 17 FL OZ/A was applied to 1- to 2-leaf rice (EPOST) or 4-leaf to 1-tiller rice (LPOST). Weeds evaluated included hemp sesbania (SEBEX), ivyleaf morningglory (IPOHE), pitted morningglory (IPOLA), barnyardgrass (ECHCG), browntop millet (PANRA), and Amazon sprangletop (LEFPA). Rice injury was minimal from all treatments. All treatments containing Regiment controlled SEBEX. Late-season SEBEX control was lower following EPOST compared with LPOST applications of Regiment due to weeds that emerged after the EPOST application. Clincher SF or Regiment plus Ricestar HT combinations controlled ECHCG better than Ricestar HT alone. At the same evaluation, all EPOST Regiment treatments controlled ECHCG more than LPOST applications of Clincher SF or Ricestar HT. Only minor differences in PANRA control were detected 28 days after LPOST applications. Regiment applied alone at an EPOST or LPOST timing controlled LEFPA less than all Regiment plus Ricestar HT combinations or Clincher SF or Ricestar HT applied alone. Regiment plus Ricestar HT combinations were effective in controlling PANRA and LEFPA at EPOST and LPOST application timings.

### **Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cocomrie	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 72 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 23-May-06
<b>Harvest Date:</b> 21-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

### **Pest Description**

<b>Pest 1 Type:</b> W	<b>Code:</b> SEBEX <i>Sesbania exaltata</i>
<b>Common Name:</b> Hemp sesbania	
<b>Pest 2 Type:</b> W	
<b>Code:</b> IPOHE <i>Ipomoea hederacea</i>	
<b>Common Name:</b> Ivyleaf morningglory	
<b>Pest 3 Type:</b> W	
<b>Code:</b> IPOLA <i>Ipomoea lacunosa</i>	
<b>Common Name:</b> Pitted morningglory	
<b>Pest 4 Type:</b> W	
<b>Code:</b> ECHCG <i>Echinochloa crus-galli</i>	
<b>Common Name:</b> Barnyardgrass	
<b>Pest 5 Type:</b> W	
<b>Code:</b> PANRA <i>Brachiaria ramosa</i>	
<b>Common Name:</b> Browntop millet	
<b>Pest 6 Type:</b> W	
<b>Code:</b> LEFPA <i>Leptochloa panicoides</i>	
<b>Common Name:</b> Amazon sprangletop	

**Mississippi State University Delta Research and Extension Center  
Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

**Site and Design**

**Plot Width, Unit:** 5.33 FT    **Site Type:** Field

**Plot Length, Unit:** 15 FT    **Tillage Type:** Conventional

**Replications:** 4    **Study Design:** Randomized Complete Block

**% Slope:** 0.1    **Soil Drainage:** G Good

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
2.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
3.	25-Jul-06	Ultra Blazer	2	L	1	PT/A

**Comment:** Ultra Blazer application on 25-Jul-06 was made to control hemp sesbania so that the experiment could be harvested.

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Soil Description**

**% Sand:** 11    **% OM:** 2.1    **Texture:** Silty clay

**% Silt:** 30    **pH:** 8.2    **Soil Name:** Sharkey

**% Clay:** 59    **CEC:** 34.2    **Fert. Level:** Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5    **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Mississippi State University Delta Research and Extension Center  
Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

**Application Description**

	<b>A</b>	<b>B</b>
<b>Application Date:</b>	31-May-06	12-Jun-06
<b>Time of Day:</b>	8:30 am	9:30 am
<b>Application Method:</b>	Broadcast	Broadcast
<b>Application Timing:</b>	EPOST	LPOST
<b>Application Placement:</b>	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB
<b>Air Temperature, Unit:</b>	75 F	94 F
<b>% Relative Humidity:</b>	70	49
<b>Wind Velocity, Unit:</b>	4 MPH	4 MPH
<b>Wind Direction:</b>	NW	NW
<b>Dew Presence (Y/N):</b>	N	N
<b>Soil Temperature, Unit:</b>	76 F	78 F
<b>Soil Moisture:</b>	Excessive	Adequate
<b>% Cloud Cover:</b>	95	5

**Crop Stage At Each Application**

	<b>A</b>	<b>B</b>
<b>Crop 1 Code:</b>	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	2 leaf	1 tiller
<b>Stage Minimum, Percent:</b>	2 leaf	1 tiller
<b>Stage Maximum, Percent:</b>	3 leaf	2 Tiller
<b>Height, Unit:</b>	5 IN	8 IN
<b>Height Minimum, Maximum:</b>	4 6	7 9

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

**Pest Stage At Each Application**

	<b>A</b>	<b>B</b>
<b>Pest 1 Code, Disc., Scale:</b>	SEBEX W	SEBEX W
<b>Stage Majority, Percent:</b>	2 leaf	6 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	5 leaf
<b>Stage Maximum, Percent:</b>	2 leaf	6 leaf
<b>Height, Unit:</b>	2 IN	6 IN
<b>Height Minimum, Maximum:</b>	2 2	5 7
<b>Density, Unit:</b>	7 FT2	6 FT2
<b>Pest 2 Code, Disc., Scale:</b>	IPOHE W	IPOHE W
<b>Stage Majority, Percent:</b>	1 leaf	4 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	4 leaf
<b>Stage Maximum, Percent:</b>	1 leaf	5 leaf
<b>Height, Unit:</b>	1 IN	5 IN
<b>Height Minimum, Maximum:</b>	1 2	4 5
<b>Density, Unit:</b>	3 FT2	3 FT2
<b>Pest 3 Code, Disc., Scale:</b>	IPOLA W	IPOLA W
<b>Stage Majority, Percent:</b>	1 leaf	4 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	4 leaf
<b>Stage Maximum, Percent:</b>	1 leaf	5 leaf
<b>Height, Unit:</b>	1 IN	5 IN
<b>Height Minimum, Maximum:</b>	1 2	4 5
<b>Density, Unit:</b>	2 FT2	2 FT2
<b>Pest 4 Code, Disc., Scale:</b>	ECHCG W	ECHCG W
<b>Stage Majority, Percent:</b>	2 leaf	1 till
<b>Stage Minimum, Percent:</b>	1 leaf	4 leaf
<b>Stage Maximum, Percent:</b>	2 leaf	1 till
<b>Height, Unit:</b>	2 IN	4 IN
<b>Height Minimum, Maximum:</b>	1 2	4 5
<b>Density, Unit:</b>	6 FT2	5 FT2
<b>Pest 5 Code, Disc., Scale:</b>	PANRA W	PANRA W
<b>Stage Majority, Percent:</b>	1 leaf	4 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	4 leaf
<b>Stage Maximum, Percent:</b>	2 leaf	1 till
<b>Height, Unit:</b>	0.5 IN	4 IN
<b>Height Minimum, Maximum:</b>	0.25 0.5	3 5
<b>Density, Unit:</b>	4	4 FT2
<b>Pest 6 Code, Disc., Scale:</b>	LEFPA W	LEFPA W
<b>Stage Majority, Percent:</b>		3 leaf
<b>Stage Minimum, Percent:</b>		2 leaf
<b>Stage Maximum, Percent:</b>		3 leaf
<b>Height, Unit:</b>		3 IN
<b>Height Minimum, Maximum:</b>		2 4
<b>Density, Unit:</b>		5 FT2

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

**Application Equipment**

	<b>A</b>	<b>B</b>
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	24 PSI	24 MPH
<b>Nozzle Type:</b>	DG	DG
<b>Nozzle Size:</b>	11002VS	11002VS
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN
<b>Boom Length, Unit:</b>	60 IN	60 IN
<b>Boom Height, Unit:</b>	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH
<b>Carrier:</b>	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA

**Date      By      Notes**

- 19-Jun-06 JAB A new flush of grass occurred in plots that received EPOST application.
- 26-Jun-06 JAB A large proportion of morningglory species and browntop millet were killed by floodwater.
- 7-Aug-06 JAB Browntop millet had begun to dry down, so this species was not evaluated.

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

Pest Code								3-Jun-06	Rice Injury %	7-Jun-06	Rice Injury %	13-Jun-06	Rice Injury %	19-Jun-06	Rice Injury %	SEBEX 3-Jun-06 Control %	SEBEX 7-Jun-06 Control %
No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	3 DA-A	7 DA-A	13 DA-A	19 DA-A	3 DA-A	7 DA-A	3 DA-A	7 DA-A	3 DA-A	7 DA-A
1	Nontreated							0 b	0 c	0 a	0 b	0 c	0 b				
2	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L	0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A		3 ab		3 a		2 a		0 b	43 a		91 a		
3	Ricestar HT	0.58 EC	17 FL OZ/A	EPOST A		0 b		1 bc		1 a		0 b	0 c	0 b			
4	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 10 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A		1 b		2 ab		2 a		0 b	38 ab	93 a			
5	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 14 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A		2 ab		4 a		3 a		1 b	40 ab	92 a			
6	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 17 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A		4 a		3 a		3 a		1 b	35 b	94 a			
7	Clincher SF Agri-Dex	2.38 EC L	13 FL OZ/A 32 FL OZ/A	EPOST A EPOST A		0 b		0 c		1 a		0 b	0 c	0 b			
8	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L	0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B								0 b					
9	Ricestar HT	0.58 EC	17 FL OZ/A	LPOST B								0 b					
10	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 10 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B								1 b					
11	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 14 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B								2 a					
12	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 17 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B								2 a					
13	Clincher SF Agri-Dex	2.38 EC L	13 FL OZ/A 32 FL OZ/A	LPOST B LPOST B								0 b					
Standard Deviation								1.7		1.3		1.8		0.9	4.6	1.9	
CV								117.75		71.99		112.31		181.14	20.71	3.63	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

Pest Code								SEBEX 13-Jun-06	SEBEX 19-Jun-06	SEBEX 26-Jun-06	SEBEX 3-Jul-06	SEBEX 10-Jul-06	SEBEX 17-Jul-06
Rating Date								Control %	Control %	Control %	Control %	Control %	Control %
Rating Data Type								13 1 13 DA-A	19 7 19 DA-A	26 14 14 DA-B	33 21 21 DA-B	40 28 28 DA-B	47 35 35 DA-B
Rating Unit													
Days After First/Last Applic.													
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	12	13	14	15	16	17
1	Nontreated							0 b	0 c	0 c	0 c	0 c	0 c
2	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L 0.58 EC	0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A		91 a	90 ab		90 b	89 b	89 b	86 b	
3	Ricestar HT	0.58 EC	17 FL OZ/A	EPOST A		0 b	0 c		0 c	0 c	0 c	0 c	
4	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L 0.58 EC SF L	0.5 OZ/A 10 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A		93 a	91 a		91 b	88 b	86 b	84 b	
5	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L 0.58 EC SF L	0.5 OZ/A 14 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A		93 a	93 a		90 b	90 b	89 b	88 b	
6	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L 0.58 EC SF L	0.5 OZ/A 17 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A		93 a	90 ab		90 b	89 b	88 b	85 b	
7	Clincher SF Agri-Dex	2.38 EC L	13 FL OZ/A 32 FL OZ/A	EPOST A EPOST A		0 b	0 c		0 c	0 c	0 c	0 c	
8	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L 0.58 EC SF L	0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B			87 b		95 a	99 a	99 a	98 a	
9	Ricestar HT	0.58 EC	17 FL OZ/A	LPOST B				0 c	0 c	0 c	0 c	0 c	
10	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L 0.58 EC SF L	0.5 OZ/A 10 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B			89 ab		95 a	99 a	99 a	98 a	
11	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L 0.58 EC SF L	0.5 OZ/A 14 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B			89 ab		95 a	99 a	99 a	98 a	
12	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L 0.58 EC SF L	0.5 OZ/A 17 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B			90 ab		95 a	99 a	99 a	97 a	
13	Clincher SF Agri-Dex	2.38 EC L	13 FL OZ/A 32 FL OZ/A	LPOST B LPOST B			0 c		0 c	0 c	0 c	0 c	
Standard Deviation							2.7	2.5	2.0	2.3	2.7	3.9	
CV							5.13	4.45	3.51	3.93	4.68	6.97	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

Pest Code	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE	IPOHE
Rating Date	3-Jun-06	7-Jun-06	13-Jun-06	19-Jun-06	26-Jun-06	3-Jul-06
Rating Data Type	Control	Control	Control	Control	Control	Control
Rating Unit	%	%	%	%	%	%
Days After First/Last Aplic.	3 3	7 7	13 1	19 7	26 14	33 21
Trt-Eval Interval	3 DA-A	7 DA-A	13 DA-A	19 DA-A	14 DA-B	21 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Growth Unit	Appl Stage Code
1	Nontreated				18	19
2	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L	0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A	44 a	81 a
3	Ricestar HT	0.58 EC	17 FL OZ/A	EPOST A	0 b	0 c
4	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 10 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A	44 a	76 b
5	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 14 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A	45 a	78 ab
6	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 17 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A	44 a	81 a
7	Clincher SF Agri-Dex	2.38 EC L	13 FL OZ/A 32 FL OZ/A	EPOST A EPOST A	0 b	0 c
8	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L	0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B		
9	Ricestar HT	0.58 EC	17 FL OZ/A	LPOST B		
10	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 10 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B		
11	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 14 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B		
12	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 OZ/A 17 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B		
13	Clincher SF Agri-Dex	2.38 EC L	13 FL OZ/A 32 FL OZ/A	LPOST B LPOST B		
Standard Deviation				4.9	2.8	3.2
CV				19.62	6.24	6.95
				6.23	19.99	17.7

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

Pest Code								IPOHE 10-Jul-06	IPOHE 17-Jul-06	IPOLA 13-Jun-06	IPOLA 19-Jun-06	IPOLA 26-Jun-06	IPOLA 3-Jul-06	
Rating Date								Control %	Control %	Control %	Control %	Control %	Control %	
Rating Data Type								40 28	47 35	13 1	19 7	26 14	33 21	
Rating Unit								28 DA-B	35 DA-B	13 DA-A	19 DA-A	14 DA-B	21 DA-B	
Days After First/Last Applic.														
Trt-Eval Interval														
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Unit	Appl Stage	Code	24	25	26	27	28	29
1	Nontreated								0 c	0 c	0 b	0 d	0 d	0 c
2	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L	0.5 EC 4.8 38.4	0.5 FL OZ/A FL OZ/A	0.5 EPOST A EPOST A		96 a		95 a	80 a	90 a	93 a	98 a	
3	Ricestar HT	0.58 EC	17	FL OZ/A	EPOST A		28 b		28 b	0 b	0 d	30 b	30 b	
4	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 10 14	0.5 FL OZ/A FL OZ/A	0.5 EPOST A EPOST A		95 a		93 a	79 a	91 a	95 a	95 a	
5	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 14 4.8	0.5 FL OZ/A FL OZ/A	0.5 EPOST A EPOST A		95 a		95 a	84 a	93 a	94 a	94 a	
6	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 17 4.8	0.5 FL OZ/A FL OZ/A	0.5 EPOST A EPOST A		95 a		93 a	80 a	90 a	95 a	95 a	
7	Clincher SF Agri-Dex	2.38 EC L	13 32	FL OZ/A FL OZ/A	EPOST A EPOST A		30 b		33 b	0 b	0 d	29 b	28 b	
8	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L	0.5 4.8	0.5 FL OZ/A FL OZ/A	0.5 LPOST B LPOST B		99 a		95 a		63 c	89 a	99 a	
9	Ricestar HT	0.58 EC	17	FL OZ/A	LPOST B		33 b		28 b		0 d	15 c	30 b	
10	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 10 4.8	0.5 FL OZ/A FL OZ/A	0.5 LPOST B LPOST B		99 a		95 a		66 bc	85 a	99 a	
11	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 14 4.8	0.5 FL OZ/A FL OZ/A	0.5 LPOST B LPOST B		99 a		95 a		63 c	93 a	99 a	
12	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 17 4.8	0.5 FL OZ/A FL OZ/A	0.5 LPOST B LPOST B		99 a		95 a		69 b	86 a	98 a	
13	Clincher SF Agri-Dex	2.38 EC L	13 32	FL OZ/A FL OZ/A	LPOST B LPOST B		30 b		30 b		0 d	33 b	35 b	
Standard Deviation							6.6	7.1	4.6	3.1	8.9	8.0		
CV							9.52	10.63	10.02	6.42	13.87	11.5		

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center  
Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

Pest Code								IPOLA 10-Jul-06	IPOLA 17-Jul-06	ECHCG 3-Jun-06	ECHCG 7-Jun-06	ECHCG 13-Jun-06	ECHCG 19-Jun-06
Rating Date	Rating Data Type	Rating Unit	Days After First/Last Applic.	Trt-Eval Interval	Control %	Control %	Control %	Control %	Control %	Control %	Control %	Control %	
					40 28	47 35	3 3	7 7	13 1	19 7			
					28 DA-B	35 DA-B	3 DA-A	7 DA-A	13 DA-A	19 DA-A			
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	30	31	32	33	34	35
1	Nontreated					0 c		0 e	0 d	0 b	0 b	0 e	
2	Regiment Kinetic HV Urea-Ammonium nitrate	80 SF L	WP SF 38.4	0.5 4.8 FL FL	OZ/A OZ/A OZ/A	EPOST A EPOST A EPOST A	96 a	95 a	44 a	95 a	85 a	83 a	
3	Ricestar HT	0.58	EC	17	FL	OZ/A	EPOST A	35 b	40 b	31 bc	93 a	89 a	74 cd
4	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58	WP EC SF L	0.5 10 4.8 38.4	OZ/A FL FL FL	OZ/A OZ/A OZ/A	EPOST A EPOST A EPOST A	95 a	93 a	35 b	95 a	88 a	81 ab
5	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58	WP EC SF L	0.5 14 4.8 38.4	OZ/A FL FL FL	OZ/A OZ/A OZ/A	EPOST A EPOST A EPOST A	95 a	95 a	34 b	94 a	86 a	84 a
6	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58	WP EC SF L	0.5 17 4.8 38.4	OZ/A FL FL FL	OZ/A OZ/A OZ/A	EPOST A EPOST A EPOST A	95 a	93 a	38 ab	95 a	88 a	83 a
7	Clincher SF Agri-Dex	2.38 L	EC 32	13 32	FL FL	OZ/A OZ/A	EPOST A EPOST A	30 b	30 c	25 c	93 a	86 a	80 abc
8	Regiment Kinetic HV Urea-Ammonium nitrate	80 SF L	WP SF 38.4	0.5 4.8 FL	OZ/A OZ/A OZ/A	LPOST B B B	99 a	99 a					75 bcd
9	Ricestar HT	0.58	EC	17	FL	OZ/A	LPOST B	35 b	28 c				73 d
10	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58	WP EC SF L	0.5 10 4.8 38.4	OZ/A FL FL FL	OZ/A OZ/A OZ/A	LPOST B B B	99 a	99 a				73 d
11	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58	WP EC SF L	0.5 14 4.8 38.4	OZ/A FL FL FL	OZ/A OZ/A OZ/A	LPOST B B B	99 a	99 a				73 d
12	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58	WP EC SF L	0.5 17 4.8 38.4	OZ/A FL FL FL	OZ/A OZ/A OZ/A	LPOST B B B	99 a	99 a				75 bcd
13	Clincher SF Agri-Dex	2.38 L	EC 32	13 32	FL FL	OZ/A OZ/A	LPOST B B	30 b	18 d				73 d
Standard Deviation								3.9	5.7	4.7	2.1	3.2	4.3
CV								5.6	8.4	16.0	2.62	4.35	6.0

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

Pest Code					ECHCG 26-Jun-06	ECHCG 3-Jul-06	ECHCG 10-Jul-06	ECHCG 17-Jul-06	ECHCG 7-Aug-06	PANRA 3-Jun-06
Rating Date					Control %	Control %	Control %	Control %	Control %	Control %
Rating Data Type					26 14 14 DA-B	33 21 21 DA-B	40 28 28 DA-B	47 35 35 DA-B	68 56 56 DA-B	3 3 3 DA-A
Rating Unit										
Days After First/Last Applic.										
Trt-Eval Interval										
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Nontreated					36	37	38	39	40
2	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP 0.5 EC SF L	0.5 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	0.5 EPOST A EPOST A EPOST A	0 f 0 e 0 f	81 de	81 cde	80 b	76 b	63 bc
3	Ricestar HT	0.58 EC	17 FL OZ/A	EPOST A	74 e	74 e	48 d	45 e	43 d	29 c
4	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 FL OZ/A 10 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A	81 de	79 cde	73 bc	71 bc	56 cd	33 bc
5	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 FL OZ/A 14 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A	83 cd	83 cde	79 b	73 bc	74 b	31 bc
6	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 FL OZ/A 17 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A EPOST A EPOST A EPOST A	81 de	81 cde	75 bc	66 bcd	64 bc	38 ab
7	Clincher SF Agri-Dex	2.38 EC L	13 FL OZ/A 32 FL OZ/A	EPOST A EPOST A	80 de	76 de	64 c	55 de	53 cd	25 c
8	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L	0.5 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B	90 abc	94 ab	95 a	95 a	93 a	
9	Ricestar HT	0.58 EC	17 FL OZ/A	LPOST B	76 de	85 cd	71 bc	61 cd	58 bcd	
10	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 FL OZ/A 10 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B	91 ab	94 ab	95 a	94 a	91 a	
11	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 FL OZ/A 14 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B	91 ab	95 a	95 a	95 a	94 a	
12	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 FL OZ/A 17 FL OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	LPOST B LPOST B LPOST B LPOST B	93 a	94 ab	95 a	95 a	94 a	
13	Clincher SF Agri-Dex	2.38 EC L	13 FL OZ/A 32 FL OZ/A	LPOST B LPOST B	84 bcd	86 bc	74 bc	69 bc	60 bc	
Standard Deviation					5.0	5.4	7.4	8.8	10.7	4.7
CV					6.47	6.94	10.21	12.77	16.52	16.81

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

Pest Code								PANRA 7-Jun-06	PANRA 13-Jun-06	PANRA 19-Jun-06	PANRA 26-Jun-06	PANRA 3-Jul-06	PANRA 10-Jul-06	
Rating Date								Control %	Control %	Control %	Control %	Control %	Control %	
Rating Data Type								7 7	13 1	19 7	26 14	33 21	40 28	
Rating Unit								7 DA-A	13 DA-A	19 DA-A	14 DA-B	21 DA-B	28 DA-B	
Days After First/Last Applic.														
Trt-Eval Interval														
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Unit	Appl Stage	Code	42	43	44	45	46	47
1	Nontreated								0 c	0 b	0 d	0 b	0 c	0 d
2	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L	0.5 EC 4.8 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A	0.5 EPOST A EPOST A EPOST A		85 b	79 a	83 a	93 a	93 b	91 bc		
3	Ricestar HT	0.58 EC	17	FL OZ/A	EPOST	A	94 a	79 a	80 a	94 a	93 b	90 c		
4	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 10 4.8 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A FL OZ/A	0.5 EPOST A EPOST A EPOST A EPOST A		95 a	80 a	79 a	93 a	95 ab	91 bc		
5	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 14 4.8 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A FL OZ/A	0.5 EPOST A EPOST A EPOST A EPOST A		95 a	80 a	81 a	94 a	94 ab	94 abc		
6	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 17 4.8 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A FL OZ/A	0.5 EPOST A EPOST A EPOST A EPOST A		95 a	79 a	84 a	91 a	93 b	90 c		
7	Clincher SF Agri-Dex	2.38 EC L	13 32	FL OZ/A FL OZ/A	EPOST A EPOST A		95 a	79 a	76 ab	93 a	94 ab	93 bc		
8	Regiment Kinetic HV Urea-Ammonium nitrate	80 WP SF L	0.5 4.8 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A	LPOST B B B				66 bc	93 a	96 a	97 a		
9	Ricestar HT	0.58 EC	17	FL OZ/A	LPOST	B				69 bc	93 a	95 ab	93 bc	
10	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 10 4.8 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A FL OZ/A	LPOST B B B B				66 bc	94 a	95 ab	95 ab		
11	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 14 4.8 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A FL OZ/A	LPOST B B B B				64 c	91 a	95 ab	95 ab		
12	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 WP 0.58 EC SF L	0.5 17 4.8 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A FL OZ/A	LPOST B B B B				65 c	95 a	94 ab	95 ab		
13	Clincher SF Agri-Dex	2.38 EC L	13 32	FL OZ/A FL OZ/A	LPOST B B				74 abc	91 a	94 ab	91 bc		
Standard Deviation								0.9	3.9	6.4	3.3	2.1	2.7	
CV								1.18	5.76	9.32	3.81	2.36	3.2	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

Pest Code					PANRA	LEFPA	LEFPA	LEFPA	LEFPA	LEFPA
Rating Date					17-Jul-06	26-Jun-06	3-Jul-06	10-Jul-06	17-Jul-06	7-Aug-06
Rating Data Type					Control	Control	Control	Control	Control	Control
Rating Unit					%	%	%	%	%	%
Days After First/Last Applic.					47 35	26 14	33 21	40 28	47 35	68 56
Trt-Eval Interval					35 DA-B	14 DA-B	21 DA-B	28 DA-B	35 DA-B	56 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	Nontreated					48	49	50	51	52
2	Regiment Kinetic HV Urea-Ammonium nitrate	80 SF L	WP 4.8 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A	OZ/A EPOST A EPOST A EPOST A	91 ab	68 e	64 f	48 b	35 d
3	Ricestar HT	0.58 EC		17	FL OZ/A	EPOST A	90 ab	91 a	86 ab	76 a
4	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58 EC SF L	WP EC 10 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A	OZ/A EPOST A EPOST A EPOST A	88 b	75 de	75 cd	74 a	56 c
5	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58 EC SF L	WP EC 14 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A	OZ/A EPOST A EPOST A EPOST A	90 ab	80 cd	85 ab	79 a	71 abc
6	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58 EC SF L	WP EC 17 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A	OZ/A EPOST A EPOST A EPOST A	91 ab	78 cd	83 abc	83 a	78 ab
7	Clincher SF Agri-Dex	2.38 EC L		13 32	FL OZ/A FL OZ/A	EPOST A EPOST A	88 b	91 a	84 abc	74 a
8	Regiment Kinetic HV Urea-Ammonium nitrate	80 SF L	WP 4.8 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A	OZ/A LPOST B LPOST B LPOST B	95 a	74 de	65 ef	49 b	25 d
9	Ricestar HT	0.58 EC		17	FL OZ/A	LPOST B	92 ab	90 ab	90 a	88 a
10	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58 EC SF L	WP EC 10 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A	OZ/A LPOST B LPOST B LPOST B	94 a	86 abc	79 bcd	78 a	69 bc
11	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58 EC SF L	WP EC 14 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A	OZ/A LPOST B LPOST B LPOST B	94 a	80 cd	73 de	74 a	71 abc
12	Regiment Ricestar HT Kinetic HV Urea-Ammonium nitrate	80 0.58 EC SF L	WP EC 17 38.4	0.5 FL OZ/A FL OZ/A FL OZ/A	OZ/A LPOST B LPOST B LPOST B	93 ab	83 a-d	84 abc	76 a	76 ab
13	Clincher SF Agri-Dex	2.38 EC L		13 32	FL OZ/A FL OZ/A	LPOST B LPOST B	88 b	81 bcd	80 bcd	70 a
Standard Deviation					3.1	5.8	5.8	10.6	10.5	10.5
CV					3.71	7.66	7.94	15.89	17.77	18.32

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

## **Mississippi State University Delta Research and Extension Center Regiment and Ricestar HT Combinations**

Trial ID: 06-WS-10

Location: DREC

Means followed by same letter do not significantly differ ( $P=.05$ , Duncan's New MRT)

## Mississippi State University Delta Research and Extension Center Regiment and Permit Combinations

Trial ID: 06-WS-11

Location: DREC

### **Objective:**

To determine the efficacy of Regiment when applied in a tank mixture with Permit at a MPOST or PTFLD application timing.

### **Conclusions:**

This experiment was designed to evaluate tank mixtures of Regiment and Permit. Nutsedge species would be a primary target of Regiment plus Permit tank mixtures. However, no nutsedge was present in the test area in 2006. Weeds evaluated included hemp sesbania (SEBEX), ivyleaf morningglory (IPOHE), pitted morningglory (IPOLA), barnyardgrass (ECHCG), browntop millet (PANRA), and Amazon sprangletop (LEFPA). All treatments controlled SEBEX at least 98% by 14 days after application. At 21 days after application, control of IPOHE and IPOLA from Regiment applied to 3- to 4-leaf rice (MPOST) was equivalent to Stam M-4 plus Facet. IPOHE and IPOLA control from Regiment plus Permit applied 7 days after flooding (7 d PTFLD) was adequate (at least 80%) by 17 days after treatment; however, this treatment controlled IPOHE and IPOLA less than Stam M-4 plus Facet and Permit or Stam M-4 plus Facet followed by Permit. Treatments containing Regiment controlled ECHCG better than those containing Stam M-4 plus Facet at 35 days following the 7 d PTFLD application. PANRA was controlled better from treatments containing Stam M-4 plus Facet compared with those containing Regiment. This experiment would need to be repeated in an area where nutsedge is troublesome to determine the complete effectiveness of Regiment plus Permit tank mixtures.

### **Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cocodrie	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 72 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 23-May-06
<b>Harvest Date:</b> 13-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

### **Pest Description**

<b>Pest 1 Type:</b> W	<b>Code:</b> SEBEX <i>Sesbania exaltata</i>
	<b>Common Name:</b> Hemp sesbania
<b>Pest 2 Type:</b> W	<b>Code:</b> IPOHE <i>Ipomoea hederacea</i>
	<b>Common Name:</b> Ivyleaf morningglory
<b>Pest 3 Type:</b> W	<b>Code:</b> IPOLA <i>Ipomoea lacunosa</i>
	<b>Common Name:</b> Pitted morningglory
<b>Pest 4 Type:</b> W	<b>Code:</b> ECHCG <i>Echinochloa crus-galli</i>
	<b>Common Name:</b> Barnyardgrass
<b>Pest 5 Type:</b> W	<b>Code:</b> PANRA <i>Brachiaria ramosa</i>
	<b>Common Name:</b> Browntop millet
<b>Pest 6 Type:</b> W	<b>Code:</b> LEFPA <i>Leptochloa panicoides</i>
	<b>Common Name:</b> Amazon sprangletop

### **Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

**Mississippi State University Delta Research and Extension Center  
Regiment and Permit Combinations**

Trial ID: 06-WS-11

Location: DREC

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
2.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
3.	25-Jul-06	Ultra Blazer	2	L	1	PT/A

**Comment:** Ultra Blazer application on 25-Jul-06 was made to control hemp sesbania so that the experiment could be harvested.

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
 % Silt: 30 pH: 8.2 Soil Name: Sharkey  
 % Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Application Description**

	A	B
<b>Application Date:</b>	5-Jun-06	23-Jun-06
<b>Time of Day:</b>	2:15 pm	9:30 am
<b>Application Method:</b>	Broadcast	Broadcast
<b>Application Timing:</b>	MPOST	7d PTFLD
<b>Application Placement:</b>	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB, LCV
<b>Air Temperature, Unit:</b>	94 F	86 F
<b>% Relative Humidity:</b>	50	68
<b>Wind Velocity, Unit:</b>	3 MPH	4 MPH
<b>Wind Direction:</b>	W	W
<b>Dew Presence (Y/N):</b>	N	Y
<b>Soil Temperature, Unit:</b>	76 F	
<b>Soil Moisture:</b>	Adequate	Flood
<b>% Cloud Cover:</b>	5	0

**Mississippi State University Delta Research and Extension Center  
Regiment and Permit Combinations**

Trial ID: 06-WS-11

Location: DREC

**Crop Stage At Each Application**

	A	B
<b>Crop 1 Code:</b>	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	3 leaf	3 tiller
<b>Stage Minimum, Percent:</b>	3 leaf	3 tiller
<b>Stage Maximum, Percent:</b>	4 leaf	4 tiller
<b>Height, Unit:</b>	7 IN	12 IN
<b>Height Minimum, Maximum:</b>	6 8	11 13

**Pest Stage At Each Application**

	A	B
<b>Pest 1 Code, Disc., Scale:</b>	SEBEX W	SEBEX W
<b>Stage Majority, Percent:</b>	4 leaf	9 leaf
<b>Stage Minimum, Percent:</b>	3 leaf	8 leaf
<b>Stage Maximum, Percent:</b>	4 leaf	9 leaf
<b>Height, Unit:</b>	4 IN	15 IN
<b>Height Minimum, Maximum:</b>	3 4	10 18
<b>Density, Unit:</b>	4 FT2	4 FT2
<b>Pest 2 Code, Disc., Scale:</b>	IPOHE W	IPOHE W
<b>Stage Majority, Percent:</b>	2 leaf	8 leaf
<b>Stage Minimum, Percent:</b>	2 leaf	8 leaf
<b>Stage Maximum, Percent:</b>	3 leaf	9 leaf
<b>Height, Unit:</b>	3 IN	7 IN
<b>Height Minimum, Maximum:</b>	2 3	6 8
<b>Density, Unit:</b>	3 FT2	3 FT2
<b>Pest 3 Code, Disc., Scale:</b>	IPOLA W	IPOLA W
<b>Stage Majority, Percent:</b>	2 leaf	8 leaf
<b>Stage Minimum, Percent:</b>	2 leaf	8 leaf
<b>Stage Maximum, Percent:</b>	3 leaf	9 leaf
<b>Height, Unit:</b>	3 IN	7 IN
<b>Height Minimum, Maximum:</b>	2 3	6 8
<b>Density, Unit:</b>	3 FT2	3 FT2
<b>Pest 4 Code, Disc., Scale:</b>	ECHCG W	ECHCG W
<b>Stage Majority, Percent:</b>	2 leaf	6 till
<b>Stage Minimum, Percent:</b>	1 leaf	4 till
<b>Stage Maximum, Percent:</b>	2 leaf	9 till
<b>Height, Unit:</b>	2 IN	12 IN
<b>Height Minimum, Maximum:</b>	1 2	8 15
<b>Density, Unit:</b>	5 FT2	4 FT2
<b>Pest 5 Code, Disc., Scale:</b>	PANRA W	PANRA W
<b>Stage Majority, Percent:</b>	2 leaf	2 till
<b>Stage Minimum, Percent:</b>	1 leaf	4 leaf
<b>Stage Maximum, Percent:</b>	2 leaf	4 till
<b>Height, Unit:</b>	2 IN	5 IN
<b>Height Minimum, Maximum:</b>	1 2	4 7
<b>Density, Unit:</b>	3 FT2	3 FT2
<b>Pest 6 Code, Disc., Scale:</b>	LEFPA W	LEFPA W
<b>Stage Majority, Percent:</b>		1 till
<b>Stage Minimum, Percent:</b>		3 leaf
<b>Stage Maximum, Percent:</b>		1 till
<b>Height, Unit:</b>		7 IN
<b>Height Minimum, Maximum:</b>		6 8
<b>Density, Unit:</b>		6 FT2

**Mississippi State University Delta Research and Extension Center  
Regiment and Permit Combinations**

Trial ID: 06-WS-11

Location: DREC

**Application Equipment**

	<b>A</b>	<b>B</b>
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	24 PSI	24 PSI
<b>Nozzle Type:</b>	DG	TT
<b>Nozzle Size:</b>	11002VS	11001
<b>Nozzle Spacing, Unit:</b>	20 IN	16 IN
<b>Boom Length, Unit:</b>	60 IN	64 IN
<b>Boom Height, Unit:</b>	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	2 MPH
<b>Carrier:</b>	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA

**Date            By            Notes**

19-Jun-06    JAB        A large proportion of morningglory species and browntop millet were killed by floodwater.

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Permit Combinations**

Trial ID: 06-WS-11

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							12-Jun-06 Rice Injury % 7 7 7 DA-A	19-Jun-06 Rice Injury % 14 14 14 DA-A	26-Jun-06 Rice Injury % 21 3 21 DA-A	SEBEX 12-Jun-06 Control % 7 7 7 DA-A	SEBEX 19-Jun-06 Control % 14 14 14 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	1	2	3	7	8
1	Nontreated							0 c	0 a	0 a	0 c	0 b
2	Regiment Permit	80 75	WP WG	0.5 0.5	OZ/A OZ/A	MPOST MPOST	A A	2 b	3 a	1 a	88 b	97 a
	Kinetic HV	SF		4.8	FL OZ/A	MPOST	A					
	Urea-Ammonium nitrate	L		38.4	FL OZ/A	MPOST	A					
3	Stam M-4 Facet Permit	4 75 75	SL DF WG	4 0.5 0.5	QT/A LB/A OZ/A	MPOST MPOST MPOST	A A A	4 a	0 a	0 a	97 a	98 a
4	Regiment Permit	80 75	WP WG	0.6 0.6	OZ/A OZ/A	7 D PTFLD 7 D PTFLD	B B					
	Kinetic HV	SF		4.8	FL OZ/A	7 D PTFLD	B					
	Urea-Ammonium nitrate	L		38.4	FL OZ/A	7 D PTFLD	B					
5	Stam M-4 Facet Permit Agri-Dex	4 75 75 L	SL DF WG	4 0.5 0.5 32	QT/A LB/A OZ/A FL OZ/A	MPOST 7 D PTFLD 7 D PTFLD	A B B	5 a	2 a	0 a	98 a	98 a
Standard Deviation CV							1.0 36.29	2.2 186.33	1.3 400.0	1.8 2.48	0.8 1.02	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							SEBEX 26-Jun-06 Control % 21 3 21 DA-A	SEBEX 3-Jul-06 Control % 28 10 10 DA-B	SEBEX 10-Jul-06 Control % 35 17 17 DA-B	IPOHE 12-Jun-06 Control % 7 7 7 DA-A	IPOHE 19-Jun-06 Control % 14 14 14 DA-A	IPOHE 26-Jun-06 Control % 21 3 21 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	9	10	11	12	13	14
1	Nontreated							0 c	0 c	0 b	0 c	0 c	0 c
2	Regiment Permit	80 75	WP WG	0.5 0.5	OZ/A OZ/A	MPOST MPOST	A A	98 a	99 a	99 a	74 b	93 b	98 a
	Kinetic HV	SF		4.8	FL OZ/A	MPOST	A						
	Urea-Ammonium nitrate	L		38.4	FL OZ/A	MPOST	A						
3	Stam M-4 Facet Permit	4 75 75	SL DF WG	4 0.5 0.5	QT/A LB/A OZ/A	MPOST MPOST MPOST	A A A	98 a	99 a	98 a	97 a	98 a	98 a
4	Regiment Permit	80 75	WP WG	0.6 0.6	OZ/A OZ/A	7 D PTFLD 7 D PTFLD	B B	43 b	96 b	96 a			38 b
	Kinetic HV	SF		4.8	FL OZ/A	7 D PTFLD	B						
	Urea-Ammonium nitrate	L		38.4	FL OZ/A	7 D PTFLD	B						
5	Stam M-4 Facet Permit Agri-Dex	4 75 75 L	SL DF WG	4 0.5 0.5 32	QT/A LB/A OZ/A FL OZ/A	MPOST 7 D PTFLD 7 D PTFLD	A B B	98 a	99 a	98 a	98 a	98 a	98 a
Standard Deviation CV							6.7 9.97	1.9 2.43	2.2 2.88	1.2 1.82	2.0 2.73	2.2 3.37	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Permit Combinations**

Trial ID: 06-WS-11

Location: DREC

Pest Code		IPOHE	IPOHE	IPOLA	IPOLA	IPOLA	IPOLA
Rating Date		3-Jul-06	10-Jul-06	12-Jun-06	19-Jun-06	26-Jun-06	3-Jul-06
Rating Data Type		Control	Control	Control	Control	Control	Control
Rating Unit		%	%	%	%	%	%
Days After First/Last Applic.		28 10 10 DA-B	35 17 17 DA-B	7 7 7 DA-A	14 14 14 DA-A	21 3 21 DA-A	28 10 10 DA-B
Trt-Eval Interval							
Trt Treatment No.	Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code
1 Nontreated							
2 Regiment	80 WP	0.5	OZ/A	MPOST	A	99 a	99 a
Permit	75 WG	0.5	OZ/A	MPOST	A		
Kinetic HV	SF	4.8	FL OZ/A	MPOST	A		
Urea-Ammonium nitrate	L	38.4	FL OZ/A	MPOST	A		
3 Stam M-4	4 SL	4	QT/A	MPOST	A	99 a	99 a
Facet	75 DF	0.5	LB/A	MPOST	A		
Permit	75 WG	0.5	OZ/A	MPOST	A		
4 Regiment	80 WP	0.6	OZ/A	7 D PTFLD	B	92 b	89 b
Permit	75 WG	0.6	OZ/A	7 D PTFLD	B		
Kinetic HV	SF	4.8	FL OZ/A	7 D PTFLD	B		
Urea-Ammonium nitrate	L	38.4	FL OZ/A	7 D PTFLD	B		
5 Stam M-4	4 SL	4	QT/A	MPOST	A	99 a	98 a
Facet	75 DF	0.5	LB/A	MPOST	A		
Permit	75 WG	0.5	OZ/A	7 D PTFLD	B		
Agri-Dex	L	32	FL OZ/A	7 D PTFLD	B		
Standard Deviation						4.0	3.8
CV						5.21	4.89
						2.3	2.3
						1.4	1.4
						2.6	2.6
						3.2	3.2

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Pest Code		IPOLA	ECHCG	ECHCG	ECHCG	ECHCG	ECHCG
Rating Date		10-Jul-06	12-Jun-06	19-Jun-06	26-Jun-06	3-Jul-06	10-Jul-06
Rating Data Type		Control	Control	Control	Control	Control	Control
Rating Unit		%	%	%	%	%	%
Days After First/Last Applic.		35 17 17 DA-B	7 7 7 DA-A	14 14 14 DA-A	21 3 21 DA-A	28 10 10 DA-B	35 17 17 DA-B
Trt-Eval Interval							
Trt Treatment No.	Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code
1 Nontreated							
2 Regiment	80 WP	0.5	OZ/A	MPOST	A	99 a	74 b
Permit	75 WG	0.5	OZ/A	MPOST	A		
Kinetic HV	SF	4.8	FL OZ/A	MPOST	A		
Urea-Ammonium nitrate	L	38.4	FL OZ/A	MPOST	A		
3 Stam M-4	4 SL	4	QT/A	MPOST	A	99 a	80 a
Facet	75 DF	0.5	LB/A	MPOST	A		
Permit	75 WG	0.5	OZ/A	MPOST	A		
4 Regiment	80 WP	0.6	OZ/A	7 D PTFLD	B	92 b	
Permit	75 WG	0.6	OZ/A	7 D PTFLD	B		
Kinetic HV	SF	4.8	FL OZ/A	7 D PTFLD	B		
Urea-Ammonium nitrate	L	38.4	FL OZ/A	7 D PTFLD	B		
5 Stam M-4	4 SL	4	QT/A	MPOST	A	97 ab	80 a
Facet	75 DF	0.5	LB/A	MPOST	A		
Permit	75 WG	0.5	OZ/A	7 D PTFLD	B		
Agri-Dex	L	32	FL OZ/A	7 D PTFLD	B		
Standard Deviation						3.3	2.9
CV						4.24	4.99
						6.2	6.2
						4.0	4.0
						4.2	4.2
						2.4	2.4

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Regiment and Permit Combinations**

Trial ID: 06-WS-11

Location: DREC

Pest Code							ECHCG 31-Jul-06	PANRA 19-Jun-06	PANRA 26-Jun-06	PANRA 3-Jul-06	PANRA 10-Jul-06	PANRA 31-Jul-06
Rating Date							Control %	Control %	Control %	Control %	Control %	Control %
Rating Data Type							56 38	14 14	21 3	28 10	35 17	56 38
Rating Unit							38 DA-B	14 DA-A	21 DA-A	10 DA-B	17 DA-B	38 DA-B
Days After First/Last Applic.	Trt-Eval Interval	Form No.	Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code				
1 Nontreated							27	28	29	30	31	32
2 Regiment	80	WP	0.5	OZ/A	MPOST	A	85 a	69 a	79 b	80 b	78 bc	66 b
Permit	75	WG	0.5	OZ/A	MPOST	A						
Kinetic HV		SF	4.8	FL OZ/A	MPOST	A						
Urea-Ammonium nitrate		L	38.4	FL OZ/A	MPOST	A						
3 Stam M-4	4	SL	4	QT/A	MPOST	A	60 b	75 a	94 a	94 a	93 a	90 a
Facet	75	DF	0.5	LB/A	MPOST	A						
Permit	75	WG	0.5	OZ/A	MPOST	A						
4 Regiment	80	WP	0.6	OZ/A	7 D PTFLD	B	84 a		10 c	69 c	68 c	69 b
Permit	75	WG	0.6	OZ/A	7 D PTFLD	B						
Kinetic HV		SF	4.8	FL OZ/A	7 D PTFLD	B						
Urea-Ammonium nitrate		L	38.4	FL OZ/A	7 D PTFLD	B						
5 Stam M-4	4	SL	4	QT/A	MPOST	A	66 b	74 a	93 a	94 a	84 ab	83 a
Facet	75	DF	0.5	LB/A	MPOST	A						
Permit	75	WG	0.5	OZ/A	7 D PTFLD	B						
Agri-Dex		L	32	FL OZ/A	7 D PTFLD	B						
Standard Deviation							6.5	6.7	5.9	4.0	7.1	7.2
CV							11.02	12.36	10.66	5.96	11.01	11.66

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

Pest Code							LEFPA 3-Jul-06	LEFPA 10-Jul-06	LEFPA 31-Jul-06	13-Sep-06
Rating Date							Control %	Control %	Control %	Yield bu/A
Rating Data Type							28 10	35 17	56 38	
Rating Unit							10 DA-B	17 DA-B	38 DA-B	
Days After First/Last Applic.	Trt-Eval Interval	Form No.	Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code		
1 Nontreated							33	34	35	38
2 Regiment	80	WP	0.5	OZ/A	MPOST	A	76 a	30 c	31 b	169 a
Permit	75	WG	0.5	OZ/A	MPOST	A				
Kinetic HV		SF	4.8	FL OZ/A	MPOST	A				
Urea-Ammonium nitrate		L	38.4	FL OZ/A	MPOST	A				
3 Stam M-4	4	SL	4	QT/A	MPOST	A	85 a	85 a	74 a	172 a
Facet	75	DF	0.5	LB/A	MPOST	A				
Permit	75	WG	0.5	OZ/A	MPOST	A				
4 Regiment	80	WP	0.6	OZ/A	7 D PTFLD	B	75 a	54 b	51 ab	168 a
Permit	75	WG	0.6	OZ/A	7 D PTFLD	B				
Kinetic HV		SF	4.8	FL OZ/A	7 D PTFLD	B				
Urea-Ammonium nitrate		L	38.4	FL OZ/A	7 D PTFLD	B				
5 Stam M-4	4	SL	4	QT/A	MPOST	A	80 a	66 ab	63 a	166 a
Facet	75	DF	0.5	LB/A	MPOST	A				
Permit	75	WG	0.5	OZ/A	7 D PTFLD	B				
Agri-Dex		L	32	FL OZ/A	7 D PTFLD	B				
Standard Deviation							6.7	13.3	16.9	9.2
CV							10.65	28.4	38.57	6.03

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

**Objective:**

To determine the most effective rate and timing for V-10142 applications targeting broadleaf weed species.

**Conclusions:**

V-10142 is an ALS-inhibiting herbicide, which is the same mode of action as Regiment and Permit. Nutsedge species are a primary target of V-10142. However, no nutsedge was present in the test area in 2006. Also, the compound has little activity against annual grasses. In this experiment, V-10142 was applied at five application rates to 1- to 2-leaf rice (EPOST), 3- to 4-leaf rice (MPOST), or at 7 days after flood (7 d PTFLD). Weeds evaluated included hemp sesbania (SEBEX), ivyleaf morningglory (IPOHE), and pitted morningglory (IPOLA). Rice injury was minimal throughout the experiment. At 23 days after MPOST application, SEBEX, IPOHE, and IPOLA were all controlled at least 91% by V-10142 applied EPOST or MPOST. No differences in control were detected among the five application rates of V-10142 applied EPOST or MPOST. Control of these species was slightly lower when V-10142 application was delayed until 7 d PTFLD compared with EPOST or MPOST applications. Differences in rice yields were not attributed to V-10142 application rate or timing.

**Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cocodrie	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 72 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 23-May-06
<b>Harvest Date:</b> 20-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

**Pest Description**

<b>Pest 1 Type:</b> W	<b>Code:</b> SEBEX <i>Sesbania exaltata</i>
<b>Common Name:</b> Hemp sesbania	
<b>Pest 2 Type:</b> W	<b>Code:</b> IPOHE <i>Ipomoea hederacea</i>
<b>Common Name:</b> Ivyleaf morningglory	
<b>Pest 3 Type:</b> W	<b>Code:</b> IPOLA <i>Ipomoea lacunosa</i>
<b>Common Name:</b> Pitted morningglory	

**Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

**Trial Initiation Comments:**

*Cyperus* spp. were not present in the test area.

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	10-Jun-06	Clincher SF	2.38	EC	15	FL OZ/A
2.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
3.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
4.	27-Jun-06	Clincher SF	2.38	EC	15	FL OZ/A
5.	25-Jul-06	Ultra Blazer	2	L	1	PT/A

**Comment:** Ultra Blazer application on 25-Jul-06 was made to control hemp sesbania so that the experiment could be harvested.

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Soil Description**

**% Sand:** 11    **% OM:** 2.1    **Texture:** Silty clay  
**% Silt:** 30    **pH:** 8.2    **Soil Name:** Sharkey  
**% Clay:** 59    **CEC:** 34.2    **Fert. Level:** Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5    **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

**Application Description**

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Application Date:</b>	31-May-06	7-Jun-06	23-Jun-06
<b>Time of Day:</b>	9:00 am	8:30 am	9:00 am
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	EPOST	MPOST	7d PTFLD
<b>Application Placement:</b>	Foliar	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB	JAB, LCV
<b>Air Temperature, Unit:</b>	76 F	77 F	86 F
<b>% Relative Humidity:</b>	70	58	68
<b>Wind Velocity, Unit:</b>	3 MPH	1 MPH	4 MPH
<b>Wind Direction:</b>	W	SW	W
<b>Dew Presence (Y/N):</b>	N	Y	Y
<b>Soil Temperature, Unit:</b>	79 F	78 F	
<b>Soil Moisture:</b>	Excessive	Excessive	Flood
<b>% Cloud Cover:</b>	95	0	0

**Crop Stage At Each Application**

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Crop 1 Code:</b>	ORYSA	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	2 leaf	4 leaf	3 tiller
<b>Stage Minimum, Percent:</b>	2 leaf	3 leaf	3 tiller
<b>Stage Maximum, Percent:</b>	3 leaf	4 leaf	4 tiller
<b>Height, Unit:</b>	5 IN	7 IN	12 IN
<b>Height Minimum, Maximum:</b>	4 6	6 8	11 13

**Pest Stage At Each Application**

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Pest 1 Code, Disc., Scale:</b>	SEBEX W	SEBEX W	SEBEX W
<b>Stage Majority, Percent:</b>	2 leaf	4 leaf	9 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	3 leaf	8 leaf
<b>Stage Maximum, Percent:</b>	2 leaf	4 leaf	9 leaf
<b>Height, Unit:</b>	1 IN	4 IN	14 IN
<b>Height Minimum, Maximum:</b>	1 2	3 4	11 18
<b>Density, Unit:</b>	8 FT2	8 FT2	6 FT2
<b>Pest 2 Code, Disc., Scale:</b>	IPOHE W	IPOHE W	IPOHE W
<b>Stage Majority, Percent:</b>	1 leaf	3 leaf	7 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	2 leaf	7 leaf
<b>Stage Maximum, Percent:</b>	1 leaf	3 leaf	9 leaf
<b>Height, Unit:</b>	1 IN	3 IN	6 IN
<b>Height Minimum, Maximum:</b>	1 1	2 3	5 7
<b>Density, Unit:</b>	4 FT2	4 FT2	4 FT2
<b>Pest 3 Code, Disc., Scale:</b>	IPOLA W	IPOLA W	IPOLA W
<b>Stage Majority, Percent:</b>	1 leaf	3 leaf	7 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	2 leaf	7 leaf
<b>Stage Maximum, Percent:</b>	1 leaf	3 leaf	8 leaf
<b>Height, Unit:</b>	1 IN	3 IN	6 IN
<b>Height Minimum, Maximum:</b>	1 1	2 3	5 7
<b>Density, Unit:</b>	3 FT2	3 FT2	3 FT2

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

**Application Equipment**

	A	B	C
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	24 PSI	29 PSI	24 PSI
<b>Nozzle Type:</b>	DG	XR	TT
<b>Nozzle Size:</b>	11002VS	11001VS	11001VS
<b>Nozzle Spacing, Unit:</b>	20 IN	16 IN	16 IN
<b>Boom Length, Unit:</b>	60 IN	64 IN	64 IN
<b>Boom Height, Unit:</b>	18 IN	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	2 MPH	2 MPH
<b>Carrier:</b>	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA

Date	By	Notes
13-Jun-06	JAB	Weed populations were low in the first five drill passes in the experiment. Plots within this area were rated based on the weed pressure in these plots.
30-Jun-06	JAB	Plots 107 and 108 were infested with horse purslane at planting and competition damaged rice.
30-Jun-06	JAB	Morningglory species were killed by floodwater.
19-Jul-06	JAB	Plots 103, 114, 203, 214, 303, 314, 403, and 414 were shorter than other plots. An error occurred during the urea application.

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							7-Jun-06 Rice Injury % 7 0 7 DA-A	13-Jun-06 Rice Injury % 13 6 13 DA-A	20-Jun-06 Rice Injury % 20 13 13 DA-B	30-Jun-06 Rice Injury % 30 7 23 DA-B	SEBEX 7-Jun-06 Control % 7 0 7 DA-A	SEBEX 13-Jun-06 Control % 13 6 13 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4	7	8
1	Nontreated							0 a	0 a	0 b	0 c	0 c	0 g
2	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	2.13 19.2 15 32	OZ/A FL OZ/A ASN	EPOST A D	A	0 a	0 a	0 b	0 c	86 b	93 a
3	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	3.2 19.2 15 32	OZ/A FL OZ/A ASN	EPOST A D	A	0 a	2 a	1 b	1 c	88 ab	90 ab
4	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	4.27 19.2 15 32	OZ/A FL OZ/A ASN	EPOST A D	A	0 a	2 a	2 b	1 c	89 ab	92 a
5	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	5.33 19.2 15 32	OZ/A FL OZ/A ASN	EPOST A D	A	0 a	2 a	2 b	2 b	93 a	93 a
6	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	6.4 19.2 15 32	OZ/A FL OZ/A ASN	EPOST A D	A	0 a	2 a	4 a	4 a	90 ab	96 a
7	Regiment Dyne-A-Pak	80 AJ	WP	0.2 28.8	OZ/A FL OZ/A	EPOST A	A	1 a	1 a	0 b	0 c	93 a	95 a
8	Permit Induce	75 L	WG	0.75 4.8	OZ/A FL OZ/A	EPOST A	A	1 a	0 a	0 b	0 c	89 ab	90 ab
9	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	2.13 19.2 15 32	OZ/A FL OZ/A ASN	MPOST B D	B		0 a	0 b	0 c		70 def
10	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	3.2 19.2 15 32	OZ/A FL OZ/A ASN	MPOST B D	B		0 a	0 b	0 c		69 ef
11	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	4.27 19.2 15 32	OZ/A FL OZ/A ASN	MPOST B D	B		1 a	0 b	0 c		64 f
12	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	5.33 19.2 15 32	OZ/A FL OZ/A ASN	MPOST B D	B		2 a	1 b	1 c		79 cd
13	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	6.4 19.2 15 32	OZ/A FL OZ/A ASN	MPOST B D	B		1 a	1 b	1 c		78 cde
14	Regiment Dyne-A-Pak	80 AJ	WP	0.2 28.8	OZ/A FL OZ/A	MPOST B	B		1 a	1 b	0 c		81 bc
15	Permit Induce	75 L	WG	0.75 4.8	OZ/A FL OZ/A	MPOST B	B		0 a	0 b	0 c		80 c
16	V-10142 Agri-Dex Clincher SF	75 L 2.38	DG EC	2.13 19.2 15 32	OZ/A FL OZ/A ASN	7 d PTFLD C D	C				0 c		

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							7-Jun-06 Rice Injury % 7 0 7 DA-A	13-Jun-06 Rice Injury % 13 6 13 DA-A	20-Jun-06 Rice Injury % 20 13 13 DA-B	30-Jun-06 Rice Injury % 30 7 23 DA-B	SEBEX 7-Jun-06 Control % 7 0 7 DA-A	SEBEX 13-Jun-06 Control % 13 6 13 DA-A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4	7	8
17	V-10142	75	DG	3.2	OZ/A	7 d	PTFLD C				0 c		
	Agri-Dex		L	19.2	FL OZ/A	7 d	PTFLD C						
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D						
	Agri-Dex		L	32	FL OZ/A	ASN	D						
18	V-10142	75	DG	4.27	OZ/A	7 d	PTFLD C				0 c		
	Agri-Dex		L	19.2	FL OZ/A	7 d	PTFLD C						
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D						
	Agri-Dex		L	32	FL OZ/A	ASN	D						
19	V-10142	75	DG	5.33	OZ/A	7 d	PTFLD C				0 c		
	Agri-Dex		L	19.2	FL OZ/A	7 d	PTFLD C						
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D						
	Agri-Dex		L	32	FL OZ/A	ASN	D						
20	V-10142	75	DG	6.4	OZ/A	7 d	PTFLD C				0 c		
	Agri-Dex		L	19.2	FL OZ/A	7 d	PTFLD C						
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D						
	Agri-Dex		L	32	FL OZ/A	ASN	D						
21	Regiment Dyne-A-Pak	80	WP AJ	0.2 28.8	OZ/A FL OZ/A	7 d	PTFLD C				0 c		
22	Permit Induce	75	WG L	0.75 4.8	OZ/A FL OZ/A	7 d	PTFLD C				0 c		
Standard Deviation CV							0.7 370.33	1.2 155.62	1.2 164.37	0.7 178.16	3.2 4.04	6.0 7.65	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

Pest Code	Rating Date	Rating Data Type	Rating Unit	Days After First/Last Applic.	Trt-Eval Interval	SEBEX 20-Jun-06 Control % 20 13 13 DA-B	SEBEX 30-Jun-06 Control % 30 7 23 DA-B	SEBEX 6-Jul-06 Control % 36 13 13 DA-C	SEBEX 19-Jul-06 Control % 49 26 26 DA-C	IPOHE 7-Jun-06 Control % 7 0 7 DA-A	IPOHE 13-Jun-06 Control % 13 6 13 DA-A	IPOHE 20-Jun-06 Control % 20 13 13 DA-B		
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Growth Rate Unit	Appl Stage	Code	9	10	11	12	13	14	15
1	Nontreated							0 g	0 f	0 h	0 f	0 c	0 e	0 d
2	V-10142	75	DG	2.13	OZ/A	EPOST	A	95 abc	94 ab	95 abc	96 abc	80 ab	86 b	97 a
	Agri-Dex	L		19.2	FL OZ/A	EPOST	A							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							
3	V-10142	75	DG	3.2	OZ/A	EPOST	A	94 abc	98 ab	99 a	99 a	79 b	90 ab	98 a
	Agri-Dex	L		19.2	FL OZ/A	EPOST	A							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							
4	V-10142	75	DG	4.27	OZ/A	EPOST	A	96 ab	98 ab	99 a	99 a	79 b	90 ab	97 a
	Agri-Dex	L		19.2	FL OZ/A	EPOST	A							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							
5	V-10142	75	DG	5.33	OZ/A	EPOST	A	95 abc	99 a	99 a	99 a	85 ab	91 ab	98 a
	Agri-Dex	L		19.2	FL OZ/A	EPOST	A							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							
6	V-10142	75	DG	6.4	OZ/A	EPOST	A	99 a	99 a	99 a	99 a	88 a	94 a	99 a
	Agri-Dex	L		19.2	FL OZ/A	EPOST	A							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							
7	Regiment	80	WP	0.2	OZ/A	EPOST	A	93 abc	89 b	89 cd	87 d	83 ab	85 bc	94 a
	Dyne-A-Pak	AJ		28.8	FL OZ/A	EPOST	A							
8	Permit	75	WG	0.75	OZ/A	EPOST	A	93 abc	93 ab	91 a-d	91 a-d	83 ab	79 c	86 b
	Induce	L		4.8	FL OZ/A	EPOST	A							
9	V-10142	75	DG	2.13	OZ/A	MPOST	B	83 def	91 ab	94 abc	94 a-d		56 d	84 b
	Agri-Dex	L		19.2	FL OZ/A	MPOST	B							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							
10	V-10142	75	DG	3.2	OZ/A	MPOST	B	78 f	96 ab	97 ab	97 abc		59 d	83 b
	Agri-Dex	L		19.2	FL OZ/A	MPOST	B							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							
11	V-10142	75	DG	4.27	OZ/A	MPOST	B	79 ef	96 ab	99 a	99 a		56 d	84 b
	Agri-Dex	L		19.2	FL OZ/A	MPOST	B							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							
12	V-10142	75	DG	5.33	OZ/A	MPOST	B	86 c-f	97 ab	97 ab	96 abc		63 d	84 b
	Agri-Dex	L		19.2	FL OZ/A	MPOST	B							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							
13	V-10142	75	DG	6.4	OZ/A	MPOST	B	83 def	94 ab	96 abc	98 ab		61 d	76 c
	Agri-Dex	L		19.2	FL OZ/A	MPOST	B							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							
14	Regiment	80	WP	0.2	OZ/A	MPOST	B	88 b-e	94 ab	95 abc	97 abc		64 d	81 b
	Dyne-A-Pak	AJ		28.8	FL OZ/A	MPOST	B							
15	Permit	75	WG	0.75	OZ/A	MPOST	B	89 bed	92 ab	97 ab	97 abc		61 d	85 b
	Induce	L		4.8	FL OZ/A	MPOST	B							
16	V-10142	75	DG	2.13	OZ/A	7 d PTFLD	C							
	Agri-Dex	L		19.2	FL OZ/A	7 d PTFLD	C							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex	L		32	FL OZ/A	ASN	D							

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								SEBEX 20-Jun-06 Control % 20 13 13 DA-B	SEBEX 30-Jun-06 Control % 30 7 23 DA-B	SEBEX 6-Jul-06 Control % 36 13 13 DA-C	SEBEX 19-Jul-06 Control % 49 26 26 DA-C	IPOHE 7-Jun-06 Control % 7 0 7 DA-A	IPOHE 13-Jun-06 Control % 13 6 13 DA-A	IPOHE 20-Jun-06 Control % 20 13 13 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	9	10	11	12	13	14	15
17	V-10142	75	DG	3.2	OZ/A	7 d	PTFLD C		58 de	73 fg	90 bcd			
	Agri-Dex		L	19.2	FL OZ/A	7 d	PTFLD C							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex		L	32	FL OZ/A	ASN	D							
18	V-10142	75	DG	4.27	OZ/A	7 d	PTFLD C		65 d	84 de	93 a-d			
	Agri-Dex		L	19.2	FL OZ/A	7 d	PTFLD C							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex		L	32	FL OZ/A	ASN	D							
19	V-10142	75	DG	5.33	OZ/A	7 d	PTFLD C		55 e	73 fg	78 e			
	Agri-Dex		L	19.2	FL OZ/A	7 d	PTFLD C							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex		L	32	FL OZ/A	ASN	D							
20	V-10142	75	DG	6.4	OZ/A	7 d	PTFLD C		63 de	79 ef	89 cd			
	Agri-Dex		L	19.2	FL OZ/A	7 d	PTFLD C							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex		L	32	FL OZ/A	ASN	D							
21	Regiment Dyne-A-Pak	80	WP AJ	0.2 28.8	OZ/A FL OZ/A	7 d	PTFLD C		78 c	90 bcd	95 a-d			
22	Permit Induce	75	WG L	0.75 4.8	OZ/A FL OZ/A	7 d	PTFLD C		75 c	90 bcd	93 a-d			
Standard Deviation CV								5.8 6.92	5.9 7.24	4.9 5.64	4.9 5.45	4.8 6.66	4.7 6.82	3.3 3.99

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

Pest Code								IPOHE 30-Jun-06	IPOHE 6-Jul-06	IPOHE 19-Jul-06	IPOLA 13-Jun-06	IPOLA 20-Jun-06	IPOLA 30-Jun-06	IPOLA 6-Jul-06	
Rating Date								Control %	Control %	Control %	Control %	Control %	Control %	Control %	
Rating Data Type								30 7	36 13	49 26	13 6	20 13	30 7	36 13	
Rating Unit								23 DA-B	13 DA-C	26 DA-C	13 DA-A	13 DA-B	23 DA-B	13 DA-C	
Days After First/Last Applic.															
Trt-Eval Interval															
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Unit	Appl Stage	Code	16	17	18	19	20	21	22
1	Nontreated								0 d	0 f	0 e	0 e	0 c	0 f	0 h
2	V-10142	75 DG	2.13 OZ/A	EPOST	A			97 a	97 ab	97 ab	85 b	97 a	97 ab	98 ab	
	Agri-Dex	L	19.2 FL OZ/A	EPOST	A										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										
3	V-10142	75 DG	3.2 OZ/A	EPOST	A			99 a	99 a	99 a	90 ab	96 a	99 a	99 a	
	Agri-Dex	L	19.2 FL OZ/A	EPOST	A										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										
4	V-10142	75 DG	4.27 OZ/A	EPOST	A			98 a	98 ab	98 ab	91 ab	99 a	99 a	99 a	
	Agri-Dex	L	19.2 FL OZ/A	EPOST	A										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										
5	V-10142	75 DG	5.33 OZ/A	EPOST	A			99 a	99 a	99 a	93 ab	98 a	99 a	99 a	
	Agri-Dex	L	19.2 FL OZ/A	EPOST	A										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										
6	V-10142	75 DG	6.4 OZ/A	EPOST	A			99 a	99 a	99 a	94 a	97 a	99 a	99 a	
	Agri-Dex	L	19.2 FL OZ/A	EPOST	A										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										
7	Regiment	80 WP	0.2 OZ/A	EPOST	A			95 ab	94 bc	91 cd	88 ab	94 a	95 ab	95 bc	
	Dyne-A-Pak	AJ	28.8 FL OZ/A	EPOST	A										
8	Permit	75 WG	0.75 OZ/A	EPOST	A			95 ab	95 abc	95 abc	75 c	84 b	95 ab	95 bc	
	Induce	L	4.8 FL OZ/A	EPOST	A										
9	V-10142	75 DG	2.13 OZ/A	MPOST	B			95 ab	95 abc	95 abc	59 d	84 b	96 ab	99 a	
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										
10	V-10142	75 DG	3.2 OZ/A	MPOST	B			98 a	99 a	99 a	58 d	80 b	98 a	99 a	
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										
11	V-10142	75 DG	4.27 OZ/A	MPOST	B			98 a	99 a	99 a	56 d	84 b	98 a	99 a	
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										
12	V-10142	75 DG	5.33 OZ/A	MPOST	B			98 a	98 ab	98 ab	63 d	80 b	97 ab	97 ab	
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										
13	V-10142	75 DG	6.4 OZ/A	MPOST	B			93 ab	97 ab	98 ab	59 d	81 b	97 ab	97 ab	
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										
14	Regiment	80 WP	0.2 OZ/A	MPOST	B			96 a	98 ab	98 ab	59 d	81 b	96 ab	97 ab	
	Dyne-A-Pak	AJ	28.8 FL OZ/A	MPOST	B										
15	Permit	75 WG	0.75 OZ/A	MPOST	B			96 a	99 a	99 a	61 d	83 b	96 ab	95 bc	
	Induce	L	4.8 FL OZ/A	MPOST	B										
16	V-10142	75 DG	2.13 OZ/A	7 d PTFLD	C			56 c	83 e	90 cd			59 e	84 g	
	Agri-Dex	L	19.2 FL OZ/A	7 d PTFLD	C										
	Clincher SF	2.38 EC	15 FL OZ/A	ASN	D										
	Agri-Dex	L	32 FL OZ/A	ASN	D										

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								IPOHE 30-Jun-06 Control %	IPOHE 6-Jul-06 Control %	IPOHE 19-Jul-06 Control %	IPOLA 13-Jun-06 Control %	IPOLA 20-Jun-06 Control %	IPOLA 30-Jun-06 Control %	IPOLA 6-Jul-06 Control %
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	16	17	18	19	20	21	22
17	V-10142	75	DG	3.2	OZ/A	7 d PTFLD	C	68 c	85 e	93 bcd			64 de	88 ef
	Agri-Dex		L	19.2	FL OZ/A	7 d PTFLD	C							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex		L	32	FL OZ/A	ASN	D							
18	V-10142	75	DG	4.27	OZ/A	7 d PTFLD	C	68 c	90 cd	93 bcd			68 de	90 de
	Agri-Dex		L	19.2	FL OZ/A	7 d PTFLD	C							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex		L	32	FL OZ/A	ASN	D							
19	V-10142	75	DG	5.33	OZ/A	7 d PTFLD	C	56 c	86 de	88 d			59 e	86 fg
	Agri-Dex		L	19.2	FL OZ/A	7 d PTFLD	C							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex		L	32	FL OZ/A	ASN	D							
20	V-10142	75	DG	6.4	OZ/A	7 d PTFLD	C	68 c	90 cd	92 bcd			69 de	90 de
	Agri-Dex		L	19.2	FL OZ/A	7 d PTFLD	C							
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D							
	Agri-Dex		L	32	FL OZ/A	ASN	D							
21	Regiment Dyne-A-Pak	80	WP AJ	0.2 28.8	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C	84 b	91 c	91 cd			84 bc	93 cd
22	Permit Induce	75	WG L	0.75 4.8	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C	65 c	85 e	88 d			75 cd	86 fg
Standard Deviation CV								7.2 8.76	3.2 3.53	3.5 3.86	5.0 7.22	4.3 5.25	8.4 10.1	2.3 2.57

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							IPOLA 19-Jul-06 Control % 49 26 26 DA-C	50% Head DAE	20-Sep-06 Yield bu/A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	23	25	28
1	Nontreated							0 h	78 a	163 d
2	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	2.13 FL OZ/A 15 FL OZ/A	OZ/A EPOST ASN ASN	EPOST A ASN ASN	98 ab	78 a	176 a-d	
3	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	3.2 FL OZ/A 15 FL OZ/A	OZ/A EPOST ASN ASN	EPOST A ASN ASN	99 a	78 a	177 a-d	
4	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	4.27 FL OZ/A 15 FL OZ/A	OZ/A EPOST ASN ASN	EPOST A ASN ASN	99 a	78 a	179 abc	
5	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	5.33 FL OZ/A 15 FL OZ/A	OZ/A EPOST ASN ASN	EPOST A ASN ASN	99 a	77 a	188 a	
6	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	6.4 FL OZ/A 15 FL OZ/A	OZ/A EPOST ASN ASN	EPOST A ASN ASN	99 a	77 a	186 ab	
7	Regiment Dyne-A-Pak	80 AJ	WP 28.8	0.2 FL OZ/A	OZ/A EPOST	EPOST A	90 de	77 a	167 cd	
8	Permit Induce	75 L	WG 4.8	0.75 FL OZ/A	OZ/A EPOST	EPOST A	95 a-d	77 a	171 bcd	
9	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	2.13 FL OZ/A 15 FL OZ/A	OZ/A MPOST ASN ASN	MPOST B ASN ASN	99 a	77 a	174 a-d	
10	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	3.2 FL OZ/A 15 FL OZ/A	OZ/A MPOST ASN ASN	MPOST B ASN ASN	99 a	77 a	181 abc	
11	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	4.27 FL OZ/A 15 FL OZ/A	OZ/A MPOST ASN ASN	MPOST B ASN ASN	99 a	76 a	180 abc	
12	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	5.33 FL OZ/A 15 FL OZ/A	OZ/A MPOST ASN ASN	MPOST B ASN ASN	96 a-d	78 a	185 ab	
13	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	6.4 FL OZ/A 15 FL OZ/A	OZ/A MPOST ASN ASN	MPOST B ASN ASN	98 ab	77 a	189 a	
14	Regiment Dyne-A-Pak	80 AJ	WP 28.8	0.2 FL OZ/A	OZ/A MPOST	MPOST B	97 abc	78 a	175 a-d	
15	Permit Induce	75 L	WG 4.8	0.75 FL OZ/A	OZ/A MPOST	MPOST B	95 a-d	78 a	174 a-d	
16	V-10142 Agri-Dex Clincher SF Agri-Dex	75 L 2.38 L	DG 19.2 EC 32	2.13 FL OZ/A 15 FL OZ/A	OZ/A 7 d PTFLD ASN ASN	7 d PTFLD C ASN ASN	84 f	78 a	185 ab	

**Mississippi State University Delta Research and Extension Center**  
**V-10142 Application Rate and Timing**

Trial ID: 06-WS-12

Location: DREC

Pest Code					IPOLA 19-Jul-06			
Rating Date					Control %			
Rating Data Type					49	50% Head DAE	20-Sep-06	
Rating Unit					26		Yield bu/A	
Days After First/Last Applic.					26			
Trt-Eval Interval					DA-C			
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	
17	V-10142	75	DG	3.2	OZ/A	7 d PTFLD	C	23
	Agri-Dex		L	19.2	FL OZ/A	7 d PTFLD	C	91 cd
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D	
	Agri-Dex		L	32	FL OZ/A	ASN	D	
18	V-10142	75	DG	4.27	OZ/A	7 d PTFLD	C	91 cd
	Agri-Dex		L	19.2	FL OZ/A	7 d PTFLD	C	
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D	
	Agri-Dex		L	32	FL OZ/A	ASN	D	
19	V-10142	75	DG	5.33	OZ/A	7 d PTFLD	C	85 ef
	Agri-Dex		L	19.2	FL OZ/A	7 d PTFLD	C	
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D	
	Agri-Dex		L	32	FL OZ/A	ASN	D	
20	V-10142	75	DG	6.4	OZ/A	7 d PTFLD	C	92 bcd
	Agri-Dex		L	19.2	FL OZ/A	7 d PTFLD	C	
	Clincher SF	2.38	EC	15	FL OZ/A	ASN	D	
	Agri-Dex		L	32	FL OZ/A	ASN	D	
21	Regiment	80	WP	0.2	OZ/A	7 d PTFLD	C	91 cd
	Dyne-A-Pak		AJ	28.8	FL OZ/A	7 d PTFLD	C	
22	Permit	75	WG	0.75	OZ/A	7 d PTFLD	C	76 g
	Induce		L	4.8	FL OZ/A	7 d PTFLD	C	
Standard Deviation					3.9	1.0	9.5	
CV					4.39	1.27	5.32	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

## Mississippi State University Delta Research and Extension Center Early Postemergence IR5878 Weed Control Programs

Trial ID: 06-WS-13

Location: DREC

### **Objective:**

To determine the efficacy of IR5878 as a component of early postemergence weed control programs in Mississippi.

### **Conclusions:**

IR5878 is an ALS-inhibiting herbicide, which is the same mode of action as Regiment and Permit. Although nutsedge is one of the primary targets of IR5878, no nutsedge was present in the test area in 2006. In this experiment, IR5878 was applied to 1-leaf rice (VEPOST) or to 1- to 2-leaf rice (EPOST) alone and in combination with other herbicides. Weeds evaluated included hemp sesbania (SEBEX), ivyleaf morningglory (IPOHE), pitted morningglory (IPOLA), barnyardgrass (ECHCG), and browntop millet (PANRA). Rice injury was minimal following all treatments in this experiment. Very few weeds had emerged at the time of VEPOST applications, so VEPOST treatments provided poor control in 2006. EPOST applications of IR5878 performed well on SEBEX (>90% at 20 days following application). SEBEX control reached 90% more rapidly following application of a tank mixture of IR5878 and Permit at 0.33 OZ/A compared with IR5878 alone. The flood greatly reduced the morningglory populations. IR5878 provides a good option for SEBEX control in a Clearfield production system or in a Clincher SF/Ricestar HT system.

### **Crop Description**

<b>Crop 1:</b> ORYSA	<i>Oryza sativa</i>	Rice
<b>Variety:</b> CL 131		<b>Description:</b> Clearfield variety
<b>BBCH Scale:</b>	BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b>	Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b>	1 IN	
<b>Row Spacing, Unit:</b>	8 IN	
<b>Seed Bed:</b>	Smooth	<b>Soil Temperature, Unit:</b> 72 F
<b>Soil Moisture:</b>	Adequate	<b>Emergence Date:</b> 23-May-06
<b>Harvest Date:</b>	21-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b>	2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b>	12.0	

### **Pest Description**

<b>Pest 1 Type:</b> W	<b>Code:</b> SEBEX	<i>Sesbania exaltata</i>
<b>Common Name:</b> Hemp sesbania		
<b>Pest 2 Type:</b> W	<b>Code:</b> IPOHE	<i>Ipomoea hederacea</i>
<b>Common Name:</b> Ivyleaf morningglory		
<b>Pest 3 Type:</b> W	<b>Code:</b> IPOLA	<i>Ipomoea lacunosa</i>
<b>Common Name:</b> Pitted morningglory		
<b>Pest 4 Type:</b> W	<b>Code:</b> ECHCG	<i>Echinochloa crus-galli</i>
<b>Common Name:</b> Common barnyardgrass		
<b>Pest 5 Type:</b> W	<b>Code:</b> PANRA	<i>Brachiaria ramosa</i>
<b>Common Name:</b> Browntop millet		

### **Site and Design**

<b>Plot Width, Unit:</b>	5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b>	15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b>	4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b>	0.1	<b>Soil Drainage:</b> G Good

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
2.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
3.	25-Jul-06	Ultra Blazer	2	L	1	PT/A

**Comment:** Ultra Blazer application on 25-Jul-06 was made to control hemp sesbania so that the experiment could be harvested.

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Application Description**

	A	B	C	D	E
<b>Application Date:</b>	17-May-06	25-May-06	31-May-06	7-Jun-06	19-Jun-06
<b>Time of Day:</b>	7:00 am	6:45 am	7:00 am	8:30 am	9:00 am
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	PRE	VEPOST	EPOST	MPOST	PTFLD
<b>Application Placement:</b>	Soil	Foliar	Foliar	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB	JAB	JAB	JAB,LCV
<b>Air Temperature, Unit:</b>	64 F	74 F	79 F	77 F	94 F
<b>% Relative Humidity:</b>	56	86	86	58	55
<b>Wind Velocity, Unit:</b>	2 MPH	2 MPH	2 MPH	1 MPH	0 MPH
<b>Wind Direction:</b>	N	NW	W	W	
<b>Dew Presence (Y/N):</b>	N	Y	Y	Y	Y
<b>Soil Temperature, Unit:</b>	67 F	76	77 F	76 F	
<b>Soil Moisture:</b>	Adequate	Excessive	Excessive	Excessive	Flood
<b>% Cloud Cover:</b>	50	10	90	0	20

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

**Crop Stage At Each Application**

	A	B	C	D	E
<b>Crop 1 Code:</b>	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>		1 leaf	2 leaf	4 leaf	2 tiller
<b>Stage Minimum, Percent:</b>		1 leaf	2 leaf	3 leaf	2 tiller
<b>Stage Maximum, Percent:</b>		1 Leaf	3 leaf	4 leaf	3 tiller
<b>Height, Unit:</b>	2 IN	5 IN	7 IN	10 IN	
<b>Height Minimum, Maximum:</b>	1 2	4 6	6 8	8 11	

**Pest Stage At Each Application**

	A	B	C	D	E
<b>Pest 1 Code, Disc., Scale:</b>	SEBEX W				
<b>Stage Majority, Percent:</b>		Cot	2 leaf	3 leaf	6 leaf
<b>Stage Minimum, Percent:</b>		Cot	1 leaf	3 leaf	6 leaf
<b>Stage Maximum, Percent:</b>		Cot	2 leaf	3 leaf	7 leaf
<b>Height, Unit:</b>	0.5 IN	2 IN	3 IN	9 IN	
<b>Height Minimum, Maximum:</b>	0.5 1	2 2	2 4	8 10	
<b>Density, Unit:</b>	0.5 FT2	5 FT2	5 FT2	4 FT2	
<b>Pest 2 Code, Disc., Scale:</b>	IPOHE W				
<b>Stage Majority, Percent:</b>		Cot	1 leaf	2 leaf	4 leaf
<b>Stage Minimum, Percent:</b>		Cot	1 leaf	2 leaf	3 leaf
<b>Stage Maximum, Percent:</b>		Cot	2 leaf	3 leaf	4 leaf
<b>Height, Unit:</b>	0.5 IN	2 IN	4 IN	6 IN	
<b>Height Minimum, Maximum:</b>	0.5 1	1 2	2 4	5 6	
<b>Density, Unit:</b>	0.5 FT2	3 FT2	4 FT2	4 FT2	
<b>Pest 3 Code, Disc., Scale:</b>	IPOLA W				
<b>Stage Majority, Percent:</b>		Cot	1 leaf	2 leaf	4 leaf
<b>Stage Minimum, Percent:</b>		Cot	1 leaf	2 leaf	3 leaf
<b>Stage Maximum, Percent:</b>		Cot	2 leaf	3 leaf	4 leaf
<b>Height, Unit:</b>	0.5 IN	2 IN	4 IN	6 IN	
<b>Height Minimum, Maximum:</b>	0.5 1	1 2	2 4	5 6	
<b>Density, Unit:</b>	0.5 FT2	3 FT2	4 FT2	4 FT2	
<b>Pest 4 Code, Disc., Scale:</b>	ECHCG W				
<b>Stage Majority, Percent:</b>			1 leaf	3 leaf	3 till
<b>Stage Minimum, Percent:</b>			1 leaf	3 leaf	3 leaf
<b>Stage Maximum, Percent:</b>			2 leaf	4 leaf	5 till
<b>Height, Unit:</b>			1 IN	3 IN	8 IN
<b>Height Minimum, Maximum:</b>			1 2	2 3	4 12
<b>Density, Unit:</b>			7 FT2	7 FT2	4 FT2
<b>Pest 5 Code, Disc., Scale:</b>	PANRA W				
<b>Stage Majority, Percent:</b>			1 leaf	2 leaf	4 leaf
<b>Stage Minimum, Percent:</b>			1 leaf	2 leaf	1 till
<b>Stage Maximum, Percent:</b>			2 leaf	3 leaf	3 leaf
<b>Height, Unit:</b>			1 IN	3 IN	4 IN
<b>Height Minimum, Maximum:</b>			1 2	2 3	3 4
<b>Density, Unit:</b>			4 FT2	4 FT2	4 FT2

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

**Application Equipment**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>
<b>Appl. Equipment:</b>	CO2 backpack				
<b>Operating Pressure, Unit:</b>	36 PSI	40 PSI	34 PSI	24 PSI	24 PSI
<b>Nozzle Type:</b>	AI	AI	AI	XR	XR
<b>Nozzle Size:</b>	110015VS	110015VS	110015VS	11001VS	11001VS
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN	16 IN	16 IN
<b>Boom Length, Unit:</b>	60 IN	60 IN	60 IN	64 IN	64 IN
<b>Boom Height, Unit:</b>	18 IN				
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH	2 MPH	2 MPH
<b>Carrier:</b>	Water	Water	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA				

**Date      By      Notes**

25-May-06 JAB      Very few weeds emerged at VEPOST application. Application was made based on rice growth stage.

19-Jun-06 JAB      Morningglory species were killed by floodwater.

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							1-Jun-06 Rice Injury % 15 1 7 DA-B	7-Jun-06 Rice Injury % 21 0 7 DA-C	13-Jun-06 Rice Injury % 27 6 13 DA-C	SEBEX 1-Jun-06 Control % 15 1 7 DA-B	SEBEX 7-Jun-06 Control % 21 0 7 DA-C	SEBEX 13-Jun-06 Control % 27 6 13 DA-C	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	6	7	8
1	Nontreated							0 a	0 c	0 c	0 e	0 i	0 e
2	Command IR5878	3 ME 50 WG	ME 50 WG	12.8 2.1	FL OZ/A OZ/A	PRE EPOST	A C	0 a	0 c	0 c	0 e	81 cde	90 ab
	Induce	L		4.8	FL OZ/A	EPOST	C						
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E						
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E						
3	Command IR5878	3 ME 50 WG	ME 50 WG	12.8 2.1	FL OZ/A OZ/A	VEPOST VEPOST	B B	0 a	0 c	0 c	59 b	55 g	58 d
	Induce	L		4.8	FL OZ/A	VEPOST	B						
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E						
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E						
4	Command IR5878	3 ME 50 WG	ME 50 WG	12.8 2.1	FL OZ/A OZ/A	PRE EPOST	A C	0 a	5 a	3 a	0 e	97 a	96 ab
	Super Wham	4 SC		3	QT/A	EPOST	C						
	Induce	L		4.8	FL OZ/A	EPOST	C						
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E						
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E						
5	Facet IR5878	75 DF 50 WG	DF 50 WG	8 2.1	oz/A OZ/A	PRE EPOST	A C	0 a	0 c	0 c	88 a	89 a-d	95 ab
	Agri-Dex	L		19.2	FL OZ/A	EPOST	C						
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E						
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E						
6	IR5878	50 WG		2.1	OZ/A	EPOST	C			0 c	0 c	76 de	88 b
	Facet	75 DF		10.7	OZ/A	EPOST	C						
	Agri-Dex	L		19.2	FL OZ/A	EPOST	C						
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E						
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E						
7	Newpath IR5878	2 AS 50 WG	AS 50 WG	6 2.1	FL OZ/A OZ/A	PRE EPOST	A C	0 a	0 c	0 c	8 e	83 b-e	90 ab
	Induce	L		4.8	FL OZ/A	EPOST	C						
	Newpath	2 AS		4	FL OZ/A	MPOST	D						
	Agri-Dex	L		19.2	FL OZ/A	MPOST	D						
8	IR5878	50 WG		2.1	OZ/A	VEPOST	B	0 a	0 c	0 c	39 c	34 h	64 cd
	Newpath	2 AS		6	FL OZ/A	VEPOST	B						
	Induce	L		4.8	FL OZ/A	VEPOST	B						
	Newpath	2 AS		4	FL OZ/A	MPOST	D						
	Agri-Dex	L		19.2	FL OZ/A	MPOST	D						
9	IR5878	50 WG		2.1	OZ/A	EPOST	C			5 a	3 a	96 ab	95 ab
	Super Wham	4 SC		4	QT/A	EPOST	C						
	Induce	L		4.8	FL OZ/A	EPOST	C						
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E						
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E						
10	Command Permit	3 ME 75 WG	ME 75 WG	12.8 0.33	FL OZ/A OZ/A	PRE EPOST	A C	0 a	0 c	0 c	0 e	86 a-d	94 ab
	IR5878	50 WG		2.1	OZ/A	EPOST	C						
	Induce	L		4.8	FL OZ/A	EPOST	C						
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E						
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E						
11	Command Permit	3 ME 75 WG	ME 75 WG	12.8 1	FL OZ/A OZ/A	PRE EPOST	A C	0 a	0 c	0 c	0 e	70 ef	90 ab
	Induce	L		4.8	FL OZ/A	EPOST	C						
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E						
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E						

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							1-Jun-06 Rice Injury % 15 1 7 DA-B	7-Jun-06 Rice Injury % 21 0 7 DA-C	13-Jun-06 Rice Injury % 27 6 13 DA-C	SEBEX 1-Jun-06 Control % 15 1 7 DA-B	SEBEX 7-Jun-06 Control % 21 0 7 DA-C	SEBEX 13-Jun-06 Control % 27 6 13 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Growth Rate Unit	Appl Stage						
12	Command	3 ME	12.8 FL OZ/A	VEPOST	B	0 a	0 c	0 c	25 d	40 h	65 cd	
	Permit	75 WG	1 OZ/A	VEPOST	B							
	Induce	L	4.8 FL OZ/A	VEPOST	B							
	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E							
13	Permit	75 WG	1 OZ/A	EPOST	C		4 a	4 a		96 ab	98 a	
	Super Wham	4 SC	3 QT/A	EPOST	C							
	Agri-Dex	L	19.2 FL OZ/A	EPOST	C							
	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E							
14	Newpath	2 AS	6 FL OZ/A	VEPOST	B	0 a	0 c	0 c	23 d	60 fg	68 c	
	Permit	75 WG	1 OZ/A	VEPOST	B							
	Agri-Dex	L	19.2 FL OZ/A	VEPOST	B							
	Newpath	2 AS	4 FL OZ/A	MPOST	D							
	Agri-Dex	L	19.2 FL OZ/A	MPOST	D							
15	Grasp	2 SC	2 FL OZ/A	EPOST	C		2 b	2 b		90 abc	95 ab	
	IR5878	50 WG	2.1 OZ/A	EPOST	C							
	Induce	L	19.2 FL OZ/A	EPOST	C							
	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E							
16	IR5878	50 WG	2.1 OZ/A	EPOST	C		1 bc	4 a		84 a-d	90 ab	
	Ricestar HT	0.58 EC	17 FL OZ/A	EPOST	C							
	Dyne-A-Pak	AJ	19.2 FL OZ/A	EPOST	C							
	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E							
17	IR5878	50 WG	2.1 OZ/A	EPOST	C		0 c	0 c		86 a-d	88 b	
	Clincher SF	2.38 EC	15 FL OZ/A	EPOST	C							
	Dyne-A-Pak	AJ	19.2 FL OZ/A	EPOST	C							
	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E							
18	Command	3 ME	12.8 FL OZ/A	PRE	A	0 a	2 b	3 a	0 e	96 ab	97 ab	
	IR5878	50 WG	2.1 OZ/A	EPOST	C							
	Aim	2 EC	1 FL OZ/A	EPOST	C							
	Induce	L	2.88 FL OZ/A	EPOST	C							
	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E							
Standard Deviation CV							0.0	1.1	0.5	7.1	8.3	5.9
							0.0	107.33	46.58	35.44	11.37	7.26

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							SEBEX 20-Jun-06 Control % 34 1 20 DA-C	SEBEX 3-Jul-06 Control % 47 14 14 DA-E	IPOHE 1-Jun-06 Control % 15 1 7 DA-B	IPOHE 7-Jun-06 Control % 21 0 7 DA-C	IPOHE 13-Jun-06 Control % 27 6 13 DA-C	IPOHE 20-Jun-06 Control % 34 1 20 DA-C	IPOHE 3-Jul-06 Control % 47 14 14 DA-E	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	9	10	11	12	13	14	15
1	Nontreated							0 d	0 d	0 f	0 f	0 g	0 g	0 d
2	Command IR5878 Induce Clincher SF Agri-Dex	3 ME 50 WG L 2.38 EC L	ME WG L EC L	12.8 2.1 4.8 15 19.2	FL OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE EPOST EPOST PR or PTFLD PR or PTFLD	A C C E E	91 a	92 a	0 f	81 c	91 abc	95 abc	99 a
3	Command IR5878 Induce Clincher SF Agri-Dex	3 ME 50 WG L 2.38 EC L	ME WG L EC L	12.8 2.1 4.8 15 19.2	FL OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A	VEPOST VEPOST VEPOST PR or PTFLD PR or PTFLD	B B B E E	59 c	43 c	45 c	35 e	64 f	88 e	91 b
4	Command IR5878 Super Wham Induce Clincher SF Agri-Dex	3 ME 50 WG 4 SC L 2.38 EC L	ME WG SC L EC L	12.8 2.1 3 4.8 15 19.2	FL OZ/A OZ/A QT/A FL OZ/A FL OZ/A FL OZ/A	PRE EPOST EPOST EPOST PR or PTFLD PR or PTFLD	A C C C E E	89 a	86 a	0 f	96 ab	96 ab	93 a-d	96 a
5	Facet IR5878 Agri-Dex Clincher SF Agri-Dex	75 DF 50 WG L 2.38 EC L	DF WG L EC L	8 2.1 19.2 15 19.2	OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE EPOST EPOST PR or PTFLD PR or PTFLD	A C C E E	95 a	97 a	93 a	94 abc	97 ab	98 a	99 a
6	IR5878 Facet Agri-Dex Clincher SF Agri-Dex	50 WG 75 DF L 2.38 EC L	WG DF L EC L	2.1 10.7 19.2 15 19.2	OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A	EPOST EPOST EPOST PR or PTFLD PR or PTFLD	C C C E E	94 a	98 a		89 abc	96 ab	98 ab	99 a
7	Newpath IR5878 Induce Newpath Agri-Dex	2 AS 50 WG L 2 AS L	AS WG L AS L	6 2.1 4.8 4 19.2	FL OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE EPOST EPOST MPOST MPOST	A C C D D	93 a	94 a	55 b	85 abc	89 bc	95 abc	98 a
8	IR5878 Newpath Induce Newpath Agri-Dex	50 WG 2 AS L 2 AS L	WG AS L AS L	2.1 6 4.8 4 19.2	FL OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	VEPOST VEPOST VEPOST MPOST MPOST	B B B D D	70 b	60 b	58 b	60 d	71 ef	83 f	85 c
9	IR5878 Super Wham Induce Clincher SF Agri-Dex	50 WG 4 SC L 2.38 EC L	WG SC L EC L	2.1 4 4.8 15 19.2	OZ/A QT/A FL OZ/A FL OZ/A FL OZ/A	EPOST EPOST EPOST PR or PTFLD PR or PTFLD	C C C E E	97 a	98 a		97 ab	97 ab	98 a	99 a
10	Command Permit IR5878 Induce Clincher SF Agri-Dex	3 ME 75 WG 50 WG L 2.38 EC L	ME WG WG L EC L	12.8 0.33 OZ/A 2.1 OZ/A 4.8 FL OZ/A 15 FL OZ/A 19.2 FL OZ/A	FL OZ/A OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE EPOST EPOST EPOST PR or PTFLD PR or PTFLD	A C C C E E	95 a	98 a	0 f	81 c	89 bc	94 a-d	99 a
11	Command Permit Induce Clincher SF Agri-Dex	3 ME 75 WG L 2.38 EC L	ME WG L EC L	12.8 1 OZ/A 4.8 FL OZ/A 15 FL OZ/A 19.2 FL OZ/A	FL OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE EPOST EPOST PR or PTFLD PR or PTFLD	A C C E E	93 a	96 a	0 f	61 d	79 de	93 a-d	99 a

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							SEBEX 20-Jun-06 Control % 34 1 20 DA-C	SEBEX 3-Jul-06 Control % 47 14 14 DA-E	IPOHE 1-Jun-06 Control % 15 1 7 DA-B	IPOHE 7-Jun-06 Control % 21 0 7 DA-C	IPOHE 13-Jun-06 Control % 27 6 13 DA-C	IPOHE 20-Jun-06 Control % 34 1 20 DA-C	IPOHE 3-Jul-06 Control % 47 14 14 DA-E	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	9	10	11	12	13	14	15
12	Command	3 ME	12.8 FL OZ/A	VEPOST	B		66 bc	59 b	23 e	38 e	64 f	89 de	90 b	
	Permit	75 WG	1 OZ/A	VEPOST	B									
	Induce	L	4.8 FL OZ/A	VEPOST	B									
	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
13	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E		98 a	99 a		97 ab	98 a	97 ab	97 a	
	Permit	75 WG	1 OZ/A	EPOST	C									
	Super Wham	4 SC	3 QT/A	EPOST	C									
	Agri-Dex	L	19.2 FL OZ/A	EPOST	C									
14	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E		74 b	68 b	33 d	58 d	74 e	89 de	90 b	
	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									
	Newpath	2 AS	6 FL OZ/A	VEPOST	B									
	Permit	75 WG	1 OZ/A	VEPOST	B									
15	Agri-Dex	L	19.2 FL OZ/A	VEPOST	B		95 a	99 a		86 abc	94 ab	94 a-d	99 a	
	Grasp	2 SC	2 FL OZ/A	EPOST	C									
	IR5878	50 WG	2.1 OZ/A	EPOST	C									
	Induce	L	19.2 FL OZ/A	EPOST	C									
16	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E		91 a	95 a		81 c	89 bc	93 bcd	99 a	
	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									
	IR5878	50 WG	2.1 OZ/A	EPOST	C									
	Ricestar HT	0.58 EC	17 FL OZ/A	EPOST	C									
17	Dyne-A-Pak	AJ	19.2 FL OZ/A	EPOST	C		90 a	90 a		84 bc	85 cd	91 cde	97 a	
	Clincher SF	2.38 EC	15 FL OZ/A	EPOST	C									
	Dyne-A-Pak	AJ	19.2 FL OZ/A	EPOST	C									
	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
18	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E		96 a	95 a	0 f	98 a	98 a	98 a	99 a	
	Command	3 ME	12.8 FL OZ/A	PRE	A									
	IR5878	50 WG	2.1 OZ/A	EPOST	C									
	Aim	2 EC	1 FL OZ/A	EPOST	C									
	Induce	L	2.88 FL OZ/A	EPOST	C									
	Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
	Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									
	Standard Deviation						6.0	9.4	4.1	8.5	5.4	3.1	3.1	
	CV						7.27	11.53	16.12	11.58	6.64	3.55	3.42	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

Pest Code	Rating Date	Rating Data Type	Rating Unit	Days After First/Last Applic.	Trt-Eval Interval	IPOLA 1-Jun-06 Control % 15 1 7 DA-B	IPOLA 13-Jun-06 Control % 27 6 13 DA-C	IPOLA 20-Jun-06 Control % 34 1 20 DA-C	IPOLA 3-Jul-06 Control % 47 14 14 DA-E	ECHCG 1-Jun-06 Control % 15 1 7 DA-B	ECHCG 7-Jun-06 Control % 21 0 7 DA-C	ECHCG 13-Jun-06 Control % 27 6 13 DA-C		
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	16	17	18	19	20	21	22
1	Nontreated							0 e	0 f	0 f	0 c	0 c	0 f	0 i
2	Command IR5878	3 ME 50 WG	ME 50 WG	12.8 2.1	FL OZ/A OZ/A	PRE EPOST	A C	0 e	86 cd	94 abc	99 a	93 ab	80 cde	74 gh
	Induce Clincher SF	L 2.38 EC	L 15 EC	4.8 15	FL OZ/A FL OZ/A	EPOST PR or PTFLD	C E							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	PR or PTFLD	E							
3	Command IR5878	3 ME 50 WG	ME 50 WG	12.8 2.1	FL OZ/A OZ/A	VEPOST VEPOST	B B	50 c	68 e	88 de	91 b	91 ab	88 bcd	84 a-d
	Induce Clincher SF	L 2.38 EC	L 15 EC	4.8 15	FL OZ/A FL OZ/A	VEPOST PR or PTFLD	B E							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	PR or PTFLD	E							
4	Command IR5878	3 ME 50 WG	ME 50 WG	12.8 2.1	FL OZ/A OZ/A	PRE EPOST	A C	0 e	93 abc	95 ab	97 a	90 ab	94 ab	88 abc
	Super Wham	4 SC	SC 3		QT/A	EPOST	C							
	Induce Clincher SF	L 2.38 EC	L 15 EC	4.8 15	FL OZ/A FL OZ/A	EPOST PR or PTFLD	C E							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	PR or PTFLD	E							
5	Facet IR5878	75 DF 50 WG	DF 50 WG	8 2.1	OZ/A OZ/A	PRE EPOST	A C	91 a	95 abc	98 a	99 a	94 a	86 b-e	76 efg
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	EPOST	C							
	Clincher SF	2.38 EC	EC 15		FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	PR or PTFLD	E							
6	IR5878	50 WG	WG 2.1		OZ/A	EPOST	C		96 ab	98 a	99 a		84 cde	76 efg
	Facet	75 DF	DF 10.7		OZ/A	EPOST	C							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	EPOST	C							
	Clincher SF	2.38 EC	EC 15		FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	PR or PTFLD	E							
7	Newpath IR5878	2 AS 50 WG	AS 50 WG	6 2.1	FL OZ/A OZ/A	PRE EPOST	A C	56 bc	86 cd	95 ab	98 a	90 ab	86 b-e	90 a
	Induce	L 4.8	L 4.8		FL OZ/A	EPOST	C							
	Newpath	2 AS	AS 4		FL OZ/A	MPOST	D							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	MPOST	D							
8	IR5878	50 WG	WG 2.1		OZ/A	VEPOST	B	64 b	73 e	85 e	90 b	89 b	90 abc	90 a
	Newpath	2 AS	AS 6		FL OZ/A	VEPOST	B							
	Induce	L 4.8	L 4.8		FL OZ/A	VEPOST	B							
	Newpath	2 AS	AS 4		FL OZ/A	MPOST	D							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	MPOST	D							
9	IR5878	50 WG	WG 2.1		OZ/A	EPOST	C		91 a-d	97 a	99 a		97 a	83 b-e
	Super Wham	4 SC	SC 4		QT/A	EPOST	C							
	Induce	L 4.8	L 4.8		FL OZ/A	EPOST	C							
	Clincher SF	2.38 EC	EC 15		FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	PR or PTFLD	E							
10	Command Permit IR5878	3 ME 75 WG	ME 0.33	12.8 OZ/A	FL OZ/A	PRE EPOST	A C	0 e	91 a-d	94 abc	99 a	89 b	76 e	73 gh
	Induce	L 4.8	L 4.8		FL OZ/A	EPOST	C							
	Clincher SF	2.38 EC	EC 15		FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	PR or PTFLD	E							
11	Command Permit	3 ME 75 WG	ME 1	12.8 OZ/A	FL OZ/A	PRE EPOST	A C	0 e	83 d	95 ab	99 a	90 ab	76 e	69 h
	Induce	L 4.8	L 4.8		FL OZ/A	EPOST	C							
	Clincher SF	2.38 EC	EC 15		FL OZ/A	PR or PTFLD	E							
	Agri-Dex	L 19.2	L 19.2		FL OZ/A	PR or PTFLD	E							

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							IPOLA 1-Jun-06 Control %	IPOLA 13-Jun-06 Control %	IPOLA 20-Jun-06 Control %	IPOLA 3-Jul-06 Control %	ECHCG 1-Jun-06 Control %	ECHCG 7-Jun-06 Control %	ECHCG 13-Jun-06 Control %	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	16	17	18	19	20	21	22
12	Command Permit Induce Clincher SF Agri-Dex	3 75 L 2.38 L	ME WG 4.8 FL OZ/A EC	12.8 1 15 19.2	FL OZ/A OZ/A QT/A FL OZ/A FL OZ/A	VEPOST VEPOST EPOST PR or PTFLD PR or PTFLD	B B B E E	28 d	66 e	91 bcd	86 b	90 ab	83 cde	75 fgh
13	Permit Super Wham Agri-Dex Clincher SF Agri-Dex	75 4 L 2.38 L	WG SC 19.2 EC 19.2	1 3 FL OZ/A FL OZ/A FL OZ/A	OZ/A QT/A EPOST PR or PTFLD PR or PTFLD	EPOST EPOST EPOST E E	C C C E E		94 abc	98 a	99 a		98 a	89 ab
14	Newpath Permit Agri-Dex Newpath Agri-Dex	2 75 L 2 L	AS WG 19.2 AS 19.2	6 1 FL OZ/A 4 FL OZ/A	FL OZ/A OZ/A FL OZ/A MPOST FL OZ/A	VEPOST VEPOST VEPOST MPOST MPOST	B B B D D	33 d	74 e	89 cde	90 b	90 ab	90 abc	90 a
15	Grasp IR5878 Induce Clincher SF Agri-Dex	2 50 L 2.38 L	SC WG 19.2 EC 19.2	2 2.1 FL OZ/A OZ/A FL OZ/A 15 FL OZ/A	FL OZ/A EPOST EPOST EPOST PR or PTFLD PR or PTFLD	EPOST EPOST EPOST E E	C C C E E		91 a-d	91 bcd	99 a		86 b-e	81 c-f
16	IR5878 Ricestar HT Dyne-A-Pak Clincher SF Agri-Dex	50 0.58 AJ 2.38 L	WG EC 17 EC 19.2	2.1 OZ/A FL OZ/A FL OZ/A FL OZ/A	OZ/A EPOST EPOST EPOST PR or PTFLD PR or PTFLD	EPOST EPOST EPOST E E	C C C E E		88 bcd	94 abc	99 a		78 de	78 d-g
17	IR5878 Clincher SF Dyne-A-Pak Clincher SF Agri-Dex	50 2.38 AJ 2.38 L	WG EC 15 EC 19.2	2.1 FL OZ/A FL OZ/A FL OZ/A FL OZ/A	OZ/A EPOST EPOST PR or PTFLD PR or PTFLD	EPOST EPOST EPOST E E	C C C E E		86 cd	91 bcd	97 a		80 cde	76 efg
18	Command IR5878 Aim Induce Clincher SF Agri-Dex	3 50 2 L 2.38 L	ME WG EC FL OZ/A EC FL OZ/A	12.8 2.1 1 2.88 15 19.2	FL OZ/A OZ/A FL OZ/A FL OZ/A FL OZ/A FL OZ/A	PRE EPOST EPOST EPOST PR or PTFLD PR or PTFLD	A C C C E E	0 e	97 a	98 a	99 a	92 ab	85 b-e	76 efg
Standard Deviation CV								6.2 23.11	5.4 6.73	3.1 3.55	3.4 3.77	2.6 3.18	6.0 7.4	4.3 5.61

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

Pest Code							ECHCG 20-Jun-06	ECHCG 3-Jul-06	PANRA 1-Jun-06	PANRA 7-Jun-06	PANRA 13-Jun-06	PANRA 20-Jun-06	PANRA 3-Jul-06
Rating Date							Control %	Control %	Control %	Control %	Control %	Control %	Control %
Rating Data Type							34 1	47 14	15 1	21 0	27 6	34 1	47 14
Rating Unit							20 DA-C	14 DA-E	7 DA-B	7 DA-C	13 DA-C	20 DA-C	14 DA-E
Days After First/Last Applic.													
Trt-Eval Interval													
1 Nontreated							0 h	0 c	0 b	0 h	0 j	0 h	0 c
2 Command IR5878	3 ME	12.8 FL OZ/A	PRE	A	74 efg	97 ab	90 a	83 d-g	78 ghi	79 fg	99 a		
	50 WG	2.1 OZ/A	EPOST	C									
Induce	L	4.8 FL OZ/A	EPOST	C									
Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									
3 Command IR5878	3 ME	12.8 FL OZ/A	VEPOST	B	81 bcd	93 ab	91 a	88 cde	85 c-f	85 b-e	97 ab		
	50 WG	2.1 OZ/A	VEPOST	B									
Induce	L	4.8 FL OZ/A	VEPOST	B									
Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									
4 Command IR5878	3 ME	12.8 FL OZ/A	PRE	A	85 bc	96 ab	88 a	98 a	88 a-d	88 bc	99 a		
	50 WG	2.1 OZ/A	EPOST	C									
Super Wham	4 SC	3 QT/A	EPOST	C									
Induce	L	4.8 FL OZ/A	EPOST	C									
Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									
5 Facet IR5878	75 DF	8 OZ/A	PRE	A	74 efg	97 ab	91 a	90 bc	76 hi	76 g	99 a		
	50 WG	2.1 OZ/A	EPOST	C									
Agri-Dex	L	19.2 FL OZ/A	EPOST	C									
Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									
6 IR5878	50 WG	2.1 OZ/A	EPOST	C	75 d-g	99 a			86 c-f	76 hi	80 efg	99 a	
Facet	75 DF	10.7 OZ/A	EPOST	C									
Agri-Dex	L	19.2 FL OZ/A	EPOST	C									
Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									
7 Newpath IR5878	2 AS	6 FL OZ/A	PRE	A	96 a	99 a	89 a	86 c-f	93 a	94 a	99 a		
	50 WG	2.1 OZ/A	EPOST	C									
Induce	L	4.8 FL OZ/A	EPOST	C									
Newpath	2 AS	4 FL OZ/A	MPOST	D									
Agri-Dex	L	19.2 FL OZ/A	MPOST	D									
8 IR5878	50 WG	2.1 OZ/A	VEPOST	B	95 a	94 ab	90 a	89 cd	90 abc	95 a	98 ab		
Newpath	2 AS	6 FL OZ/A	VEPOST	B									
Induce	L	4.8 FL OZ/A	VEPOST	B									
Newpath	2 AS	4 FL OZ/A	MPOST	D									
Agri-Dex	L	19.2 FL OZ/A	MPOST	D									
9 IR5878	50 WG	2.1 OZ/A	EPOST	C	78 def	97 ab			97 ab	86 b-e	88 bc	99 a	
Super Wham	4 SC	4 QT/A	EPOST	C									
Induce	L	4.8 FL OZ/A	EPOST	C									
Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									
10 Command IR5878	3 ME	12.8 FL OZ/A	PRE	A	71 fg	91 ab	89 a	80 fg	76 hi	76 g	99 a		
Permit	75 WG	0.33 OZ/A	EPOST	C									
IR5878	50 WG	2.1 OZ/A	EPOST	C									
Induce	L	4.8 FL OZ/A	EPOST	C									
Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									
11 Command IR5878	3 ME	12.8 FL OZ/A	PRE	A	69 g	92 ab	88 a	81 efg	74 i	76 g	98 ab		
Permit	75 WG	1 OZ/A	EPOST	C									
Induce	L	4.8 FL OZ/A	EPOST	C									
Clincher SF	2.38 EC	15 FL OZ/A	PR or PTFLD	E									
Agri-Dex	L	19.2 FL OZ/A	PR or PTFLD	E									

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

Pest Code							ECHCG 20-Jun-06	ECHCG 3-Jul-06	PANRA 1-Jun-06	PANRA 7-Jun-06	PANRA 13-Jun-06	PANRA 20-Jun-06	PANRA 20-Jun-06	PANRA 3-Jul-06
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	Control %	Control %	Control %	Control %	Control %	Control %	Control %
12	Command Permit Induce Clincher SF Agri-Dex	3 ME 75 WG L 2.38 EC L	ME 1 OZ/A 1 OZ/A 4.8 FL OZ/A 15 FL OZ/A 19.2 FL OZ/A	12.8 FL OZ/A 1 FL OZ/A 2.88 FL OZ/A PR or PTFLD PR or PTFLD	/A /A /A /A /A	VEPOST VEPOST VEPOST PR or PTFLD PR or PTFLD	B B B E E	34 1 47 14 15 1 21 0 27 6	20-Jun-06 14 DA-C 7 DA-B 7 DA-C 13 DA-C 20-Jun-06 14 DA-E	Control %	Control %	Control %	Control %	Control %
13	Permit Super Wham Agri-Dex Clincher SF Agri-Dex	75 WG 4 SC L 2.38 EC L	WG SC QT/A 19.2 FL OZ/A 15 FL OZ/A 19.2 FL OZ/A	1 OZ/A 3 QT/A EPOST EPOST EPOST	/A /A /A /A /A	VEPOST EPOST EPOST PR or PTFLD PR or PTFLD	C C C E E	75 d-g 81 bcd	93 ab 97 ab	89 a 98 a	85 c-g 91 ab	79 ghi 89 b	83 c-f 99 a	97 ab
14	Newpath Permit Agri-Dex Newpath Agri-Dex	2 AS 75 WG L 2 AS L	AS WG QT/A 19.2 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	6 FL OZ/A 1 OZ/A EPOST EPOST MPOST MPOST	/A /A /A /A /A	VEPOST VEPOST VEPOST MPOST MPOST	B B B D D	88 b	94 ab	91 a	90 bc	90 abc	89 b	96 b
15	Grasp IR5878 Induce Clincher SF Agri-Dex	2 SC 50 WG L 2.38 EC L	SC WG QT/A 19.2 FL OZ/A 15 FL OZ/A 19.2 FL OZ/A	2 FL OZ/A 2.1 OZ/A EPOST EPOST EPOST	/A /A /A /A /A	EPOST EPOST EPOST PR or PTFLD PR or PTFLD	C C C E E	80 cde	96 ab		88 cde	83 d-g	81 d-g	99 a
16	IR5878 Ricestar HT Dyne-A-Pak Clincher SF Agri-Dex	50 WG 0.58 EC AJ 2.38 EC L	WG EC AJ EC L	2.1 OZ/A 17 FL OZ/A 19.2 FL OZ/A 15 FL OZ/A 19.2 FL OZ/A	/A /A /A /A /A	EPOST EPOST EPOST PR or PTFLD PR or PTFLD	C C C E E	74 efg	92 ab		79 g	81 e-h	88 bc	98 ab
17	IR5878 Clincher SF Dyne-A-Pak Clincher SF Agri-Dex	50 WG 2.38 EC AJ 2.38 EC L	WG EC AJ EC L	2.1 OZ/A 15 FL OZ/A 19.2 FL OZ/A 15 FL OZ/A 19.2 FL OZ/A	/A /A /A /A /A	EPOST EPOST EPOST PR or PTFLD PR or PTFLD	C C C E E	74 efg	89 b		84 c-g	81 e-h	84 b-f	98 ab
18	Command IR5878 Aim Induce Clincher SF Agri-Dex	3 ME 50 WG 2 EC L 2.38 EC L	ME WG EC QT/A 19.2 FL OZ/A	12.8 FL OZ/A 2.1 OZ/A 1 FL OZ/A 2.88 FL OZ/A 15 FL OZ/A 19.2 FL OZ/A	/A /A /A /A /A /A	PRE EPOST EPOST EPOST PR or PTFLD PR or PTFLD	A C C C E E	75 d-g	91 ab	91 a	87 c-f	80 fgh	86 bcd	96 b
Standard Deviation							4.1	5.7	2.7	4.4	3.7	3.3	1.7	
CV							5.55	6.44	3.23	5.35	4.74	4.19	1.8	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

Pest Code							21-Sep-06 Yield bu/A	
Rating Date								
Rating Data Type								
Rating Unit								
Days After First/Last Applic.								
Trt-Eval Interval								
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	32
1	Nontreated							71 d
2	Command IR5878	3 50	ME WG	12.8 2.1	FL OZ/A OZ/A	PRE EPOST	A C	141 ab
	Induce	L		4.8	FL OZ/A	EPOST	C	
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E	
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E	
3	Command IR5878	3 50	ME WG	12.8 2.1	FL OZ/A OZ/A	VEPOST VEPOST	B B	126 c
	Induce	L		4.8	FL OZ/A	VEPOST	B	
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E	
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E	
4	Command IR5878	3 50	ME WG	12.8 2.1	FL OZ/A OZ/A	PRE EPOST	A C	142 ab
	Super Wham	4	SC	3	QT/A	EPOST	C	
	Induce	L		4.8	FL OZ/A	EPOST	C	
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E	
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E	
5	Facet IR5878	75 50	DF WG	8 2.1	OZ/A OZ/A	PRE EPOST	A C	139 abc
	Agri-Dex	L		19.2	FL OZ/A	EPOST	C	
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E	
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E	
6	IR5878	50	WG	2.1	OZ/A	EPOST	C	140 ab
	Facet	75	DF	10.7	OZ/A	EPOST	C	
	Agri-Dex	L		19.2	FL OZ/A	EPOST	C	
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E	
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E	
7	Newpath IR5878	2 50	AS WG	6 2.1	FL OZ/A OZ/A	PRE EPOST	A C	147 a
	Induce	L		4.8	FL OZ/A	EPOST	C	
	Newpath	2	AS	4	FL OZ/A	MPOST	D	
	Agri-Dex	L		19.2	FL OZ/A	MPOST	D	
8	IR5878	50	WG	2.1	OZ/A	VEPOST	B	133 abc
	Newpath	2	AS	6	FL OZ/A	VEPOST	B	
	Induce	L		4.8	FL OZ/A	VEPOST	B	
	Newpath	2	AS	4	FL OZ/A	MPOST	D	
	Agri-Dex	L		19.2	FL OZ/A	MPOST	D	
9	IR5878	50	WG	2.1	OZ/A	EPOST	C	141 ab
	Super Wham	4	SC	4	QT/A	EPOST	C	
	Induce	L		4.8	FL OZ/A	EPOST	C	
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E	
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E	
10	Command Permit	3 75	ME WG	12.8 0.33	FL OZ/A OZ/A	PRE EPOST	A C	134 abc
	IR5878	50	WG	2.1	OZ/A	EPOST	C	
	Induce	L		4.8	FL OZ/A	EPOST	C	
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E	
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E	
11	Command Permit	3 75	ME WG	12.8 1	FL OZ/A OZ/A	PRE EPOST	A C	142 ab
	Induce	L		4.8	FL OZ/A	EPOST	C	
	Clincher SF	2.38	EC	15	FL OZ/A	PR or PTFLD	E	
	Agri-Dex	L		19.2	FL OZ/A	PR or PTFLD	E	

# **Mississippi State University Delta Research and Extension Center**

## **Early Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-13

Location: DREC

Means followed by same letter do not significantly differ ( $P=.05$ , Duncan's New MRT)

## Mississippi State University Delta Research and Extension Center

### Rice Tolerance to Postflood Grasp Applications

Trial ID: 06-WS-14

Location: DREC

#### **Objective:**

To determine weed control efficacy and rice tolerance to salvage herbicide applications made after flooding.

#### **Conclusions:**

This experiment was conducted to determine weed control efficacy and rice tolerance to salvage herbicides applied at three postflood application timings. Weeds evaluated included barnyardgrass (ECHCG) and browntop millet (PANRA). Rice injury was minimal following all herbicide applications. All applications of Clincher SF and Grasp controlled ECHCG greater than 75 and 65%, respectively, 24 days following the 21 days after flooding (21 d PTFLD) application. At 31 days after the 21 d PTFLD application, Regiment at 0.6 OZ/A controlled ECHCG when applied 7 and 14 d PTFLD. However, when the Regiment rate was increased to 1.2 OZ/A, ECHCG control was equivalent from applications made at all three timings. Only Clincher SF controlled PANRA 24 days after the 21 d PTFLD application. Averaged across applications timings, rice yields were highest following applications of Grasp at 5 FL OZ/A and Regiment at 1.2 OZ/A. Averaged across herbicide treatments, rice yields were reduced when applications were delayed until 21 d PTFLD compared with applications 7 to 14 d PTFLD. Of interest, the two herbicide treatments that maximized yield in this experiment were Grasp and Regiment applied at twice the labeled application rates.

#### **Crop Description**

**Crop 1:** ORYSA *Oryza sativa*

Rice

**Variety:** Cocodrie

**Description:** Conventional variety

**BBCH Scale:** BRIC

**Planting Date:** 15-Jun-06

**Planting Method:** Drill

**Rate, Unit:** 80 LB/A

**Depth, Unit:** 1 IN

**Row Spacing, Unit:** 8 IN

**Seed Bed:** Smooth

**Soil Temperature, Unit:** 72 F

**Soil Moisture:** Adequate

**Emergence Date:** 23-Jun-06

**Harvest Date:** 21-Sep-06

**Harvest Equipment:** Mitsubishi VM-13

**Harvested Width, Unit:** 2.66 FT

**Harvested Length, Unit:** 15 FT

**% Standard Moisture:** 12.0

#### **Pest Description**

**Pest 1 Type:** W **Code:** ECHCG *Echinochloa crus-galli*

**Common Name:** Barnyardgrass

**Pest 2 Type:** W **Code:** PANRA *Brachiaria ramosa*

**Common Name:** Browntop millet

#### **Site and Design**

**Plot Width, Unit:** 5.33 FT **Site Type:** Field

**Plot Length, Unit:** 15 FT **Tillage Type:** Conventional

**Replications:** 4 **Study Design:** Randomized Complete Block (Factorial treatment arrangement)

**% Slope:** 0.1 **Soil Drainage:** G Good

#### **Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Unit
1.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
2.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
3.	4-Aug-06	Quadris	2.08	SC	12	FL OZ/A

#### **Field Prep./Maintenance:**

Triple-K -- 3-Jun-06 and 15-Jun-06

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to Postflood Grasp Applications**

Trial ID: 06-WS-14

Location: DREC

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood

**Application Description**

	A	B	C	D
<b>Application Date:</b>	16-May-06	23-Jun-06	30-Jun-06	7-Jul-06
<b>Time of Day:</b>	8:00 am	8:30 am	7:00 am	8:00 am
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	PRE	7d PTFLD	14d PTFLD	21d PTFLD
<b>Application Placement:</b>	Soil	Foliar	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB, LCV	JAB, LCV	JAB, LCV
<b>Air Temperature, Unit:</b>	70 F	86 F	78 F	70 F
<b>% Relative Humidity:</b>	54	68	64	50
<b>Wind Velocity, Unit:</b>	4 MPH	4 MPH	0 MPH	4 MPH
<b>Wind Direction:</b>	NW	W	-	NW
<b>Dew Presence (Y/N):</b>	N	Y	Y	Y
<b>Soil Temperature, Unit:</b>	68 F			
<b>Soil Moisture:</b>	Adequate	Flood	Flood	Flood
<b>% Cloud Cover:</b>	50	0	0	0

**Crop Stage At Each Application**

	A	B	C	D
<b>Crop 1 Code:</b>	ORYSA	ORYSA	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>		4 tiller	6 tiller	.5-in IE
<b>Stage Minimum, Percent:</b>		3 tiller	5 tiller	.5-in IE
<b>Stage Maximum, Percent:</b>		4 tiller	6 tiller	.5-in IE
<b>Height, Unit:</b>		12 IN	20 IN	26 IN
<b>Height Minimum, Maximum:</b>		11 13	18 22	24 27

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to Postflood Grasp Applications**

Trial ID: 06-WS-14

Location: DREC

**Pest Stage At Each Application**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>Pest 1 Code, Disc., Scale:</b>	ECHCG W	ECHCG W	ECHCG W	ECHCG W
<b>Stage Majority, Percent:</b>		7 til	Head	Head
<b>Stage Minimum, Percent:</b>		5 til	Head	Head
<b>Stage Maximum, Percent:</b>		9 til	Head	Head
<b>Height, Unit:</b>		13 IN	16 IN	16 IN
<b>Height Minimum, Maximum:</b>		8 15	14 18	15 16
<b>Density, Unit:</b>		4 FT2	4 FT2	4 FT2
<b>Pest 2 Code, Disc., Scale:</b>	PANRA W	PANRA W	PANRA W	PANRA W
<b>Stage Majority, Percent:</b>		6 til	Head	Head
<b>Stage Minimum, Percent:</b>		6 til	Head	Head
<b>Stage Maximum, Percent:</b>		7 til	Head	Head
<b>Height, Unit:</b>		9 IN	12 IN	12 IN
<b>Height Minimum, Maximum:</b>		8 11	11 13	12 13
<b>Density, Unit:</b>		3 FT2	3 FT2	

**Application Equipment**

	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	38 PSI	24 PSI	24 PSI	24 PSI
<b>Nozzle Type:</b>	AI	TT	TT	TT
<b>Nozzle Size:</b>	110015VS	11001	11001	11001
<b>Nozzle Spacing, Unit:</b>	20 IN	16 IN	16 IN	16 IN
<b>Boom Length, Unit:</b>	60 IN	64 IN	64 IN	64 IN
<b>Boom Height, Unit:</b>	18 in	18 in	18 in	18 in
<b>Ground Speed, Unit:</b>	3 MPH	2 MPH	2 MPH	2 MPH
<b>Carrier:</b>	Water	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA	15 GPA

**Date      By      Notes**

7-Aug-06 JAB Browntop millet had dried down, so it was not evaluated.

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to Postflood Grasp Applications**

Trial ID: 06-WS-14

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							30-Jun-06 Rice Injury % 45 0 7 DA-B	6-Jul-06 Rice Injury % 51 6 6 DA-C	14-Jul-06 Rice Injury % 59 7 7 DA-D	21-Jul-06 Rice Injury % 66 14 14 DA-D	6-Jul-06 Root Injury % 51 6 6 DA-C	ECHCG 30-Jun-06 Control % 45 0 7 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	1	2	3	4	7	9
1	Command Grasp Agri-Dex 7 d after flood	3 ME 2 SC L	1 PT/A 2.5 FL OZ/A 48 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	0 b	0 c	0 b	0 c	3 bc	33 b		
2	Command Grasp Agri-Dex 14 d after flood	3 ME 2 SC L	1 PT/A 2.5 FL OZ/A 48 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C		1 bc	1 b	0 c	1 bc			
3	Command Grasp Agri-Dex 21 d after flood	3 ME 2 SC L	1 PT/A 2.5 FL OZ/A 48 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D				1 b	0 c			
4	Command Grasp Agri-Dex 7 d after flood	3 ME 2 SC L	1 PT/A 5 FL OZ/A 48 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	0 b	3 ab	1 b	2 bc	8 a	33 b		
5	Command Grasp Agri-Dex 14 d after flood	3 ME 2 SC L	1 PT/A 5 FL OZ/A 48 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C		1 bc	2 b	2 bc	5 ab			
6	Command Grasp Agri-Dex 21 d after flood	3 ME 2 SC L	1 PT/A 5 FL OZ/A 48 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D			1 b	0 c				
7	Command Clincher SF Agri-Dex 7 d after flood	3 ME 2.38 EC L	1 PT/A 15 FL OZ/A 48 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	0 b	0 c	0 b	0 c	0 c	48 ab		
8	Command Clincher SF Agri-Dex 14 d after flood	3 ME 2.38 EC L	1 PT/A 15 FL OZ/A 48 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C		0 c	0 b	0 c	0 c			
9	Command Clincher SF Agri-Dex 21 d after flood	3 ME 2.38 EC L	1 PT/A 15 FL OZ/A 48 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D			0 b	0 c				
10	Command Regiment Dyne-A-Pak 7 d after flood	3 ME 80 WP AJ	1 PT/A 0.6 OZ/A 16 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	3 a	4 a	0 b	0 c	0 c	60 a		
11	Command Regiment Dyne-A-Pak 14 d after flood	3 ME 80 WP AJ	1 PT/A 0.6 OZ/A 16 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C		3 ab	2 b	2 b	1 bc			
12	Command Regiment Dyne-A-Pak 21 d after flood	3 ME 80 WP AJ	1 PT/A 0.6 OZ/A 16 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D			1 b	1 bc				
13	Command Regiment Dyne-A-Pak 7 d after flood	3 ME 80 WP AJ	1 PT/A 1.2 OZ/A 16 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	4 a	5 a	2 b	2 b	5 ab	68 a		

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to Postflood Grasp Applications**

Trial ID: 06-WS-14

Location: DREC

Pest Code							30-Jun-06	6-Jul-06	14-Jul-06	21-Jul-06	6-Jul-06	ECHCG	
							Rice Injury %	Rice Injury %	Rice Injury %	Rice Injury %	Root Injury %	30-Jun-06 Control %	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	45 0 7 DA-B	51 6 6 DA-C	59 7 7 DA-D	66 14 14 DA-D	51 6 6 DA-C	45 0 7 DA-B
14	Command Regiment Dyne-A-Pak 14 d after flood	3 ME 80 WP AJ	1 PT/A 1.2 OZ/A 16 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C			1	2	3	4	7	9
15	Command Regiment Dyne-A-Pak 21 d after flood	3 ME 80 WP AJ	1 PT/A 1.2 OZ/A 16 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D					3 ab	5 a	4 a	1 bc
Standard Deviation							1.1	1.5	1.4	1.2	2.8	14.3	
CV							83.91	78.51	120.83	121.76	121.76	29.83	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to Postflood Grasp Applications**

Trial ID: 06-WS-14

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							ECHCG 6-Jul-06 Control % 51 6 6 DA-C	ECHCG 14-Jul-06 Control % 59 7 7 DA-D	ECHCG 21-Jul-06 Control % 66 14 14 DA-D	ECHCG 31-Jul-06 Control % 76 24 24 DA-D	ECHCG 7-Aug-06 Control % 83 31 31 DA-D	PANRA 6-Jul-06 Control % 51 6 6 DA-C	PANRA 14-Jul-06 Control % 59 7 7 DA-D	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	10	11	12	13	14	15	16
1	Command Grasp Agri-Dex 7 d after flood	3 ME 2 SC L	1 PT/A 2.5 FL OZ/A 48 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	75 a-d	56 de	55 efg	45 fg	63 cde	76 abc	30 cde		
2	Command Grasp Agri-Dex 14 d after flood	3 ME 2 SC L	1 PT/A 2.5 FL OZ/A 48 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C	58 d	59 cde	69 b-e	58 efg	70 bcd	58 cde	45 bcd		
3	Command Grasp Agri-Dex 21 d after flood	3 ME 2 SC L	1 PT/A 2.5 FL OZ/A 48 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D		31 gh	60 d-g	54 efg	59 def				
4	Command Grasp Agri-Dex 7 d after flood	3 ME 2 SC L	1 PT/A 5 FL OZ/A 48 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	65 cd	50 ef	50 g	43 g	45 f	55 de			
5	Command Grasp Agri-Dex 14 d after flood	3 ME 2 SC L	1 PT/A 5 FL OZ/A 48 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C	60 d	61 b-e	71 bcd	64 cde	65 cd	50 e	33 cde		
6	Command Grasp Agri-Dex 21 d after flood	3 ME 2 SC L	1 PT/A 5 FL OZ/A 48 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D		30 h	53 fg	59 def	58 def		20 e		
7	Command Clincher SF Agri-Dex 7 d after flood	3 ME 2.38 EC L	1 PT/A 15 FL OZ/A 48 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	85 ab	75 abc	73 bcd	68 cde	59 def	91 a	88 a		
8	Command Clincher SF Agri-Dex 14 d after flood	3 ME 2.38 EC L	1 PT/A 15 FL OZ/A 48 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C	61 cd	78 ab	79 abc	74 bcd	65 cd	81 ab	90 a		
9	Command Clincher SF Agri-Dex 21 d after flood	3 ME 2.38 EC L	1 PT/A 15 FL OZ/A 48 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D		48 efg	66 b-f	63 cde	55 def		48 bc		
10	Command Regiment Dyne-A-Pak 7 d after flood	3 ME 80 WP AJ	1 PT/A 0.6 OZ/A 16 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	81 abc	86 a	88 a	85 ab	86 ab	81 ab	55 b		
11	Command Regiment Dyne-A-Pak 14 d after flood	3 ME 80 WP AJ	1 PT/A 0.6 OZ/A 16 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C	63 cd	73 a-d	75 a-d	74 bcd	78 abc	65 b-e	35 cde		
12	Command Regiment Dyne-A-Pak 21 d after flood	3 ME 80 WP AJ	1 PT/A 0.6 OZ/A 16 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D		38 fgh	65 c-f	58 efg	48 ef		30 cde		
13	Command Regiment Dyne-A-Pak 7 d after flood	3 ME 80 WP AJ	1 PT/A 1.2 OZ/A 16 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	88 a	90 a	89 a	93 a	90 a	88 a	56 b		

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to Postflood Grasp Applications**

Trial ID: 06-WS-14

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							ECHCG 6-Jul-06 Control % 51 6 6 DA-C	ECHCG 14-Jul-06 Control % 59 7 7 DA-D	ECHCG 21-Jul-06 Control % 66 14 14 DA-D	ECHCG 31-Jul-06 Control % 76 24 24 DA-D	ECHCG 7-Aug-06 Control % 83 31 31 DA-D	PANRA 6-Jul-06 Control % 51 6 6 DA-C	PANRA 14-Jul-06 Control % 59 7 7 DA-D	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	10	11	12	13	14	15	16
14	Command Regiment Dyne-A-Pak 14 d after flood	3 ME 80 WP AJ	1 PT/A 1.2 OZ/A 16 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C	66 bcd	79 ab	81 ab	84 ab	78 abc	74 a-d	38 cde		
15	Command Regiment Dyne-A-Pak 21 d after flood	3 ME 80 WP AJ	1 PT/A 1.2 OZ/A 16 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D		56 de	73 bcd	75 bc	79 abc			28 de	
Standard Deviation CV							12.4 17.73	11.3 18.64	9.2 13.19	9.5 14.38	10.3 15.56	12.5 17.33	10.9 23.97	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to Postflood Grasp Applications**

Trial ID: 06-WS-14

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							PANRA 21-Jul-06 Control % 66 14 14 DA-D	PANRA 31-Jul-06 Control % 76 24 24 DA-D	50% Head DAE	21-Sep-06 Yield bu/A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code				
1	Command Grasp Agri-Dex 7 d after flood	3 ME 2 SC L	1 PT/A 2.5 FL OZ/A 48 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	23 ef	17	18	20	23	165 abc
2	Command Grasp Agri-Dex 14 d after flood	3 ME 2 SC L	1 PT/A 2.5 FL OZ/A 48 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C	23 ef		0 e	76 a	160 bcd	
3	Command Grasp Agri-Dex 21 d after flood	3 ME 2 SC L	1 PT/A 2.5 FL OZ/A 48 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D	54 cd		0 e	77 a	164 abc	
4	Command Grasp Agri-Dex 7 d after flood	3 ME 2 SC L	1 PT/A 5 FL OZ/A 48 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	15 f		0 e	77 a	180 a	
5	Command Grasp Agri-Dex 14 d after flood	3 ME 2 SC L	1 PT/A 5 FL OZ/A 48 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C	28 ef		0 e	77 a	177 ab	
6	Command Grasp Agri-Dex 21 d after flood	3 ME 2 SC L	1 PT/A 5 FL OZ/A 48 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D	35 def		0 e	77 a	169 abc	
7	Command Clincher SF Agri-Dex 7 d after flood	3 ME 2.38 EC L	1 PT/A 15 FL OZ/A 48 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	88 a		90 a	77 a	175 ab	
8	Command Clincher SF Agri-Dex 14 d after flood	3 ME 2.38 EC L	1 PT/A 15 FL OZ/A 48 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C	89 a		90 a	77 a	158 bcd	
9	Command Clincher SF Agri-Dex 21 d after flood	3 ME 2.38 EC L	1 PT/A 15 FL OZ/A 48 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D	78 ab		83 a	76 a	142 d	
10	Command Regiment Dyne-A-Pak 7 d after flood	3 ME 80 WP AJ	1 PT/A 0.6 OZ/A 16 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	53 cd		40 bc	76 a	171 abc	
11	Command Regiment Dyne-A-Pak 14 d after flood	3 ME 80 WP AJ	1 PT/A 0.6 OZ/A 16 FL OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C	33 def		33 cd	76 a	168 abc	
12	Command Regiment Dyne-A-Pak 21 d after flood	3 ME 80 WP AJ	1 PT/A 0.6 OZ/A 16 FL OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D	40 cde		20 d	76 a	154 cd	
13	Command Regiment Dyne-A-Pak 7 d after flood	3 ME 80 WP AJ	1 PT/A 1.2 OZ/A 16 FL OZ/A	PRE 7 d PTFLD 7 d PTFLD	A B B	55 cd		53 b	76 a	182 a	

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to Postflood Grasp Applications**

Trial ID: 06-WS-14

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							PANRA 21-Jul-06 Control % 66 14 14 DA-D	PANRA 31-Jul-06 Control % 76 24 24 DA-D	50% Head DAE	21-Sep-06 Yield bu/A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	17	18	20	23
14	Command Regiment Dyne-A-Pak 14 d after flood	3 80 AJ	ME WP 16	1 1.2 FL OZ/A	PT/A OZ/A OZ/A	PRE 14 d PTFLD 14 d PTFLD	A C C	41 cde	44 bc	77 a	175 ab
15	Command Regiment Dyne-A-Pak 21 d after flood	3 80 AJ	ME WP 16	1 1.2 FL OZ/A	PT/A OZ/A OZ/A	PRE 21 d PTFLD 21 d PTFLD	A D D	63 bc	40 bc	76 a	163 abc
Standard Deviation CV							14.8 31.09	9.7 29.34	0.8 1.09	12.1 7.25	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

# Mississippi State University Delta Research and Extension Center

## Prowl Timing

Trial ID: 06-WS-15

Location: DREC

### **Objective:**

To determine the rice response to Prowl sources (Prowl EC or Prowl H2O) applied at three application timings.

### **Conclusions:**

Prowl EC or H2O are not labeled for application to rice until the seeds have imbibed water for germination. This experiment was conducted to determine the rice response of three varieties to applications of Prowl EC or Prowl H2O at three application timings (0, 3, or 7 days after planting). Varieties were chosen to represent different growth types of rice that possess different levels of seedling vigor. No differences in rice yield observed for each variety across treatments. Rice yields were not reduced by Prowl EC or H2O applications made prior to rice emergence.

### **Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Various	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 4-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 71 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 13-May-06
<b>Harvest Date:</b> 12-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

### **Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block (Factorial treatment arrangement)
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

### **Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	4-May-06	Command	3	ME	1.33	PT/A
2.	4-May-06	Aim	2	EC	1.67	FL OZ/A
3.	4-May-06	Agri-Dex		L	1.67	% V/V
4.	1-Jun-06	SuperWham	4	EC	4	QT/A
5.	1-Jun-06	Facet	75	DF	0.67	LB/A
6.	1-Jun-06	Permit	75	DF	1	OZ/A
7.	1-Jun-06	Agri-Dex		L	1.67	% V/V
8.	1-Jun-06	Urea (46:0:0)	46	GR	325	LB/A

### **Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	3-Jun-06	Flood
3.	31-Aug-05	Drain

**Mississippi State University Delta Research and Extension Center**  
**Prowl Timing**

Trial ID: 06-WS-15

Location: DREC

**Application Description**

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Application Date:</b>	4-May-06	7-May-06	10-May-06
<b>Time of Day:</b>	7:00 pm	7:30 am	7:00 am
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	0 DAP	3 DAP	7 DAP
<b>Application Placement:</b>	Soil	Soil	Soil
<b>Applied By:</b>	JAB	JAB	JAB
<b>Air Temperature, Unit:</b>	82 F	76 F	74 F
<b>% Relative Humidity:</b>	69	57	72
<b>Wind Velocity, Unit:</b>	0 MPH	3 MPH	4 MPH
<b>Wind Direction:</b>		N	NW
<b>Dew Presence (Y/N):</b>	N	N	N
<b>Soil Temperature, Unit:</b>	71 F	70 F	70 F
<b>Soil Moisture:</b>	Adequate	Excessive	Adequate
<b>% Cloud Cover:</b>	75	100	75

**Application Equipment**

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	38 PSI	39 PSI	39 PSI
<b>Nozzle Type:</b>	AI	AI	AI
<b>Nozzle Size:</b>	110015VS	110015VS	110015VS
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	20 IN
<b>Boom Length, Unit:</b>	60 IN	60 IN	60 IN
<b>Boom Height, Unit:</b>	18 IN	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA

**Mississippi State University Delta Research and Extension Center**  
**Prowl Timing**

Trial ID: 06-WS-15

Location: DREC

Crop Name						Rice	Rice
						12-Sep-06	
						50% Head	
						DAE	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Appl Code	
1	Cocodire Prowl EC 0 DAP	3.3	EC	2.4	PT/A	A	81 b
2	Cocodire Prowl EC 3 DAP	3.3	EC	2.4	PT/A	B	81 b
3	Cocodire Prowl EC 7 DAP	3.3	EC	2.4	PT/A	C	81 b
4	Cocodire Prowl H2O 0 DAP	3.8	CS	2.08	PT/A	A	81 b
5	Cocodire Prowl H2O 3 DAP	3.8	CS	2.08	PT/A	B	81 b
6	Cocodire Prowl H2O 7 DAP	3.8	CS	2.08	PT/A	C	81 b
7	Lemont Prowl EC 0 DAP	3.3	EC	2.4	PT/A	A	87 a
8	Lemont Prowl EC 3 DAP	3.3	EC	2.4	PT/A	B	86 a
9	Lemont Prowl EC 7 DAP	3.3	EC	2.4	PT/A	C	86 a
10	Lemont Prowl H2O 0 DAP	3.8	CS	2.08	PT/A	A	86 a
11	Lemont Prowl H2O 3 DAP	3.8	CS	2.08	PT/A	B	85 a
12	Lemont Prowl H2O 7 DAP	3.8	CS	2.08	PT/A	C	87 a
13	Wells Prowl EC 0 DAP	3.3	EC	2.4	PT/A	A	87 a
14	Wells Prowl EC 3 DAP	3.3	EC	2.4	PT/A	B	87 a
15	Wells Prowl EC 7 DAP	3.3	EC	2.4	PT/A	C	86 a
16	Wells Prowl H2O 0 DAP	3.8	CS	2.08	PT/A	A	86 a
17	Wells Prowl H2O 3 DAP	3.8	CS	2.08	PT/A	B	86 a
18	Wells Prowl H2O 7 DAP	3.8	CS	2.08	PT/A	C	86 a

**Mississippi State University Delta Research and Extension Center**  
**Prowl Timing**

Trial ID: 06-WS-15

Location: DREC

Crop Name	Rice	Rice						
Rating Date	12-Sep-06							
Rating Data Type	50% Head	Yield						
Rating Unit	DAE	bu/A						
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Appl Code		
19	Cocodrie - NTC			81	b	152	a-d	
20	Lemont - NTC			86	a	131	e	
21	Wells -NTC			87	a	129	e	
	Standard Deviation					1.2	11.8	
	CV					1.41	8.3	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Postemergence Applications of DPX-KF081**

Trial ID: 06-WS-16

Location: DREC

**Objective:**

To determine the most effective application rate and timing of DPX-KF081 for control of broadleaf weed species.

**Conclusions:**

DPX-KF081 is a PPOase-inhibiting herbicide, which is the same mode of action as Aim and Ultra Blazer. This experimental herbicide was evaluated at five application rates applied to 1- to 2-leaf rice (EPOST), 4-leaf to 1-tiller rice, or 7 days after flood (7 d PTFLD). Weeds evaluated included hemp sesbania (SEBEX), ivyleaf morningglory (IPOHE), and pitted morningglory (IPOLA). Rice injury up to 13 and 10% was observed following EPOST and 7 d PTFLD applications, respectively. However, rice had recovered from injury by 21 days after treatment. Only the lowest rate of DPX-KF081 controlled SEBEX <90% 21 days after EPOST applications. In contrast, for LPOST and 7 d PTFLD applications, only the highest DPX-KF081 rate applied 7 d PTFLD controlled SEBEX >80% on 6-Jul-06. IPOHE and IPOLA control was more consistent than SEBEX control. On 6-Jul-06, only the lowest rate of DPX-KF081 controlled IPOHE and IPOLA <85%. EPOST applications of DPX-KF081 compared favorably with LPOST applications of Ultra Blazer, Permit, Aim, and Grandstand R.

**Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cocodrie	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 72 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 23-May-06
<b>Harvest Date:</b> 21-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

**Pest Description**

**Pest 1 Type:** W **Code:** SEBEX *Sesbania exaltata*

**Common Name:** Hemp sesbania

**Pest 2 Type:** W **Code:** IPOHE *Ipomoea hederacea*

**Common Name:** Ivyleaf morningglory

**Pest 3 Type:** W **Code:** IPOLA *Ipomoea lacunosa*

**Common Name:** Pitted morningglory

**Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

**Mississippi State University Delta Research and Extension Center**  
**Postemergence Applications of DPX-KF081**

Trial ID: 06-WS-16

Location: DREC

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	16-May-06	Command	3	ME	1	PT/A
2.	9-Jun-06	Clincher SF	2.38	EC	15	FL OZ/A
3.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
4.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
5.	27-Jun-06	Clincher SF	2.38	EC	15	FL OZ/A
6.	25-Jul-06	Ultra Blazer	2	L	1	PT/A

**Comment:** Ultra Blazer application on 25-Jul-06 was made to control hemp sesbania so that the experiment could be harvested.

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Mississippi State University Delta Research and Extension Center**  
**Postemergence Applications of DPX-KF081**

Trial ID: 06-WS-16

Location: DREC

**Application Description**

	A	B	C
<b>Application Date:</b>	31-May-06	12-Jun-06	23-Jun-06
<b>Time of Day:</b>	6:15 am	9:00 am	8:45 am
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	EPOST	LPOST	7d PTFLD
<b>Application Placement:</b>	Foliar	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB	JAB, LCV
<b>Air Temperature, Unit:</b>	78 F	94 F	86 F
<b>% Relative Humidity:</b>	85	50	68
<b>Wind Velocity, Unit:</b>	2 MPH	4 MPH	4 MPH
<b>Wind Direction:</b>	W	NW	W
<b>Dew Presence (Y/N):</b>	Y	N	Y
<b>Soil Temperature, Unit:</b>	72 F	78 F	
<b>Soil Moisture:</b>	Excessive	Adequate	Flood
<b>% Cloud Cover:</b>	80	10	0

**Crop Stage At Each Application**

	A	B	C
<b>Crop 1 Code:</b>	ORYSA	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	2 leaf	1 tiller	3 tiller
<b>Stage Minimum, Percent:</b>	2 leaf	1 tiller	3 tiller
<b>Stage Maximum, Percent:</b>	3 leaf	2 tiller	4 tiller
<b>Height, Unit:</b>	6 IN	8 IN	12 IN
<b>Height Minimum, Maximum:</b>	4 6	7 9	11 13

**Pest Stage At Each Application**

	A	B	C
<b>Pest 1 Code, Disc., Scale:</b>	SEBEX W	SEBEX W	SEBEX W
<b>Stage Majority, Percent:</b>	2 leaf	5 leaf	9 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	5 leaf	8 leaf
<b>Stage Maximum, Percent:</b>	2 leaf	6 leaf	9 leaf
<b>Height, Unit:</b>	2 IN	5 IN	14 IN
<b>Height Minimum, Maximum:</b>	1 2	4 5	11 18
<b>Density, Unit:</b>	5 FT2	6 FT2	6 FT2
<b>Pest 2 Code, Disc., Scale:</b>	IPOHE W	IPOHE W	IPOHE W
<b>Stage Majority, Percent:</b>	1 leaf	5 leaf	7 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	5 leaf	6 leaf
<b>Stage Maximum, Percent:</b>	1 leaf	6 leaf	8 leaf
<b>Height, Unit:</b>	2 IN	5 IN	8 IN
<b>Height Minimum, Maximum:</b>	1 2	4 5	6 9
<b>Density, Unit:</b>	4 FT2	3 FT2	3 FT2
<b>Pest 3 Code, Disc., Scale:</b>	IPOLA W	IPOLA W	IPOLA W
<b>Stage Majority, Percent:</b>	1 leaf	5 leaf	7 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	5 leaf	6 leaf
<b>Stage Maximum, Percent:</b>	1 leaf	6 leaf	8 leaf
<b>Height, Unit:</b>	2 IN	5 IN	8 IN
<b>Height Minimum, Maximum:</b>	1 2	4 5	6 9
<b>Density, Unit:</b>	3 FT2	2 FT2	2 FT2

**Mississippi State University Delta Research and Extension Center**  
**Postemergence Applications of DPX-KF081**

Trial ID: 06-WS-16

Location: DREC

**Application Equipment**

	<b>A</b>	<b>B</b>	<b>C</b>
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	34 PSI	24 PSI	24 PSI
<b>Nozzle Type:</b>	XR	DG	TT
<b>Nozzle Size:</b>	110015VS	110015VS	11001
<b>Nozzle Spacing, Unit:</b>	20 IN	16 IN	16 IN
<b>Boom Length, Unit:</b>	60 IN	64 IN	64 IN
<b>Boom Height, Unit:</b>	18 IN	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	2 MPH
<b>Carrier:</b>	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA

**Date            By            Notes**

13-Jun-06 JAB      Weed populations were low in the last three drill passes in the experiment. Plots within this area were rated based on the weed pressure in these plots.

30-Jun-06 JAB      Morningglory species were killed by floodwater.

**Mississippi State University Delta Research and Extension Center**  
**Postemergence Applications of DPX-KF081**

Trial ID: 06-WS-16

Location: DREC

Pest Code							7-Jun-06 Rice Injury %	13-Jun-06 Rice Injury %	20-Jun-06 Rice Injury %	30-Jun-06 Rice Injury %	6-Jul-06 Rice Injury %	SEBEX 7-Jun-06 Control %	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	7 DA-A	13 DA-A	8 DA-B	7 DA-C	13 DA-C	7 DA-A
1	Nontreated							0 e	0 c	0 b	0 e	0 b	0 d
2	DPX-KF081 Agri-Dex	10 L	WP 18.4	OZ/A	EPOST	A		13 a	5 a	3 a	3 d	0 b	96 a
3	DPX-KF081 Agri-Dex	10 L	WP 12.3	OZ/A	EPOST	A		10 b	5 a	2 ab	1 e	0 b	95 ab
4	DPX-KF081 Agri-Dex	10 L	WP 9.2	OZ/A	EPOST	A		8 c	4 ab	1 ab	1 e	0 b	90 b
5	DPX-KF081 Agri-Dex	10 L	WP 7.04	OZ/A	EPOST	A		5 d	3 ab	0 b	0 e	0 b	90 b
6	DPX-KF081 Agri-Dex	10 L	WP 4.6	OZ/A	EPOST	A		3 d	2 b	0 b	0 e	0 b	81 c
7	DPX-KF081 Agri-Dex	10 L	WP 18.4	OZ/A	LPOST	B				1 b	0 e	0 b	
8	DPX-KF081 Agri-Dex	10 L	WP 12.3	OZ/A	LPOST	B				0 b	0 e	0 b	
9	DPX-KF081 Agri-Dex	10 L	WP 9.2	OZ/A	LPOST	B				0 b	0 e	0 b	
10	DPX-KF081 Agri-Dex	10 L	WP 7.04	OZ/A	LPOST	B				0 b	0 e	0 b	
11	DPX-KF081 Agri-Dex	10 L	WP 4.6	OZ/A	LPOST	B				0 b	0 e	0 b	
12	DPX-KF081 Agri-Dex	10 L	WP 18.4	OZ/A	7 d PTFLD	C					10 a	3 a	
13	DPX-KF081 Agri-Dex	10 L	WP 12.3	OZ/A	7 d PTFLD	C					5 b	3 a	
14	DPX-KF081 Agri-Dex	10 L	WP 9.2	OZ/A	7 d PTFLD	C					5 bc	1 b	
15	DPX-KF081 Agri-Dex	10 L	WP 7.04	OZ/A	7 d PTFLD	C					4 cd	0 b	
16	DPX-KF081 Agri-Dex	10 L	WP 4.6	OZ/A	7 d PTFLD	C					3 d	0 b	
17	Ultra Blazer Induce	2 L	WG 8	FL OZ/A	LPOST	C				0 b	0 e	0 b	
18	Permit Agri-Dex	75 L	WG 0.75	OZ/A	LPOST	C				0 b	0 e	0 b	
19	Aim Induce	2 L	EC 1.6	FL OZ/A	LPOST	C				1 b	0 e	0 b	
20	Grandstand R Agri-Dex	3 L	SL 16	FL OZ/A	LPOST	C				0 b	0 e	0 b	
Standard Deviation							1.4	1.0	1.1	0.7	0.6	3.6	
CV							21.57	33.38	237.82	48.85	176.69	4.82	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Postemergence Applications of DPX-KF081**

Trial ID: 06-WS-16

Location: DREC

Pest Code	SEBEX 13-Jun-06	SEBEX 20-Jun-06	SEBEX 30-Jun-06	SEBEX 6-Jul-06	SEBEX 19-Jul-06	IPOHE 7-Jun-06	IPOHE 13-Jun-06
Rating Date	Control %	Control %	Control %	Control %	Control %	Control %	Control %
Rating Data Type	13 1 13 DA-A	20 8 8 DA-B	30 7 7 DA-C	36 13 13 DA-C	49 26 26 DA-C	7 7 7 DA-A	13 1 13 DA-A
Rating Unit							
Days After First/Last Applic.							
Trt-Eval Interval							
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Stage	Appl Code
1	Nontreated			0 c	0 f	0 i	0 h
2	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	EPOST EPOST	A A	97 a 96 a
3	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	EPOST EPOST	A A	94 a 91 ab
4	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	EPOST EPOST	A A	93 a 94 a
5	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	EPOST EPOST	A A	93 a 91 ab
6	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	EPOST EPOST	A A	86 b 83 bc
7	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	LPOST LPOST	B B	78 c 75 c-f
8	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	LPOST LPOST	B B	64 d 59 gh
9	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	LPOST LPOST	B B	78 c 81 b-e
10	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	LPOST LPOST	B B	65 d 70 efg
11	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	LPOST LPOST	B B	53 e 58 gh
12	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C C	86 a-d 81 b-e
13	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C C	74 def 75 de
14	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C C	75 c-f 75 de
15	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C C	64 fg 69 ef
16	DPX-KF081 Agri-Dex	10 L	WP 19.2	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C C	48 h 56 g
17	Ultra Blazer Induce	2 L	WG 4.8	0.75 FL OZ/A	LPOST LPOST	C C	91 ab 96 a
18	Permit Agri-Dex	75 L	WG 19.2	0.75 FL OZ/A	LPOST LPOST	C C	79 c 92 ab
19	Aim Induce	2 L	EC 4.8	1.6 FL OZ/A	LPOST LPOST	C C	97 a 99 a
20	Grandstand R Agri-Dex	3 L	SL 19.2	16 FL OZ/A	LPOST LPOST	C C	80 c 89 abc
Standard Deviation				2.6	6.7	8.6	8.1
CV				3.38	8.8	11.46	10.69
						10.5	3.3
						14.77	2.5
						4.26	3.22

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Postemergence Applications of DPX-KF081**

Trial ID: 06-WS-16

Location: DREC

Pest Code	IPOHE	IPOHE	IPOHE	IPOHE	IPOLA	IPOLA	IPOLA	
Rating Date	20-Jun-06	30-Jun-06	6-Jul-06	19-Jul-06	13-Jun-06	20-Jun-06	30-Jun-06	
Rating Data Type	Control %	Control %	Control %	Control %	Control %	Control %	Control %	
Rating Unit	20 8	30 7	36 13	49 26	13 1	20 8	30 7	
Days After First/Last Applic.	8 DA-B	7 DA-C	13 DA-C	26 DA-C	13 DA-A	8 DA-B	7 DA-C	
Trt-Eval Interval								
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Unit	Appl Stage	Code
1	Nontreated							15
2	DPX-KF081 Agri-Dex	10 L	WP 18.4 OZ/A	EPOST 19.2 FL OZ/A	A EPOST A	98 ab	98 a	16
3	DPX-KF081 Agri-Dex	10 L	WP 12.3 OZ/A	EPOST 19.2 FL OZ/A	A EPOST A	98 ab	99 a	17
4	DPX-KF081 Agri-Dex	10 L	WP 9.2 OZ/A	EPOST 19.2 FL OZ/A	A EPOST A	97 abc	97 a	18
5	DPX-KF081 Agri-Dex	10 L	WP 7.04 OZ/A	EPOST 19.2 FL OZ/A	A EPOST A	97 abc	97 a	19
6	DPX-KF081 Agri-Dex	10 L	WP 4.6 OZ/A	EPOST 19.2 FL OZ/A	A EPOST A	95 a-d	93 ab	20
7	DPX-KF081 Agri-Dex	10 L	WP 18.4 OZ/A	LPOST 19.2 FL OZ/A	B LPOST B	93 a-d	91 abc	21
8	DPX-KF081 Agri-Dex	10 L	WP 12.3 OZ/A	LPOST 19.2 FL OZ/A	B LPOST B	90 cde	89 abc	98 ab
9	DPX-KF081 Agri-Dex	10 L	WP 9.2 OZ/A	LPOST 19.2 FL OZ/A	B LPOST B	91 b-e	94 ab	97 abc
10	DPX-KF081 Agri-Dex	10 L	WP 7.04 OZ/A	LPOST 19.2 FL OZ/A	B LPOST B	85 efg	85 bc	93 a-e
11	DPX-KF081 Agri-Dex	10 L	WP 4.6 OZ/A	LPOST 19.2 FL OZ/A	B LPOST B	83 fg	81 cd	90 abc
12	DPX-KF081 Agri-Dex	10 L	WP 18.4 OZ/A	7 d PTFLD 19.2 FL OZ/A	C 7 d PTFLD C		89 abc	97 ab
13	DPX-KF081 Agri-Dex	10 L	WP 12.3 OZ/A	7 d PTFLD 19.2 FL OZ/A	C 7 d PTFLD C		81 cd	94 a-f
14	DPX-KF081 Agri-Dex	10 L	WP 9.2 OZ/A	7 d PTFLD 19.2 FL OZ/A	C 7 d PTFLD C		84 bc	91 c-f
15	DPX-KF081 Agri-Dex	10 L	WP 7.04 OZ/A	7 d PTFLD 19.2 FL OZ/A	C 7 d PTFLD C		74 d	91 bc
16	DPX-KF081 Agri-Dex	10 L	WP 4.6 OZ/A	7 d PTFLD 19.2 FL OZ/A	C 7 d PTFLD C		50 e	88 efg
17	Ultra Blazer Induce	2 L	WG 8 FL OZ/A	LPOST 4.8 FL OZ/A	C LPOST C	94 a-d	97 a	90 bc
18	Permit Agri-Dex	75 L	WG 0.75 OZ/A	LPOST 19.2 FL OZ/A	C LPOST C	80 g	98 a	98 ab
19	Aim Induce	2 L	EC 1.6 FL OZ/A	LPOST 4.8 FL OZ/A	C LPOST C	99 a	99 a	98 a
20	Grandstand R Agri-Dex	3 L	SL 16 FL OZ/A	LPOST 19.2 FL OZ/A	C LPOST C	89 def	97 a	99 a
Standard Deviation				4.3	6.4	4.0	3.5	2.9
CV				5.01	7.55	4.49	3.91	5.3
							3.78	7.0
							6.26	8.34

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Postemergence Applications of DPX-KF081**

Trial ID: 06-WS-16

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							IPOLA 6-Jul-06 Control % 36 13 13 DA-C	IPOLA 19-Jul-06 Control % 49 26 26 DA-C	21-Sep-06 Yield bu/A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	22	23	26
1	Nontreated							0 g	0 e	171 a
2	DPX-KF081 Agri-Dex	10 L	WP L	18.4 19.2	OZ/A FL OZ/A	EPOST EPOST	A A	98 ab	98 a	180 a
3	DPX-KF081 Agri-Dex	10 L	WP L	12.3 19.2	OZ/A FL OZ/A	EPOST EPOST	A A	99 a	99 a	175 a
4	DPX-KF081 Agri-Dex	10 L	WP L	9.2 19.2	OZ/A FL OZ/A	EPOST EPOST	A A	98 ab	98 a	183 a
5	DPX-KF081 Agri-Dex	10 L	WP L	7.04 19.2	OZ/A FL OZ/A	EPOST EPOST	A A	97 abc	97 a	178 a
6	DPX-KF081 Agri-Dex	10 L	WP L	4.6 19.2	OZ/A FL OZ/A	EPOST EPOST	A A	95 a-d	94 abc	178 a
7	DPX-KF081 Agri-Dex	10 L	WP L	18.4 19.2	OZ/A FL OZ/A	LPOST LPOST	B B	94 a-d	94 abc	180 a
8	DPX-KF081 Agri-Dex	10 L	WP L	12.3 19.2	OZ/A FL OZ/A	LPOST LPOST	B B	86 ef	85 d	173 a
9	DPX-KF081 Agri-Dex	10 L	WP L	9.2 19.2	OZ/A FL OZ/A	LPOST LPOST	B B	94 a-d	94 abc	175 a
10	DPX-KF081 Agri-Dex	10 L	WP L	7.04 19.2	OZ/A FL OZ/A	LPOST LPOST	B B	90 de	94 abc	185 a
11	DPX-KF081 Agri-Dex	10 L	WP L	4.6 19.2	OZ/A FL OZ/A	LPOST LPOST	B B	89 def	89 cd	172 a
12	DPX-KF081 Agri-Dex	10 L	WP L	18.4 19.2	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C C	93 bcd	89 cd	174 a
13	DPX-KF081 Agri-Dex	10 L	WP L	12.3 19.2	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C C	91 cde	85 d	171 a
14	DPX-KF081 Agri-Dex	10 L	WP L	9.2 19.2	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C C	91 cde	89 cd	177 a
15	DPX-KF081 Agri-Dex	10 L	WP L	7.04 19.2	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C C	89 def	90 bcd	178 a
16	DPX-KF081 Agri-Dex	10 L	WP L	4.6 19.2	OZ/A FL OZ/A	7 d PTFLD 7 d PTFLD	C C	84 f	88 cd	166 a
17	Ultra Blazer Induce	2 L	L	8 4.8	FL OZ/A FL OZ/A	LPOST LPOST	C C	98 ab	98 a	171 a
18	Permit Agri-Dex	75 L	WG L	0.75 19.2	OZ/A FL OZ/A	LPOST LPOST	C C	98 ab	98 a	178 a
19	Aim Induce	2 L	EC L	1.6 4.8	FL OZ/A FL OZ/A	LPOST LPOST	C C	99 a	99 a	174 a
20	Grandstand R Agri-Dex	3 L	SL L	16 19.2	FL OZ/A FL OZ/A	LPOST LPOST	C C	97 abc	96 ab	172 a
Standard Deviation CV							3.7 4.12	4.1 4.61	10.4 5.95	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to DPX-KF081 Applications**

Trial ID: 06-WS-17

Location: DREC

**Objective:**

To determine the rice response to different application rates and timings of DPX-KF081.

**Conclusions:**

DPX-KF081 is a PPOase-inhibiting herbicide, which is the same mode of action as Aim and Ultra Blazer. This experimental herbicide was evaluated at four application rates applied to 1- to 2-leaf rice (EPOST), 4-leaf to 1-tiller rice (LPOST) or in sequential applications (EPOST followed by LPOST). EPOST applications were more injurious to rice than LPOST applications. However, injury from single applications was no more than 4% by 10-Jul-06. Injury following sequential applications persisted longer than that from single applications but was no more than 11% on 10-Jul-06. Rice maturity was delayed slightly for each application timing when the highest rate was applied. However, by the end of the year, rice yields were equivalent following all treatments.

**Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cocodrie	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 72 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 23-May-06
<b>Harvest Date:</b> 20-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

**Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Unit
1.	16-May-06	Command	3	ME	1	PT/A
2.	2-Jun-06	Grandstand R	3	SL	12	FL OZ/A
3.	2-Jun-06	Permit	75	WG	1	OZ/A
4.	2-Jun-06	Agri-Dex		L	0.5	% V/V
5.	9-Jun-06	Clincher SF	2.38	EC	15	FL OZ/A
6.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
7.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
8.	27-Jun-06	Clincher SF	2.38	EC	15	FL OZ/A
9.	25-Jul-06	Ultra Blazer	2	L	1	PT/A
10.	4-Aug-06	Quadris	2.08	SC	12	FL OZ/A

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to DPX-KF081 Applications**

Trial ID: 06-WS-17

Location: DREC

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Application Description**

	A	B
<b>Application Date:</b>	31-May-06	12-Jun-06
<b>Time of Day:</b>	6:30 am	9:15 am
<b>Application Method:</b>	Broadcast	Broadcast
<b>Application Timing:</b>	EPOST	LPOST
<b>Application Placement:</b>	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB
<b>Air Temperature, Unit:</b>	78 F	94 F
<b>% Relative Humidity:</b>	85	50
<b>Wind Velocity, Unit:</b>	2 MPH	4 MPH
<b>Wind Direction:</b>	W	NW
<b>Dew Presence (Y/N):</b>	Y	N
<b>Soil Temperature, Unit:</b>	77 F	78 F
<b>Soil Moisture:</b>	Excessive	Adequate
<b>% Cloud Cover:</b>	80	10

**Crop Stage At Each Application**

	A	B
<b>Crop 1 Code:</b>	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	2 leaf	1 tiller
<b>Stage Minimum, Percent:</b>	2 leaf	1 tiller
<b>Stage Maximum, Percent:</b>	3 leaf	2 tiller
<b>Height, Unit:</b>	5 IN	8 IN
<b>Height Minimum, Maximum:</b>	4 6	7 9

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to DPX-KF081 Applications**

Trial ID: 06-WS-17

Location: DREC

**Application Equipment**

	<b>A</b>	<b>B</b>
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	34 PSI	24 PSI
<b>Nozzle Type:</b>	XR	DG
<b>Nozzle Size:</b>	110015VS	110015VS
<b>Nozzle Spacing, Unit:</b>	20 IN	16 IN
<b>Boom Length, Unit:</b>	60 IN	64 IN
<b>Boom Height, Unit:</b>	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH
<b>Carrier:</b>	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to DPX-KF081 Applications**

Trial ID: 06-WS-17

Location: DREC

Crop Name Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							Rice 7-Jun-06 Rice Injury % 7 7 7 DA-A	Rice 12-Jun-06 Rice Injury % 12 0 12 DA-A	Rice 20-Jun-06 Rice Injury % 20 8 8 DA-B	Rice 27-Jun-06 Rice Injury % 27 15 15 DA-B	Rice 10-Jul-06 Rice Injury % 40 28 28 DA-B	Rice 50% Head DAE	Rice 20-Sep-06 Yield bu/A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	1	2	3	4	5	7	10
1	Nontreated			0	g	0	d	0	f	0	d	0	b	77 f 185 a
2	DPX-KF081 Agri-Dex	10 L	WP 19.2	36.8 FL OZ/A	EPOST EPOST	A A	21 ab	13 a	13 bc	7 bc	3 b	81 abc	182 a	
3	DPX-KF081 Agri-Dex	10 L	WP 19.2	18.4 FL OZ/A	EPOST EPOST	A A	14 cd	10 ab	10 bed	7 bc	4 b	80 bcd	190 a	
4	DPX-KF081 Agri-Dex	10 L	WP 19.2	9.2 FL OZ/A	EPOST EPOST	A A	11 cde	8 abc	8 cde	7 abc	2 b	80 bcd	187 a	
5	DPX-KF081 Agri-Dex	10 L	WP 19.2	4.6 FL OZ/A	EPOST EPOST	A A	8 ef	5 bcd	5 ef	3 cd	2 b	79 de	181 a	
6	DPX-KF081 Agri-Dex	10 L	WP 19.2	36.8 FL OZ/A	LPOST LPOST	B B			5 def	3 cd	1 b	79 de	191 a	
7	DPX-KF081 Agri-Dex	10 L	WP 19.2	18.4 FL OZ/A	LPOST LPOST	B B			3 ef	2 cd	0 b	78 ef	180 a	
8	DPX-KF081 Agri-Dex	10 L	WP 19.2	9.2 FL OZ/A	LPOST LPOST	B B			3 ef	0 d	0 b	78 ef	187 a	
9	DPX-KF081 Agri-Dex	10 L	WP 19.2	4.6 FL OZ/A	LPOST LPOST	B B			3 ef	2 cd	0 b	79 de	187 a	
10	DPX-KF081 Agri-Dex	10 L	WP 19.2	36.8 FL OZ/A	EPOST EPOST	A A	23 a	8 abc	19 a	13 a	11 a	82 a	192 a	
	DPX-KF081 Agri-Dex	10 L	WP 19.2	36.8 FL OZ/A	LPOST LPOST	B B								
11	DPX-KF081 Agri-Dex	10 L	WP 19.2	18.4 FL OZ/A	EPOST EPOST	A A	16 bc	13 a	14 b	11 ab	10 a	81 ab	172 a	
	DPX-KF081 Agri-Dex	10 L	WP 19.2	18.4 FL OZ/A	LPOST LPOST	B B								
12	DPX-KF081 Agri-Dex	10 L	WP 19.2	9.2 FL OZ/A	EPOST EPOST	A A	10 def	7 abc	7 de	7 bc	3 b	79 de	186 a	
	DPX-KF081 Agri-Dex	10 L	WP 19.2	9.2 FL OZ/A	LPOST LPOST	B B								
13	DPX-KF081 Agri-Dex	10 L	WP 19.2	4.6 FL OZ/A	EPOST EPOST	A A	5 fg	4 cd	5 def	4 cd	1 b	80 cd	181 a	
	DPX-KF081 Agri-Dex	10 L	WP 19.2	4.6 FL OZ/A	LPOST LPOST	B B								
Standard Deviation CV							3.6 29.87	4.0 53.59	3.3 46.43	3.7 76.0	2.5 92.24	0.8 1.02	8.7 4.71	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

**Objective:**

To determine the effectiveness of IR5878 as a component of mid postemergence weed control programs in Mississippi.

**Conclusions:**

IR5878 is an ALS-inhibiting herbicide, which is the same mode of action as Regiment and Permit. Although nutsedge is one of the primary targets of IR5878, no nutsedge was present in the test area in 2006. In this experiment, IR5878 was applied to 3- to 4-leaf rice (MPOST) alone and in combination with other herbicides. Weeds evaluated included hemp sesbania (SEBEX), ivyleaf morningglory (IPOHE), pitted morningglory (IPOLA), barnyardgrass (ECHCG), and browntop millet (PANRA). No treatment injured rice >5%. At 14 days after MPOST applications, only treatments which included Super Wham or Aim controlled SEBEX >91%. By 28 days after MPOST applications, SEBEX, IPOHE, and IPOLA were controlled >93% by all treatments. IR5878 provided sufficient control of broadleaf weeds until flood. Data indicate that IR5878 is an option for SEBEX control in rice.

**Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cocodrie	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 72 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 23-May-06

**Pest Description**

**Pest 1 Type:** W **Code:** SEBEX *Sesbania exaltata*  
**Common Name:** Hemp sesbania

**Pest 2 Type:** W **Code:** IPOHE *Ipomoea hederacea*  
**Common Name:** Ivyleaf morningglory

**Pest 3 Type:** W **Code:** IPOLA *Ipomoea lacunosa*  
**Common Name:** Pitted morningglory

**Pest 4 Type:** W **Code:** ECHCG *Echinochloa crus-galli*  
**Common Name:** Common barnyardgrass

**Pest 5 Type:** W **Code:** PANRA *Brachiaria ramosa*  
**Common Name:** Browntop millet

**Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A
2.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
3.	25-Jul-06	Ultra Blazer	2	L	1	PT/A

**Comment:** Ultra Blazer application on 25-Jul-06 was made to control hemp sesbania so that the experiment could be harvested.

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Soil Description**

**% Sand:** 11    **% OM:** 2.1    **Texture:** Silty clay  
**% Silt:** 30    **pH:** 8.2    **Soil Name:** Sharkey  
**% Clay:** 59    **CEC:** 34.2    **Fert. Level:** Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5    **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Application Description**

	A	B	C
<b>Application Date:</b>	17-May-06	5-Jun-06	19-Jun-06
<b>Time of Day:</b>	7:00 am	7:00 am	9:00 am
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	PRE	MPOST	PTFLD
<b>Application Placement:</b>	Soil	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB	JAB, LCV
<b>Air Temperature, Unit:</b>	64 F	94 F	94 F
<b>% Relative Humidity:</b>	56	56	56
<b>Wind Velocity, Unit:</b>	4 MPH	3 MPH	0 MPH
<b>Wind Direction:</b>	NW	NW	
<b>Dew Presence (Y/N):</b>	N	N	Y
<b>Soil Temperature, Unit:</b>	67 F	74 F	
<b>Soil Moisture:</b>	Adequate	Adequate	Flood
<b>% Cloud Cover:</b>	50	5	20

**Crop Stage At Each Application**

	A	B	C
<b>Crop 1 Code:</b>	ORYSA	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>		3 leaf	2 tiller
<b>Stage Minimum, Percent:</b>		3 leaf	3 tiller
<b>Stage Maximum, Percent:</b>		4 leaf	3 tiller
<b>Height, Unit:</b>		7 IN	10 IN
<b>Height Minimum, Maximum:</b>		6 8	8 11

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

**Pest Stage At Each Application**

	A	B	C
<b>Pest 1 Code, Disc., Scale:</b>	SEBEX W	SEBEX W	SEBEX W
<b>Stage Majority, Percent:</b>		3 leaf	
<b>Stage Minimum, Percent:</b>		3 leaf	
<b>Stage Maximum, Percent:</b>		4 leaf	
<b>Height, Unit:</b>		4 IN	
<b>Height Minimum, Maximum:</b>		3 4	
<b>Density, Unit:</b>		4 FT2	
<b>Pest 2 Code, Disc., Scale:</b>	IPOHE W	IPOHE W	IPOHE W
<b>Stage Majority, Percent:</b>		3 leaf	
<b>Stage Minimum, Percent:</b>		2 leaf	
<b>Stage Maximum, Percent:</b>		3 leaf	
<b>Height, Unit:</b>		2 IN	
<b>Height Minimum, Maximum:</b>		1 2	
<b>Density, Unit:</b>		3 FT2	
<b>Pest 3 Code, Disc., Scale:</b>	IPOLA W	IPOLA W	IPOLA W
<b>Stage Majority, Percent:</b>		3 leaf	
<b>Stage Minimum, Percent:</b>		2 leaf	
<b>Stage Maximum, Percent:</b>		3 leaf	
<b>Height, Unit:</b>		2 IN	
<b>Height Minimum, Maximum:</b>		1 2	
<b>Density, Unit:</b>		3 FT2	
<b>Pest 4 Code, Disc., Scale:</b>	ECHCG W	ECHCG W	ECHCG W
<b>Stage Majority, Percent:</b>		2 leaf	3 till
<b>Stage Minimum, Percent:</b>		1 leaf	4 leaf
<b>Stage Maximum, Percent:</b>		2 leaf	5 till
<b>Height, Unit:</b>		2 IN	8 IN
<b>Height Minimum, Maximum:</b>		1 2	4 12
<b>Density, Unit:</b>		3 FT2	6 FT2
<b>Pest 5 Code, Disc., Scale:</b>	PANRA W	PANRA W	PANRA W
<b>Stage Majority, Percent:</b>		2 leaf	4 leaf
<b>Stage Minimum, Percent:</b>		1 leaf	3 leaf
<b>Stage Maximum, Percent:</b>		2 leaf	1 till
<b>Height, Unit:</b>		2 IN	4 IN
<b>Height Minimum, Maximum:</b>		1 2	2 4
<b>Density, Unit:</b>		2 FT2	5 FT2

**Application Equipment**

	A	B	C
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	38 PSI	24 PSI	24 PSI
<b>Nozzle Type:</b>	AI	DG	XR
<b>Nozzle Size:</b>	110015VS	11002VS	11001VS
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	16 IN
<b>Nozzles/Row:</b>	3	3	4
<b>Boom Length, Unit:</b>	60 IN	60 IN	64 IN
<b>Boom Height, Unit:</b>	16 IN	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	2 MPH
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA

Date      By      Notes

19-Jun-06 JAB      Morningglory species were killed by floodwater.

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							12-Jun-06 Rice Injury % 26 7 7 DA-B	19-Jun-06 Rice Injury % 33 0 14 DA-B	3-Jul-06 Rice Injury % 47 14 28 DA-B	SEBEX 5-Jun-06 Control % 19 0 19 DA-A	SEBEX 12-Jun-06 Control % 26 7 7 DA-B	SEBEX 19-Jun-06 Control % 33 0 14 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	1	2	3	4	5	6
1	Treated Check							0 c	0 d	0 c	0 a	0 f	0 g
	Command	3 ME	12.8 FL OZ/A	PRE	A								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
2	Command	3 ME	12.8 FL OZ/A	PRE	A			0 c	2 bcd	0 c	5 a	70 e	79 f
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Induce	L	4.8 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
3	Command	3 ME	12.8 FL OZ/A	PRE	A			5 a	2 bcd	0 c	5 a	96 a	96 ab
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Super Wham	4 SC	3 QT/A	MPOST	B								
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
4	Command	3 ME	12.8 FL OZ/A	PRE	A			5 a	5 a	0 c	5 a	98 a	99 a
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Super Wham	4 SC	4 QT/A	MPOST	B								
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
5	IR5878	50 WG	2.1 OZ/A	MPOST	B			0 c	0 d	0 c		73 de	88 cd
	Facet	75 DF	10.7 OZ/A	MPOST	B								
	Agri-Dex	L	1 QT/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
6	Grasp	2 SC	2 FL OZ/A	MPOST	B			0 c	3 abc	5 a		86 b	89 cd
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
7	Command	3 ME	12.8 FL OZ/A	PRE	A			0 c	0 d	0 c	3 a	70 e	86 cde
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Facet	75 DF	10.7 OZ/A	MPOST	B								
	Agri-Dex	L	1 QT/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
8	Command	3 ME	12.8 FL OZ/A	PRE	A			0 c	2 bcd	0 c	5 a	78 cd	84 def
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Permit	75 WG	0.25 OZ/A	MPOST	B								
	Induce	L	4.8 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
9	Command	3 ME	12.8 FL OZ/A	PRE	A			0 c	2 bcd	0 c	3 a	83 bc	91 bc
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Permit	75 WG	0.33 OZ/A	MPOST	B								
	Induce	L	4.8 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							12-Jun-06 Rice Injury % 26 7 7 DA-B	19-Jun-06 Rice Injury % 33 0 14 DA-B	3-Jul-06 Rice Injury % 47 14 28 DA-B	SEBEX 5-Jun-06 Control % 19 0 19 DA-A	SEBEX 12-Jun-06 Control % 26 7 7 DA-B	SEBEX 19-Jun-06 Control % 33 0 14 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	1	2	3	4	5	6
10	Command IR5878 Grandstand R Agri-Dex Clincher SF Agri-Dex	3 50 3 L 2.38	ME WG SL EC	12.8 2.1 10.7 FL OZ/A FL OZ/A 19.2	FL OZ/A OZ/A OZ/A MPOST MPOST	PRE MPOST MPOST B B	A	0 c	1 cd	0 c	3 a	78 cd	81 ef
11	Command IR5878 Aim Induce Clincher SF Agri-Dex	3 50 2 L 2.38	ME WG EC FL OZ/A FL OZ/A	12.8 2.1 1 FL OZ/A 4.8 15	FL OZ/A OZ/A MPOST MPOST	PRE MPOST MPOST B B	A	3 b	0 d	0 c	0 a	97 a	98 a
12	Command Permit Super Wham Agri-Dex Clincher SF Agri-Dex	3 75 4 L 2.38	ME WG SC FL OZ/A FL OZ/A	12.8 1 4 19.2 19.2	FL OZ/A OZ/A QT/A MPOST MPOST	PRE MPOST MPOST B B	A	5 a	4 ab	2 b	5 a	97 a	99 a
Standard Deviation CV								0.4 29.25	1.5 90.83	0.5 93.8	5.1 156.39	3.9 5.08	3.4 4.08

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							SEBEX 3-Jul-06 Control % 47 14 28 DA-B	IPOHE 5-Jun-06 Control % 19 0 19 DA-A	IPOHE 12-Jun-06 Control % 26 7 7 DA-B	IPOHE 19-Jun-06 Control % 33 0 14 DA-B	IPOHE 3-Jul-06 Control % 47 14 28 DA-B	IPOLA 12-Jun-06 Control % 26 7 7 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	7	8	9	10	11	12
1	Treated Check							0 c	5 a	1 e	1 d	55 b	0 e
	Command	3 ME	12.8 FL OZ/A	PRE	A								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
2	Command	3 ME	12.8 FL OZ/A	PRE	A		93 b	6 a	71 d	90 c	98 a	71 d	
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Induce	L	4.8 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
3	Command	3 ME	12.8 FL OZ/A	PRE	A		99 a	10 a	97 a	97 ab	99 a	96 a	
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Super Wham	4 SC	3 QT/A	MPOST	B								
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
4	Command	3 ME	12.8 FL OZ/A	PRE	A		99 a	6 a	97 a	98 a	99 a	97 a	
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Super Wham	4 SC	4 QT/A	MPOST	B								
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
5	IR5878	50 WG	2.1 OZ/A	MPOST	B		99 a		84 b	98 a	99 a	85 b	
	Facet	75 DF	10.7 OZ/A	MPOST	B								
	Agri-Dex	L	1 QT/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
6	Grasp	2 SC	2 FL OZ/A	MPOST	B		99 a		71 d	94 b	99 a	75 cd	
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
7	Command	3 ME	12.8 FL OZ/A	PRE	A		99 a	8 a	83 b	96 ab	99 a	84 b	
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Facet	75 DF	10.7 OZ/A	MPOST	B								
	Agri-Dex	L	1 QT/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
8	Command	3 ME	12.8 FL OZ/A	PRE	A		99 a	3 a	78 bcd	94 b	99 a	76 cd	
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Permit	75 WG	0.25 OZ/A	MPOST	B								
	Induce	L	4.8 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
9	Command	3 ME	12.8 FL OZ/A	PRE	A		99 a	5 a	75 cd	96 ab	99 a	79 bc	
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Permit	75 WG	0.33 OZ/A	MPOST	B								
	Induce	L	4.8 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							SEBEX 3-Jul-06 Control % 47 14 28 DA-B	IPOHE 5-Jun-06 Control % 19 0 19 DA-A	IPOHE 12-Jun-06 Control % 26 7 7 DA-B	IPOHE 19-Jun-06 Control % 33 0 14 DA-B	IPOHE 3-Jul-06 Control % 47 14 28 DA-B	IPOLA 12-Jun-06 Control % 26 7 7 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	7	8	9	10	11	12
10	Command IR5878 Grandstand R Agri-Dex Clincher SF Agri-Dex	3 50 3 L 2.38	ME WG SL EC	12.8 2.1 10.7 19.2 15	FL OZ/A OZ/A OZ/A FL OZ/A FL OZ/A	PRE MPOST MPOST MPOST LPOST/PTFLD	A B B B C	97 a	5 a	80 bc	96 ab	99 a	85 b
11	Command IR5878 Aim Induce Clincher SF Agri-Dex	3 50 2 L 2.38	ME WG EC FL OZ/A EC	12.8 2.1 1 FL OZ/A 4.8 15	FL OZ/A OZ/A MPOST MPOST LPOST/PTFLD	PRE MPOST B B C	A B B B C	99 a	3 a	98 a	98 a	99 a	97 a
12	Command Permit Super Wham Agri-Dex Clincher SF Agri-Dex	3 75 4 L 2.38	ME WG SC FL OZ/A EC	12.8 1 4 QT/A 19.2 15	FL OZ/A OZ/A MPOST MPOST LPOST/PTFLD	PRE MPOST B B C	A B B B C	99 a	5 a	98 a	99 a	99 a	98 a
Standard Deviation CV								2.3 2.56	8.0 145.85	4.1 5.27	2.2 2.49	1.8 1.88	4.3 5.52

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							IPOLA 19-Jun-06 Control % 33 0 14 DA-B	IPOLA 3-Jul-06 Control % 47 14 28 DA-B	ECHCG 5-Jun-06 Control % 19 0 19 DA-A	ECHCG 12-Jun-06 Control % 26 7 7 DA-B	ECHCG 19-Jun-06 Control % 33 0 14 DA-B	ECHCG 3-Jul-06 Control % 47 14 28 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	13	14	15	16	17	18
1	Treated Check							0 e	53 b	90 a	80 cd	75 d	96 a
	Command	3 ME	12.8 FL OZ/A	PRE	A								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
2	Command	3 ME	12.8 FL OZ/A	PRE	A		93 d		98 a	91 a	79 d	81 bcd	98 a
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Induce	L	4.8 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
3	Command	3 ME	12.8 FL OZ/A	PRE	A		97 ab		99 a	94 a	93 a	90 ab	99 a
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Super Wham	4 SC	3 QT/A	MPOST	B								
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
4	Command	3 ME	12.8 FL OZ/A	PRE	A		99 a		99 a	94 a	90 ab	89 ab	99 a
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Super Wham	4 SC	4 QT/A	MPOST	B								
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
5	IR5878	50 WG	2.1 OZ/A	MPOST	B		98 ab		99 a		69 e	76 cd	96 a
	Facet	75 DF	10.7 OZ/A	MPOST	B								
	Agri-Dex	L	1 QT/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
6	Grasp	2 SC	2 FL OZ/A	MPOST	B		94 cd		99 a		83 bcd	84 a-d	99 a
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
7	Command	3 ME	12.8 FL OZ/A	PRE	A		95 bed		99 a	91 a	84 a-d	87 abc	97 a
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Facet	75 DF	10.7 OZ/A	MPOST	B								
	Agri-Dex	L	1 QT/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
8	Command	3 ME	12.8 FL OZ/A	PRE	A		93 d		99 a	95 a	83 bcd	94 a	99 a
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Permit	75 WG	0.25 OZ/A	MPOST	B								
	Induce	L	4.8 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								
9	Command	3 ME	12.8 FL OZ/A	PRE	A		97 abc		99 a	93 a	83 bcd	83 a-d	99 a
	IR5878	50 WG	2.1 OZ/A	MPOST	B								
	Permit	75 WG	0.33 OZ/A	MPOST	B								
	Induce	L	4.8 FL OZ/A	MPOST	B								
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C								
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C								

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							IPOLA 19-Jun-06 Control % 33 0 14 DA-B	IPOLA 3-Jul-06 Control % 47 14 28 DA-B	ECHCG 5-Jun-06 Control % 19 0 19 DA-A	ECHCG 12-Jun-06 Control % 26 7 7 DA-B	ECHCG 19-Jun-06 Control % 33 0 14 DA-B	ECHCG 3-Jul-06 Control % 47 14 28 DA-B	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	13	14	15	16	17	18
10	Command IR5878	3 ME 50	ME WG	12.8 2.1	FL OZ/A OZ/A	PRE MPOST	A B	96 a-d	99 a	94 a	85 a-d	89 ab	99 a
	Grandstand R	3 SL		10.7	FL OZ/A	MPOST	B						
	Agri-Dex	L		19.2	FL OZ/A	MPOST	B						
	Clincher SF	2.38	EC	15	FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L		19.2	FL OZ/A	LPOST/PTFLD	C						
11	Command IR5878	3 ME 50	ME WG	12.8 2.1	FL OZ/A OZ/A	PRE MPOST	A B	98 ab	99 a	95 a	89 abc	88 ab	99 a
	Aim	2 EC		1	FL OZ/A	MPOST	B						
	Induce	L		4.8	FL OZ/A	MPOST	B						
	Clincher SF	2.38	EC	15	FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L		19.2	FL OZ/A	LPOST/PTFLD	C						
12	Command Permit	3 ME 75	ME WG	12.8 1	FL OZ/A OZ/A	PRE MPOST	A B	99 a	99 a	94 a	91 ab	91 ab	99 a
	Super Wham	4 SC		4	QT/A	MPOST	B						
	Agri-Dex	L		19.2	FL OZ/A	MPOST	B						
	Clincher SF	2.38	EC	15	FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L		19.2	FL OZ/A	LPOST/PTFLD	C						
Standard Deviation CV							2.1 2.33	1.6 1.69	3.4 3.69	6.0 7.11	6.9 8.08	2.8 2.86	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							PANRA 5-Jun-06 Control % 19 0 19 DA-A	PANRA 19-Jun-06 Control % 33 0 14 DA-B	PANRA 3-Jul-06 Control % 47 14 28 DA-B	13-Sep-06 Yield bu/A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	19	20	21	24
1	Treated Check							91 a	78 bcd	99 a	135 c
	Command	3 ME	12.8 FL OZ/A	PRE	A						
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C						
2	Command	3 ME	12.8 FL OZ/A	PRE	A		94 a	86 abc	99 a	172 b	
	IR5878	50 WG	2.1 OZ/A	MPOST	B						
	Induce	L	4.8 FL OZ/A	MPOST	B						
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C						
3	Command	3 ME	12.8 FL OZ/A	PRE	A		94 a	93 a	99 a	164 b	
	IR5878	50 WG	2.1 OZ/A	MPOST	B						
	Super Wham	4 SC	3 QT/A	MPOST	B						
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B						
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C						
4	Command	3 ME	12.8 FL OZ/A	PRE	A		95 a	95 a	99 a	179 ab	
	IR5878	50 WG	2.1 OZ/A	MPOST	B						
	Super Wham	4 SC	4 QT/A	MPOST	B						
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B						
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C						
5	IR5878	50 WG	2.1 OZ/A	MPOST	B			66 d	99 a	170 b	
	Facet	75 DF	10.7 OZ/A	MPOST	B						
	Agri-Dex	L	1 QT/A	MPOST	B						
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C						
6	Grasp	2 SC	2 FL OZ/A	MPOST	B			75 cd	99 a	190 a	
	IR5878	50 WG	2.1 OZ/A	MPOST	B						
	Agri-Dex	L	19.2 FL OZ/A	MPOST	B						
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C						
7	Command	3 ME	12.8 FL OZ/A	PRE	A		93 a	84 abc	99 a	165 b	
	IR5878	50 WG	2.1 OZ/A	MPOST	B						
	Facet	75 DF	10.7 OZ/A	MPOST	B						
	Agri-Dex	L	1 QT/A	MPOST	B						
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C						
8	Command	3 ME	12.8 FL OZ/A	PRE	A		94 a	93 a	99 a	178 ab	
	IR5878	50 WG	2.1 OZ/A	MPOST	B						
	Permit	75 WG	0.25 OZ/A	MPOST	B						
	Induce	L	4.8 FL OZ/A	MPOST	B						
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C						
9	Command	3 ME	12.8 FL OZ/A	PRE	A		93 a	73 cd	99 a	176 ab	
	IR5878	50 WG	2.1 OZ/A	MPOST	B						
	Permit	75 WG	0.33 OZ/A	MPOST	B						
	Induce	L	4.8 FL OZ/A	MPOST	B						
	Clincher SF	2.38 EC	15 FL OZ/A	LPOST/PTFLD	C						
	Agri-Dex	L	19.2 FL OZ/A	LPOST/PTFLD	C						

**Mississippi State University Delta Research and Extension Center**  
**Mid Postemergence IR5878 Weed Control Programs**

Trial ID: 06-WS-18

Location: DREC

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval							PANRA 5-Jun-06 Control % 19 0 19 DA-A	PANRA 19-Jun-06 Control % 33 0 14 DA-B	PANRA 3-Jul-06 Control % 47 14 28 DA-B	13-Sep-06 Yield bu/A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	19	20	21	24
10	Command IR5878	3 ME 50	ME WG	12.8 2.1	FL OZ/A OZ/A	PRE MPOST	A B	95 a	85 abc	99 a	170 b
	Grandstand R	3 SL		10.7	OZ/A	MPOST	B				
	Agri-Dex	L		19.2	FL OZ/A	MPOST	B				
	Clincher SF	2.38	EC	15	FL OZ/A	LPOST/PTFLD	C				
	Agri-Dex	L		19.2	FL OZ/A	LPOST/PTFLD	C				
11	Command IR5878	3 ME 50	ME WG	12.8 2.1	FL OZ/A OZ/A	PRE MPOST	A B	94 a	90 ab	99 a	175 ab
	Aim	2 EC		1	FL OZ/A	MPOST	B				
	Induce	L		4.8	FL OZ/A	MPOST	B				
	Clincher SF	2.38	EC	15	FL OZ/A	LPOST/PTFLD	C				
	Agri-Dex	L		19.2	FL OZ/A	LPOST/PTFLD	C				
12	Command Permit	3 ME 75	ME WG	12.8 1	FL OZ/A OZ/A	PRE MPOST	A B	95 a	95 a	99 a	177 ab
	Super Wham	4 SC		4	QT/A	MPOST	B				
	Agri-Dex	L		19.2	FL OZ/A	MPOST	B				
	Clincher SF	2.38	EC	15	FL OZ/A	LPOST/PTFLD	C				
	Agri-Dex	L		19.2	FL OZ/A	LPOST/PTFLD	C				
Standard Deviation							2.7	8.5	0.0	11.0	
CV							2.88	10.1	0.0	6.42	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Ricestar HT Programs in Clearfield Rice**

Trial ID: 06-WS-19

Location: DREC

**Objective:**

To determine the effectiveness of Ricestar HT as a component of a Clearfield rice weed control program.

**Conclusions:**

Although Newpath is effective for control of most annual grasses, it can be inconsistent in controlling some species. Tank mixtures of Ricestar HT and Newpath could improve grass control in a Clearfield rice production system. This experiment tested different rates of Ricestar HT applied to 1- to 2-leaf rice (EPOST), in tank mixtures with other herbicides EPOST, or in sequential applications with Newpath [EPOST followed by applications to 4-leaf to 1-tiller rice (LPOST)]. Weed species evaluated included barnyardgrass (ECHCG), browntop millet (PANRA), and Amazon sprangletop (LEFPA). At 26 days after EPOST applications, Ricestar HT at 17 FL OZ/A tank-mixed with Newpath controlled ECHCG less than sequential applications of Ricestar HT at 24 FL OZ/A EPOST followed by Newpath LPOST. However, ECHCG control was at least 90% from all treatments. PANRA and LEFPA were controlled at least 91% at 26 days after EPOST applications. Differences in rice yield were detected, and these may have resulted from competition with grasses that emerged late in the season. Although the differences were not significant in every case, rice yields were generally lower when Ricestar HT was applied in tank mixture or in sequential applications with Newpath.

**Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> CL131	<b>Description:</b> Clearfield variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 71 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 23-May-06
<b>Harvest Date:</b> 13-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

**Pest Description**

**Pest 1 Type:** W **Code:** ECHCG *Echinochloa crus-galli*  
**Common Name:** Barnyardgrass

**Pest 2 Type:** W **Code:** PANRA *Brachiaria ramosa*  
**Common Name:** Browntop millet

**Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Unit
1.	12-Jun-06	Aim	2	EC	1.67	FL OZ/A
2.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
3.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Mississippi State University Delta Research and Extension Center**  
**Ricestar HT Programs in Clearfield Rice**

Trial ID: 06-WS-19

Location: DREC

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Application Description**

	A	B	C
<b>Application Date:</b>	19-May-06	31-May-06	12-Jun-06
<b>Time of Day:</b>	7:00 am	9:00 am	9:30 am
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	DPRE	EPOST	LPOST
<b>Application Placement:</b>	Soil	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB	JAB
<b>Air Temperature, Unit:</b>	68 F	76 F	94 F
<b>% Relative Humidity:</b>	54	70	49
<b>Wind Velocity, Unit:</b>	2 MPH	4 MPH	4 MPH
<b>Wind Direction:</b>	NW	NW	NW
<b>Dew Presence (Y/N):</b>	N	N	N
<b>Soil Temperature, Unit:</b>	67 F	79 F	78 F
<b>Soil Moisture:</b>	Adequate	Excessive	Adequate
<b>% Cloud Cover:</b>	50	95	5

**Crop Stage At Each Application**

	A	B	C
<b>Crop 1 Code:</b>	ORYSA	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>		2 leaf	1 tiller
<b>Stage Minimum, Percent:</b>		2 leaf	1 tiller
<b>Stage Maximum, Percent:</b>		3 leaf	2 tiller
<b>Height, Unit:</b>		5 IN	9 IN
<b>Height Minimum, Maximum:</b>		4 6	7 9

**Mississippi State University Delta Research and Extension Center**  
**Ricestar HT Programs in Clearfield Rice**

Trial ID: 06-WS-19

Location: DREC

**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>		1 leaf	4 leaf
<b>Stage Minimum, Percent:</b>		1 leaf	3 leaf
<b>Stage Maximum, Percent:</b>		2 leaf	4 leaf
<b>Height, Unit:</b>		0.5 IN	4 IN
<b>Height Minimum, Maximum:</b>		0.5 0.5	3 4
<b>Density, Unit:</b>		3 FT2	5 FT2
<b>Pest 2 Code, Disc., Scale:</b>	PANRA W	PANRA W	PANRA W
<b>Stage Majority, Percent:</b>		1 leaf	3 leaf
<b>Stage Minimum, Percent:</b>		1 leaf	2 leaf
<b>Stage Maximum, Percent:</b>		2 leaf	3 leaf
<b>Height, Unit:</b>		0.5 IN	4 IN
<b>Height Minimum, Maximum:</b>		0.5 0.5	3 4
<b>Density, Unit:</b>		1 FT2	3 FT2

**Application Equipment**

	A	B	C
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	38 PSI	24 PSI	24 PSI
<b>Nozzle Type:</b>	AI	DG	DG
<b>Nozzle Size:</b>	110015VS	11002VS	110015VS
<b>Nozzle Spacing, Unit:</b>	20 IN	20 IN	16 IN
<b>Nozzles/Row:</b>	3	3	4
<b>Boom Length, Unit:</b>	60 IN	60 IN	64 IN
<b>Boom Height, Unit:</b>	16 IN	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	3 MPH	3 MPH
<b>Carrier:</b>	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA

**Date      By      Notes**

31-May-06 JAB      Very little grass emerged at application timing B. Treatments applied based on rice growth stage.

**Mississippi State University Delta Research and Extension Center**  
**Ricestar HT Programs in Clearfield Rice**

Trial ID: 06-WS-19

Location: DREC

Pest Code	Rating Date	Rating Data Type	Rating Unit	Days After First/Last Applic.	Trt-Eval Interval	7-Jun-06 Rice Injury % 19 7 7 DA-B	ECHCG 31-May-06 Control % 12 0 12 DA-A	ECHCG 7-Jun-06 Control % 19 7 7 DA-B	ECHCG 26-Jun-06 Control % 38 14 26 DA-B	ECHCG 10-Jul-06 Control % 52 28 40 DA-B	PANRA 31-May-06 Control % 12 0 12 DA-A	PANRA 7-Jun-06 Control % 19 7 7 DA-B
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	Nontreated					1	4	5	6	7	8	9
2	Stam M-4 Facet Permit	4 SL 75 DF 75 WG	4 QT/A 0.5 LB/A 1 OZ/A	EPOST EPOST EPOST	B B B	3 a		97 a	95 ab	88 b		97 a
3	Ricestar HT Agri-Dex	0.58 EC L	17 FL OZ/A 19.2 FL OZ/A	EPOST EPOST	B B	0 a		96 a	93 ab	86 b		96 a
4	Ricestar HT Agri-Dex	0.58 EC L	24 FL OZ/A 19.2 FL OZ/A	EPOST EPOST	B B	2 a		97 a	92 ab	86 b		97 a
5	Command Ricestar HT Agri-Dex	3 ME 0.58 EC L	1.33 PT/A 17 FL OZ/A 19.2 FL OZ/A	DPRE A EPOST EPOST	A B B	1 a	94 a	97 a	94 ab	94 ab	93 a	97 a
6	Command Ricestar HT Agri-Dex	3 ME 0.58 EC L	1.33 PT/A 24 FL OZ/A 19.2 FL OZ/A	DPRE A EPOST EPOST	A B B	1 a	93 a	96 a	95 ab	94 ab	94 a	97 a
7	Ricestar HT Newpath Agri-Dex	0.58 EC 2 AS L	17 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	EPOST EPOST EPOST	B B B	2 a		95 a	90 b	88 b		96 a
8	Ricestar HT Newpath Agri-Dex	0.58 EC 2 AS L	24 FL OZ/A 4 FL OZ/A 19.2 FL OZ/A	EPOST EPOST EPOST	B B B	2 a		95 a	93 ab	85 b		95 a
9	Ricestar HT Agri-Dex	0.58 EC L	17 FL OZ/A 19.2 FL OZ/A	EPOST EPOST	B B	0 a		97 a	95 ab	97 a		96 a
10	Ricestar HT Agri-Dex	0.58 EC L	24 FL OZ/A 19.2 FL OZ/A	EPOST EPOST	B B	3 a		97 a	96 a	99 a		97 a
	Newpath Agri-Dex	2 AS L	4 FL OZ/A 19.2 FL OZ/A	LPOST C LPOST C								
	Standard Deviation					1.4	2.5	2.8	3.1	5.3	1.9	2.0
	CV					121.95	4.03	3.24	3.74	6.52	3.0	2.35

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Ricestar HT Programs in Clearfield Rice**

Trial ID: 06-WS-19

Location: DREC

Pest Code								PANRA 26-Jun-06	PANRA 10-Jul-06	LEFPA 26-Jun-06	LEFPA 10-Jul-06	13-Sep-06	
Rating Date								Control %	Control %	Control %	Control %	Yield bu/A	
Rating Data Type								38 14	52 28	38 14	52 28		
Rating Unit													
Days After First/Last Applic.													
Trt-Eval Interval								26 DA-B	40 DA-B	26 DA-B	40 DA-B		
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Unit	Appl Stage	Code	10	11	12	13	16
1	Nontreated								0 c	0 b	0 c	0 c	101 d
2	Stam M-4	4 SL	4 QT/A	EPOST	B				97 ab	99 a	94 ab	98 a	150 ab
	Facet	75 DF	0.5 LB/A	EPOST	B								
	Permit	75 WG	1 OZ/A	EPOST	B								
3	Ricestar HT Agri-Dex	0.58 EC L	17 FL OZ/A	EPOST	B				97 ab	98 a	95 ab	92 b	137 c
4	Ricestar HT Agri-Dex	0.58 EC L	24 FL OZ/A	EPOST	B				97 ab	99 a	95 ab	97 a	152 a
5	Command Ricestar HT Agri-Dex	3 ME EC L	1.33 PT/A	DPRE	A				98 a	99 a	95 ab	99 a	144 abc
	Ricestar HT Agri-Dex	0.58 EC L	17 FL OZ/A	EPOST	B								
	Agri-Dex	19.2 L	19.2 FL OZ/A	EPOST	B								
6	Command Ricestar HT Agri-Dex	3 ME EC L	1.33 PT/A	DPRE	A				98 a	99 a	96 a	99 a	149 ab
	Ricestar HT Agri-Dex	0.58 EC L	24 FL OZ/A	EPOST	B								
	Agri-Dex	19.2 L	19.2 FL OZ/A	EPOST	B								
7	Ricestar HT Newpath Agri-Dex	0.58 EC AS L	17 FL OZ/A	EPOST	B				98 a	99 a	91 b	99 a	141 bc
	Newpath Agri-Dex	2 AS L	4 FL OZ/A	EPOST	B								
	Agri-Dex	19.2 L	19.2 FL OZ/A	EPOST	B								
8	Ricestar HT Newpath Agri-Dex	0.58 EC AS L	24 FL OZ/A	EPOST	B				95 b	99 a	97 a	98 a	134 c
	Newpath Agri-Dex	2 AS L	4 FL OZ/A	EPOST	B								
	Agri-Dex	19.2 L	19.2 FL OZ/A	EPOST	B								
9	Ricestar HT Agri-Dex	0.58 EC L	17 FL OZ/A	EPOST	B				97 ab	99 a	95 ab	99 a	137 c
	Agri-Dex	19.2 L	19.2 FL OZ/A	EPOST	B								
	Newpath Agri-Dex	2 AS L	4 FL OZ/A	LPOST	C								
	Agri-Dex	19.2 L	19.2 FL OZ/A	LPOST	C								
10	Ricestar HT Agri-Dex	0.58 EC L	24 FL OZ/A	EPOST	B				97 ab	99 a	96 ab	99 a	140 bc
	Agri-Dex	19.2 L	19.2 FL OZ/A	EPOST	B								
	Newpath Agri-Dex	2 AS L	4 FL OZ/A	LPOST	C								
	Agri-Dex	19.2 L	19.2 FL OZ/A	LPOST	C								
Standard Deviation								1.4	0.6	2.8	2.2	7.3	
CV								1.63	0.71	3.25	2.52	5.24	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Ricestar HT Programs in Conventional Rice**

Trial ID: 06-WS-20

Location: DREC

**Objective:**

To evaluate Ricestar HT as a component of a conventional rice weed control program.

**Conclusions:**

This experiment was designed to compare Ricestar HT with Clincher SF when applied to 1- to 2-leaf rice (EPOST). Weeds evaluated included barnyardgrass (ECHCG) and browntop millet (PANRA). By 22 days after application, no treatment injured rice >6%. Although minor differences in grass control were detected, all treatments controlled ECHCG and PANRA at least 89% 22 days after application. Rice yields were equivalent following all treatments and ranged from 175 to 192 bu/A.

**Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cocodrie	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 15-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 72 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 23-May-06
<b>Harvest Date:</b> 13-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

**Pest Description**

**Pest 1 Type:** W **Code:** ECHCG *Echinochloa crus-galli*  
**Common Name:** Barnyardgrass

**Pest 2 Type:** W **Code:** PANRA *Brachiaria ramosa*  
**Common Name:** Browntop millet

**Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Unit
1.	12-May-06	Aim	2	EC	1.67	FL OZ/A
2.	14-Jun-06	Urea (46:0:0)	46	GR	325	LB/A
3.	15-Jun-06	Karate Z	2.08	CS	2	FL OZ/A

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06 and 15-May-06.

**Mississippi State University Delta Research and Extension Center**  
**Ricestar HT Programs in Conventional Rice**

Trial ID: 06-WS-20

Location: DREC

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	6-Jun-06	Flush
3.	15-Jun-06	Flood
4.	5-Sep-06	Drain

**Application Description**

	A
<b>Application Date:</b>	5-Jun-06
<b>Time of Day:</b>	9:30 am
<b>Application Method:</b>	Broadcast
<b>Application Timing:</b>	EPOST
<b>Application Placement:</b>	Foliar
<b>Applied By:</b>	JAB
<b>Air Temperature, Unit:</b>	89 F
<b>% Relative Humidity:</b>	50
<b>Wind Velocity, Unit:</b>	3 MPH
<b>Wind Direction:</b>	NE
<b>Dew Presence (Y/N):</b>	N
<b>Soil Temperature, Unit:</b>	78 F
<b>Soil Moisture:</b>	Adequate
<b>% Cloud Cover:</b>	5

**Crop Stage At Each Application**

	A
<b>Crop 1 Code:</b>	ORYSA
<b>Stage Majority, Percent:</b>	3 leaf
<b>Stage Minimum, Percent:</b>	3 leaf
<b>Stage Maximum, Percent:</b>	4 leaf
<b>Height, Unit:</b>	7 IN
<b>Height Minimum, Maximum:</b>	6 8

**Mississippi State University Delta Research and Extension Center**  
**Ricestar HT Programs in Conventional Rice**

Trial ID: 06-WS-20

Location: DREC

**Pest Stage At Each Application**

<b>A</b>	
<b>Pest 1 Code, Disc., Scale:</b>	ECHCG W
<b>Stage Majority, Percent:</b>	2 leaf
<b>Stage Minimum, Percent:</b>	1 leaf
<b>Stage Maximum, Percent:</b>	3 leaf
<b>Height, Unit:</b>	2 IN
<b>Height Minimum, Maximum:</b>	2 3
<b>Density, Unit:</b>	4 FT2
<b>Pest 2 Code, Disc., Scale:</b>	PANRA W
<b>Stage Majority, Percent:</b>	3 leaf
<b>Stage Minimum, Percent:</b>	1 leaf
<b>Stage Maximum, Percent:</b>	3 leaf
<b>Height, Unit:</b>	2 IN
<b>Height Minimum, Maximum:</b>	1 2
<b>Density, Unit:</b>	4 FT2

**Application Equipment**

<b>A</b>	
<b>Appl. Equipment:</b>	CO2 backpack
<b>Operating Pressure, Unit:</b>	38 PSI
<b>Nozzle Type:</b>	DG
<b>Nozzle Size:</b>	110015VS
<b>Nozzle Spacing, Unit:</b>	16 IN
<b>Nozzles/Row:</b>	4
<b>Boom Length, Unit:</b>	64 IN
<b>Boom Height, Unit:</b>	18 IN
<b>Ground Speed, Unit:</b>	3 MPH
<b>Carrier:</b>	Water
<b>Spray Volume, Unit:</b>	15 GPA

**Mississippi State University Delta Research and Extension Center**  
**Ricestar HT Programs in Conventional Rice**

Trial ID: 06-WS-20

Location: DREC

Pest Code								12-Jun-06	19-Jun-06	27-Jun-06	ECHCG	ECHCG	ECHCG
Rating Date								Rice Injury %	Rice Injury %	Rice Injury %	Control %	Control %	Control %
Rating Data Type								7 7	14 14	22 22	7 7	14 14	22 22
Rating Unit													
Days After First/Last Applic.													
Trt-Eval Interval								7 DA-A	14 DA-A	22 DA-A	7 DA-A	14 DA-A	22 DA-A
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate Unit	Growth Stage	Appl Code	1	2	3	4	5	6
1	Nontreated Check							0 b	0 e	0 b	0 b	0 d	0 d
2	Ricestar HT Agri-Dex	0.58 EC L	17 FL OZ/A 19.2 FL OZ/A	EPOST A				0 b	1 de	0 b	86 a	90 bc	95 ab
3	Ricestar HT Agri-Dex	0.58 EC L	24 FL OZ/A 19.2 FL OZ/A	EPOST A				0 b	1 de	0 b	93 a	93 abc	97 a
4	Clincher SF Agri-Dex	2.38 EC L	13 FL OZ/A 48 FL OZ/A	EPOST A				0 b	0 e	0 b	90 a	97 ab	97 a
5	Clincher SF Agri-Dex	2.38 EC L	15 FL OZ/A 48 FL OZ/A	EPOST A				0 b	0 e	0 b	89 a	90 bc	97 a
6	Ricestar HT Regiment Kinetic HV Urea-Ammonium nitrate	0.58 EC 80 WP SF L	17 FL OZ/A 0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A				1 b	3 cd	2 b	91 a	95 ab	96 ab
7	Ricestar HT Regiment Kinetic HV Urea-Ammonium nitrate	0.58 EC 80 WP SF L	24 FL OZ/A 0.5 OZ/A 4.8 FL OZ/A 38.4 FL OZ/A	EPOST A				2 b	1 de	0 b	91 a	97 ab	97 a
8	Ricestar HT Grasp Agri-Dex	0.58 EC 2 SC L	17 FL OZ/A 2.3 FL OZ/A 48 FL OZ/A	EPOST A				1 b	6 b	6 a	89 a	91 abc	93 abc
9	Ricestar HT Grasp Agri-Dex	0.58 EC 2 SC L	24 FL OZ/A 2.3 FL OZ/A 48 FL OZ/A	EPOST A				1 b	8 a	6 a	90 a	90 abc	96 ab
10	Clincher SF Grasp Agri-Dex	2.38 EC 2 SC L	13 FL OZ/A 2.3 FL OZ/A 48 FL OZ/A	EPOST A				0 b	5 b	5 a	90 a	91 abc	90 bc
11	Clincher SF Grasp Agri-Dex	2.38 EC 2 SC L	15 FL OZ/A 2.3 FL OZ/A 48 FL OZ/A	EPOST A				1 b	4 bc	5 a	86 a	86 c	89 c
12	Command Ricestar HT Agri-Dex	3 ME 0.58 EC L	1.33 PT/A 17 FL OZ/A 19.2 FL OZ/A	EPOST A				0 b	0 e	0 b	91 a	96 ab	98 a
13	Command Ricestar HT Agri-Dex	3 ME 0.58 EC L	1.33 PT/A 24 FL OZ/A 19.2 FL OZ/A	EPOST A				0 b	0 e	0 b	90 a	90 abc	96 ab
14	Command Ricestar HT Aim Agri-Dex	3 ME 0.58 EC 2 EC L	1.33 PT/A 17 FL OZ/A 1 FL OZ/A 19.2 FL OZ/A	EPOST A				5 a	0 e	0 b	89 a	98 a	97 a
15	Command Ricestar HT Aim Agri-Dex	3 ME 0.58 EC 2 EC L	1.33 PT/A 24 FL OZ/A 1 FL OZ/A 19.2 FL OZ/A	EPOST A				5 a	1 de	0 b	89 a	95 ab	97 a
16	Ricestar HT Facet Agri-Dex	0.58 EC 75 DF L	17 FL OZ/A 0.5 LB/A 19.2 FL OZ/A	EPOST A				0 b	1 de	0 b	86 a	93 abc	94 abc
17	Ricestar HT Facet Agri-Dex	0.58 EC 75 DF L	24 FL OZ/A 0.5 LB/A 19.2 FL OZ/A	EPOST A				1 b	1 de	0 b	90 a	91 abc	97 a
Standard Deviation CV								0.9	1.5	1.3	5.1	4.8	4.0
								103.4	88.57	95.8	6.01	5.54	4.49

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Ricestar HT Programs in Conventional Rice**

Trial ID: 06-WS-20

Location: DREC

Pest Code	Rating Date	Rating Data Type	Rating Unit	Days After First/Last Applic.	Trt-Eval Interval	PANRA 12-Jun-06 Control % 7 7 7 DA-A	PANRA 19-Jun-06 Control % 14 14 14 DA-A	PANRA 27-Jun-06 Control % 22 22 22 DA-A	13-Sep-06 Yield bu/A		
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	7	8	9	12
1	Nontreated Check							0 c	0 d	0 c	154 b
2	Ricestar HT Agri-Dex	0.58 L	EC 19.2	17 FL OZ/A	EPOST A		88 ab	95 ab	98 a	180 a	
3	Ricestar HT Agri-Dex	0.58 L	EC 19.2	24 FL OZ/A	EPOST A		93 a	95 ab	98 a	182 a	
4	Clincher SF Agri-Dex	2.38 L	EC 48	13 FL OZ/A	EPOST A		89 ab	97 a	97 ab	178 a	
5	Clincher SF Agri-Dex	2.38 L	EC 48	15 FL OZ/A	EPOST A		90 ab	96 ab	98 a	178 a	
6	Ricestar HT Regiment Kinetic HV Urea-Ammonium nitrate	0.58 80 L	EC WP SF	17 0.5 4.8 38.4	FL OZ/A FL OZ/A FL OZ/A FL OZ/A	EPOST A EPOST A EPOST A EPOST A	90 ab	97 ab	97 ab	186 a	
7	Ricestar HT Regiment Kinetic HV Urea-Ammonium nitrate	0.58 80 L	EC WP SF	24 0.5 4.8 38.4	FL OZ/A FL OZ/A FL OZ/A FL OZ/A	EPOST A EPOST A EPOST A EPOST A	90 ab	94 abc	96 ab	190 a	
8	Ricestar HT Grasp Agri-Dex	0.58 2 L	EC SC	17 2.3	FL OZ/A FL OZ/A	EPOST A EPOST A	89 ab	93 abc	93 b	188 a	
9	Ricestar HT Grasp Agri-Dex	0.58 2 L	EC SC	24 2.3	FL OZ/A FL OZ/A	EPOST A EPOST A	89 ab	89 c	93 b	184 a	
10	Clincher SF Grasp Agri-Dex	2.38 2 L	EC SC	13 2.3	FL OZ/A FL OZ/A	EPOST A EPOST A	91 ab	91 bc	97 ab	192 a	
11	Clincher SF Grasp Agri-Dex	2.38 2 L	EC SC	15 2.3	FL OZ/A FL OZ/A	EPOST A EPOST A	91 ab	91 bc	94 b	190 a	
12	Command Ricestar HT Agri-Dex	3 0.58 L	ME EC	1.33 17	PT/A FL OZ/A	EPOST A EPOST A	91 ab	97 a	98 a	187 a	
13	Command Ricestar HT Agri-Dex	3 0.58 L	ME EC	1.33 24	PT/A FL OZ/A	EPOST A EPOST A	93 a	95 ab	98 a	176 a	
14	Command Ricestar HT Aim Agri-Dex	3 0.58 L	ME EC	1.33 17	PT/A FL OZ/A	EPOST A EPOST A	90 ab	98 a	98 a	179 a	
15	Command Ricestar HT Aim Agri-Dex	3 0.58 L	ME EC	1.33 24	PT/A FL OZ/A	EPOST A EPOST A	91 ab	97 ab	98 a	180 a	
16	Ricestar HT Facet Agri-Dex	0.58 75 L	EC DF	17 0.5	FL OZ/A LB/A	EPOST A EPOST A	86 b	97 a	97 ab	181 a	
17	Ricestar HT Facet Agri-Dex	0.58 75 L	EC DF	24 0.5	FL OZ/A LB/A	EPOST A EPOST A	91 ab	93 abc	97 ab	175 a	
Standard Deviation						3.4	3.5	2.4	9.9		
CV						3.96	3.9	2.69	5.48		

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

## Mississippi State University Delta Research and Extension Center Newpath Plus Prowl H2O Combinations

Trial ID: 06-WS-22

Location: DREC - Red Rice Area

### **Objective:**

To evaluate application rates of Prowl H2O for rice tolerance and weed control in a Clearfield rice production system.

### **Conclusions:**

This experiment tested the rice tolerance to Prowl H2O and the effectiveness of Prowl H2O in a Clearfield rice production system. Prowl H2O was applied in tank mixture with Newpath to 1-leaf rice (VEPOST) or in tank mixture with Newpath VEPOST and followed by a second application of Newpath 10 days prior to flooding (10 d PRFLD). Weed species evaluated included barnyardgrass (ECHCG), red rice (ORYSA), and Amazon sprangletop (LEFPA). Minor rice injury was observed 7 days after VEPOST application. All treatments controlled ECHCG at least 94% 13 days after 10 d PRFLD application. At the same evaluation, ORYSA control from Prowl H2O plus Newpath followed by Newpath was equivalent to that from two applications of Newpath. The same trend was observed late in the season (02-Aug-06). However, at the 02-Aug-06 evaluation, ORYSA control from single applications of Prowl H2O plus Newpath was no more than 64%. Prowl H2O was required to control LEFPA >85% at 28 days after 10 d PRFLD application. By the late-season evaluation, LEFPA control from treatments that did not contain Prowl H2O was not greater than 46%. With the exception of Prowl H2O at 25.3 FL OZ/A plus Newpath, rice yields following all treatments containing Prowl H2O were higher than those following Newpath-only treatments. Differences in rice yields were attributed mainly to LEFPA competition. Prowl H2O is safe for application to Clearfield rice and would be required for high yields in areas where LEFPA is troublesome.

### **Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> CL131	<b>Description:</b> Clearfield variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 18-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 73 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 25-May-06
<b>Harvest Date:</b> 27-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

### **Pest Description**

**Pest 1 Type:** W **Code:** ECHCG *Echinochloa crus-galli*  
**Common Name:** Barnyardgrass

**Pest 2 Type:** W **Code:** ORYSA *Oryza sativa*  
**Common Name:** Red rice

**Pest 3 Type:** W **Code:** LEFPA *Leptochloa panicoides*  
**Common Name:** Amazon sprangletop

### **Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Stale seedbed
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> F Fair

**Mississippi State University Delta Research and Extension Center**  
**Newpath Plus Prowl H2O Combinations**

Trial ID: 06-WS-22

Location: DREC - Red Rice Area

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Unit
1.	16-May-06	Glystar Plus	4	L	32	FL OZ/A
2.	12-Jun-06	Aim	2	EC	1.67	FL OZ/A
3.	15-Jun-06	Karate Z	2.08	EC	2	FL OZ/A
4.	15-Jun-06	Urea (46:0:0)	46	GR	325	LB/A

**Comment:** Aim application on 12-Jun-06 was made to control hemp sesbania so that the experiment could be harvested.

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	23-May-06	Flush
2.	7-Jun-06	Flush
3.	16-Jun-06	Flood
4.	5-Sep-06	Drain

**Application Description**

	A	B	C
<b>Application Date:</b>	30-May-06	7-Jun-06	19-Jul-06
<b>Time of Day:</b>	8:00 am	2:00 pm	8:00 am
<b>Application Method:</b>	Broadcast	Broadcast	Broadcast
<b>Application Timing:</b>	VEPOST	10d PRFLD	PD+14
<b>Application Placement:</b>	Foliar	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB	JAB, LCV
<b>Air Temperature, Unit:</b>	75 F	96 F	89 F
<b>% Relative Humidity:</b>	94	50	78
<b>Wind Velocity, Unit:</b>	0 MPH	2 MPH	0 MPH
<b>Wind Direction:</b>		W	
<b>Dew Presence (Y/N):</b>	Y	N	Y
<b>Soil Temperature, Unit:</b>	72 F		
<b>Soil Moisture:</b>	Excessive	Excessive	Flood
<b>% Cloud Cover:</b>	100	10	0

**Mississippi State University Delta Research and Extension Center**  
**Newpath Plus Prowl H2O Combinations**

Trial ID: 06-WS-22

Location: DREC - Red Rice Area

**Crop Stage At Each Application**

	A	B	C
<b>Crop 1 Code:</b>	ORYSA	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	1 leaf	3 leaf	PD+14
<b>Stage Minimum, Percent:</b>	1 leaf	3 leaf	PD+14
<b>Stage Maximum, Percent:</b>	2 leaf	4 leaf	PD+14
<b>Height, Unit:</b>	3 IN	8 IN	28 IN
<b>Height Minimum, Maximum:</b>	2 3	6 8	26 30

**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>	1 leaf	2 leaf	
<b>Stage Minimum, Percent:</b>	1 leaf	2 leaf	
<b>Stage Maximum, Percent:</b>	1 leaf	3 leaf	
<b>Height, Unit:</b>	0.25 IN	2 IN	
<b>Height Minimum, Maximum:</b>	0.25 0.5	2 3	
<b>Density, Unit:</b>	18 FT2	1 FT2	
<b>Pest 2 Code, Disc., Scale:</b>	ORYSA W	ORYSA W	ORYSA W
<b>Stage Majority, Percent:</b>	1 leaf	2 leaf	8 leaf
<b>Stage Minimum, Percent:</b>	1 leaf	2 leaf	8 leaf
<b>Stage Maximum, Percent:</b>	2 leaf	3 leaf	9 leaf
<b>Height, Unit:</b>	2 IN	4 IN	24 IN
<b>Height Minimum, Maximum:</b>	1 2	3 4	24 26
<b>Density, Unit:</b>	12 FT2	2 FT2	0.5 FT2
<b>Pest 3 Code, Disc., Scale:</b>	LEFPA W	LEFPA W	LEFPA W
<b>Stage Majority, Percent:</b>		2 leaf	Head
<b>Stage Minimum, Percent:</b>		2 leaf	Head
<b>Stage Maximum, Percent:</b>		3 leaf	Head
<b>Height, Unit:</b>		2 IN	27 IN
<b>Height Minimum, Maximum:</b>		2 3	26 30
<b>Density, Unit:</b>		4 FT2	10 FT2

**Application Equipment**

	A	B	C
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	34 PSI	29 PSI	24 PSI
<b>Nozzle Type:</b>	XR	XR	DG
<b>Nozzle Size:</b>	110015VS	110015VS	11001VS
<b>Nozzle Spacing, Unit:</b>	20 IN	16 IN	16 IN
<b>Boom Length, Unit:</b>	60 IN	64 IN	64 IN
<b>Boom Height, Unit:</b>	18 IN	18 IN	18 IN
<b>Ground Speed, Unit:</b>	3 MPH	2 MPH	2 MPH
<b>Carrier:</b>	Water	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA	15 GPA

Date      By      Notes

6-Jun-06   JAB      Rice injury was reduced stand.

**Mississippi State University Delta Research and Extension Center**  
**Newpath Plus Prowl H2O Combinations**

Trial ID: 06-WS-22

Location: DREC - Red Rice Area

Pest Code Rating Date Rating Data Type Rating Unit Days After First/Last Applic. Trt-Eval Interval								6-Jun-06 Rice Injury % 7 7 7 DA-A	20-Jun-06 Rice Injury % 21 13 13 DA-B	5-Jul-06 Rice Injury % 36 28 28 DA-B	ECHCG 6-Jun-06 Control % 7 7 7 DA-A	ECHCG 20-Jun-06 Control % 21 13 13 DA-B	ECHCG 5-Jul-06 Control % 36 28 28 DA-B	ECHCG 2-Aug-06 Control % 64 14 14 DA-C
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Growth Unit	Appl Stage	Code	1	2	3	5	6	7	8
1	Nontreated							0 d	0 a	0 a	0 d	0 d	0 c	0 d
2	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	VEPOST	A A		0 d	1 a	0 a	94 bc	94 c	95 b	95 c
3	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 25.3	FL OZ/A	VEPOST	A A	0 d	0 a	0 a	94 bc	95 bc	96 b	95 c
4	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 33.7	FL OZ/A	VEPOST	A A	0 d	0 a	0 a	98 a	98 a	99 a	99 a
5	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 42	FL OZ/A	VEPOST	A A	2 bcd	2 a	1 a	96 abc	95 bc	98 a	95 c
6	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 50.5	FL OZ/A	VEPOST	A A	6 a	1 a	0 a	98 a	98 a	98 a	99 a
7	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 67.4	FL OZ/A	VEPOST	A A	6 a	2 a	0 a	96 abc	96 abc	98 a	98 b
8	Newpath Agri-Dex Newpath Agri-Dex	2 L	AS 2 AS	6 19.2	FL OZ/A	VEPOST	A A	0 d	1 a	0 a	93 c	99 a	99 a	99 a
9	Newpath Prowl H2O Agri-Dex Newpath Agri-Dex	2 L	AS 3.8 CS	6 25.3	FL OZ/A	VEPOST	A A	0 d	0 a	0 a	94 bc	97 ab	99 a	99 a
10	Newpath Prowl H2O Agri-Dex Newpath Agri-Dex	2 L	AS 3.8 CS	6 33.7	FL OZ/A	VEPOST	A A	1 cd	0 a	0 a	94 bc	99 a	99 a	99 a
11	Newpath Prowl H2O Agri-Dex Newpath Agri-Dex	2 L	AS 3.8 CS	6 42	FL OZ/A	VEPOST	A A	5 abc	2 a	2 a	97 ab	99 a	99 a	99 a
12	Newpath Prowl H2O Agri-Dex Newpath Agri-Dex	2 L	AS 3.8 CS	6 50.5	FL OZ/A	VEPOST	A A	4 a-d	1 a	1 a	98 a	99 a	99 a	99 a
13	Newpath Prowl H2O Agri-Dex Newpath Agri-Dex	2 L	AS 3.8 CS	6 67.4	FL OZ/A	VEPOST	A A	5 ab	2 a	0 a	99 a	99 a	99 a	99 a
14	Newpath Agri-Dex Newpath Agri-Dex Beyond Agri-Dex	2 L	AS 2 AS	6 19.2	FL OZ/A	VEPOST	A A	0   d	0   a	0   a	96   abc	98   a	98   a	99   a
Standard Deviation CV								2.3 111.83	1.3 176.89	0.7 322.65	2.4 2.65	1.8 2.04	1.1 1.24	0.5 0.59

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Newpath Plus Prowl H2O Combinations**

Trial ID: 06-WS-22

Location: DREC - Red Rice Area

Pest Code	Rating Date	Rating Data Type	Rating Unit	Days After First/Last Applic.	Trt-Eval Interval	ORYSA 6-Jun-06 Control %	ORYSA 20-Jun-06 Control %	ORYSA 5-Jul-06 Control %	ORYSA 2-Aug-06 Control %	LEFPA 5-Jul-06 Control %	LEFPA 2-Aug-06 Control %	27-Sep-06 Yield bu/A					
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Growth Unit	Appl Stage	Code	9	10	11	12	13	14	17			
1	Nontreated							0	e	0	d	0	c	0	f	8	f
2	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	VEPOST	A A	86 abc	81 c	80 d	54 b	53 e	18 e	48 e				
3	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 25.3	FL OZ/A	VEPOST	A A	81 d	84 c	90 abc	64 b	86 cd	49 d	103 d			
4	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 33.7	FL OZ/A	VEPOST	A A	90 a	90 ab	90 abc	64 b	90 abc	69 c	123 abc			
5	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 42	FL OZ/A	VEPOST	A A	85 bcd	86 bc	86 c	58 b	94 ab	65 c	116 bcd			
6	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 50.5	FL OZ/A	VEPOST	A A	86 abc	91 ab	89 bc	56 b	88 bcd	80 abc	112 cd			
7	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 67.4	FL OZ/A	VEPOST	A A	85 bcd	86 bc	91 abc	61 b	91 abc	78 bc	128 abc			
8	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	VEPOST	A A	85 bcd	95 a	93 ab	89 a	86 cd	45 d	102 d				
	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	10 d PRFLD	B B											
9	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 25.3	FL OZ/A	VEPOST	A A	86 abc	92 a	95 a	95 a	91 abc	64 c	124 abc			
	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	VEPOST	A A											
10	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 33.7	FL OZ/A	VEPOST	A A	84 cd	95 a	95 a	90 a	93 abc	86 ab	125 abc			
	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	VEPOST	A A											
11	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 42	FL OZ/A	VEPOST	A A	88 abc	95 a	95 a	95 a	94 ab	91 ab	128 abc			
	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	VEPOST	A A											
12	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 50.5	FL OZ/A	VEPOST	A A	89 ab	95 a	95 a	90 a	94 ab	90 ab	135 ab			
	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	VEPOST	A A											
13	Newpath Prowl H2O Agri-Dex	2 L	AS 3.8 CS	6 67.4	FL OZ/A	VEPOST	A A	90 a	95 a	95 a	93 a	95 a	95 a	138 a			
	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	VEPOST	A A											
14	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	VEPOST	A A	89 ab	91 ab	93 ab	95 a	81 d	46 d	101 d				
	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	VEPOST	A A											
	Newpath Agri-Dex	2 L	AS 19.2	6 FL OZ/A	10 d PRFLD	B B											
	Beyond Agri-Dex	1 L	AS 19.2	5 FL OZ/A	10 d PRFLD	B C											
	Beyond Agri-Dex	1 L	AS 19.2	5 FL OZ/A	PD+14 d	C											
	Beyond Agri-Dex	1 L	AS 19.2	5 FL OZ/A	PD+14 d	C											
Standard Deviation						2.8	3.3	3.5	11.1	4.5	10.4	12.4					
CV						3.52	3.89	4.14	15.53	5.5	16.69	11.67					

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

## Mississippi State University Delta Research and Extension Center Rice Tolerance to Midseason Regiment Applications

Trial ID: 06-WS-23

Location: Shaw, MS

### **Objective:**

To determine the rice response to Regiment applications made after the beginning of reproductive growth.

### **Conclusions:**

Regiment is currently labeled for application to rice from the 3-leaf growth stage until internode elongation. This experiment determined the rice tolerance to late-season applications of Regiment. Regiment at 0.5 OZ/A (labeled rate) and 1OZ/A (twice the labeled rate) was applied to rice at 0.5-in and 2-in internode elongation. Although this experiment has only been conducted for one year, applications of Regiment after internode elongation did not reduce rice yield compared with the nontreated check.

### **Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cheniere	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 17-Apr-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 7.5 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 80 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 29-Apr-06
<b>Harvest Date:</b> 8-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

### **Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

### **Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Unit
1.	9-May-06	Stam	4	EC	4	QT/A
2.	9-May-06	Facet	75	DF	0.5	LB/A
3.	9-May-06	Prowl H2O	3.8	CS	2	PT/A
4.	4-Jun-06	Aim	2	EC	1	FL OZ/A
5.	4-Jun-06	Permit	75	DG	0.75	OZ/A
6.	4-Jun-06	Stam	4	EC	3	QT/A
7.	4-Jun-06	Karate Z	2.08	EC	2	FL OZ/A
8.	8-Jun-06	Urea (46:0:0)	46	GR	325	LB/A

### **Soil Description**

NA

### **Moisture Conditions**

**Overall Moisture Conditions:** NA

**Closest Weather Station:** NA

	Date	Type
1.	8-Jun-05	Flood
2.	25-Aug-06	Drain

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to Midseason Regiment Applications**

Trial ID: 06-WS-23

Location: Shaw, MS

**Application Description**

	<b>A</b>	<b>B</b>
<b>Application Date:</b>	26-Jun-06	12-Jul-06
<b>Time of Day:</b>	2:00 pm	10:00 am
<b>Application Method:</b>	Broadcast	Broadcast
<b>Application Timing:</b>	0.5-in IE	2-in IE
<b>Application Placement:</b>	Foliar	Foliar
<b>Applied By:</b>	JAB, LCV	JAB, LCV
<b>Air Temperature, Unit:</b>	92 F	94 F
<b>% Relative Humidity:</b>	50	68
<b>Wind Velocity, Unit:</b>	4 MPH	4 MPH
<b>Wind Direction:</b>	NW	SW
<b>Dew Presence (Y/N):</b>	N	N
<b>Soil Moisture:</b>	Flood	Flood
<b>% Cloud Cover:</b>	40	25

**Crop Stage At Each Application**

	<b>A</b>	<b>B</b>
<b>Crop 1 Code:</b>	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	.5-in IE	2-in IE
<b>Stage Minimum, Percent:</b>	.5-in IE	2-in IE
<b>Stage Maximum, Percent:</b>	.5-in IE	2-in IE
<b>Height, Unit:</b>	17 IN	25
<b>Height Minimum, Maximum:</b>	15 18	24 26

**Application Equipment**

	<b>A</b>	<b>B</b>
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	24 PSI	25 PSI
<b>Nozzle Type:</b>	TT	TT
<b>Nozzle Size:</b>	11001	11001
<b>Nozzle Spacing, Unit:</b>	16 IN	16 IN
<b>Boom Length, Unit:</b>	64 IN	64 IN
<b>Boom Height, Unit:</b>	18 IN	18 IN
<b>Ground Speed, Unit:</b>	2 MPH	2 MPH
<b>Carrier:</b>	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA

**Mississippi State University Delta Research and Extension Center**  
**Rice Tolerance to Midseason Regiment Applications**

Trial ID: 06-WS-23

Location: Shaw, MS

Crop Name							Rice 5-Jul-06	Rice 12-Jul-06	Rice 26-Jul-06	Rice 8-Sep-06	
							Rice Injury %	Rice Injury %	Rice Injury %	Yield bu/A	
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Unit	Growth Stage	Appl Code	9 9 9 DA-A	16 0 16 DA-A	30 14 14 DA-B	
1	Nontreated						1	0 a	0 a	0 a	200 b
2	Regiment Dyne-A-Pak	80 AJ	WP AJ	0.5 28.8	OZ/A FL OZ/A	0.5-in IE 0.5-in IE	A A	0 a	0 a	0 a	220 a
3	Regiment Dyne-A-Pak	80 AJ	WP AJ	1.0 28.8	OZ/A FL OZ/A	0.5-in IE 0.5-in IE	A A	0 a	0 a	0 a	201 b
4	Regiment Dyne-A-Pak	80 AJ	WP AJ	0.5 28.8	OZ/A FL OZ/A	2-in IE 2-in IE	B B	0 a	0 a	0 a	204 b
5	Regiment Dyne-A-Pak	80 AJ	WP AJ	1.0 28.8	OZ/A FL OZ/A	2-in IE 2-in IE	B B	0 a	0 a	0 a	192 b
Standard Deviation							0.0	0.0	0.0	8.4	
CV							0.0	0.0	0.0	4.11	

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

**Mississippi State University Delta Research and Extension Center**  
**Quadris, Quilt, and Tilt Programs in Rice**

Trial ID: 06-WS-24

Location: DREC

**Objectives:**

To evaluate fungicides in Mississippi rice production.

**Conclusions:**

This experiment compared applications of Quilt and Tilt applied at the booting rice stage and following Quadris applied 7 days following panicle differentiation (PD+7). Although plots were inoculated twice with *Rhizoctonia solani*, no sheath blight developed due to the hot, dry conditions that persisted during July. Therefore, no sheath blight control observations were collected. Rice yields were higher when fungicides were applied compared with the nontreated check; however, whole grain and total milling were not influenced by fungicide applications.

**Crop Description**

<b>Crop 1:</b> ORYSA <i>Oryza sativa</i>	Rice
<b>Variety:</b> Cheniere	<b>Description:</b> Conventional variety
<b>BBCH Scale:</b> BRIC	<b>Planting Date:</b> 4-May-06
<b>Planting Method:</b> Drill	<b>Rate, Unit:</b> 80 LB/A
<b>Depth, Unit:</b> 1 IN	
<b>Row Spacing, Unit:</b> 8 IN	
<b>Seed Bed:</b> Smooth	<b>Soil Temperature, Unit:</b> 71 F
<b>Soil Moisture:</b> Adequate	<b>Emergence Date:</b> 13-May-06
<b>Harvest Date:</b> 12-Sep-06	<b>Harvest Equipment:</b> Mitsubishi VM-13
<b>Harvested Width, Unit:</b> 2.66 FT	<b>Harvested Length, Unit:</b> 15 FT
<b>% Standard Moisture:</b> 12.0	

**Site and Design**

<b>Plot Width, Unit:</b> 5.33 FT	<b>Site Type:</b> Field
<b>Plot Length, Unit:</b> 15 FT	<b>Tillage Type:</b> Conventional
<b>Replications:</b> 4	<b>Study Design:</b> Randomized Complete Block
<b>% Slope:</b> 0.1	<b>Soil Drainage:</b> G Good

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Unit
1.	4-May-06	Command	3	ME	1.33	PT/A
2.	4-May-06	Aim	2	EC	1	FL OZ/A
3.	4-May-06	Agri-Dex		L	1.67	% V/V
4.	1-Jun-06	SuperWham	4	EC	4	QT/A
5.	1-Jun-06	Facet	75	DF	0.67	LB/A
6.	1-Jun-06	Permit	75	DF	1	OZ/A
7.	1-Jun-06	Agri-Dex		L	1.67	% V/V
8.	1-Jun-06	Urea (46:0:0)	46	GR	325	LB/A

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06.

**Mississippi State University Delta Research and Extension Center**  
**Quadrис, Quilt, and Tilt Programs in Rice**

Trial ID: 06-WS-24

Location: DREC

**Soil Description**

% Sand: 11    % OM: 2.1    Texture: Silty clay  
% Silt: 30    pH: 8.2    Soil Name: Sharkey  
% Clay: 59    CEC: 34.2    Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5    **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	3-Jun-06	Flood
3.	31-Aug-06	Drain

**Application Description**

	A	B
<b>Application Date:</b>	10-Jul-06	31-Jul-06
<b>Time of Day:</b>	3:00 pm	8:00 am
<b>Application Method:</b>	Broadcast	Broadcast
<b>Application Timing:</b>	PD+7	Boot
<b>Application Placement:</b>	Foliar	Foliar
<b>Applied By:</b>	JAB, LCV	JAB, LCV
<b>Air Temperature, Unit:</b>	92 F	86 F
<b>% Relative Humidity:</b>	71	89
<b>Wind Velocity, Unit:</b>	3 MPH	4 MPH
<b>Wind Direction:</b>	SW	SW
<b>Dew Presence (Y/N):</b>	N	Y
<b>Soil Moisture:</b>	Flood	Flood
<b>% Cloud Cover:</b>	80	0

**Crop Stage At Each Application**

	A	B
<b>Crop 1 Code:</b>	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	PD+10	Boot
<b>Height, Unit:</b>	32 IN	40 IN
<b>Height Minimum, Maximum:</b>	29 33	38 42

**Mississippi State University Delta Research and Extension Center**  
**Quadrис, Quilt, and Tilt Programs in Rice**

Trial ID: 06-WS-24

Location: DREC

**Application Equipment**

	<b>A</b>	<b>B</b>
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	24 PSI	24 PSI
<b>Nozzle Type:</b>	TT	TT
<b>Nozzle Size:</b>	11001	11001
<b>Nozzle Spacing, Unit:</b>	16 IN	16 IN
<b>Boom Length, Unit:</b>	64 IN	64 IN
<b>Boom Height, Unit:</b>	18 IN	18 IN
<b>Ground Speed, Unit:</b>	2 MPH	2 MPH
<b>Carrier:</b>	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA

**Date      By      Notes**

30-Jun-06 JAB      Plots were inoculated with *Rhizoctonia solani*.

7-Jul-06 JAB      No sheath blight had developed, so plots were inoculated a second time with *Rhizoctonia solani*.

10-Jul-06 JAB      No sheath blight present at PD+7 application.

31-Jul-06 JAB      No sheath blight present at Boot application.

# **Mississippi State University Delta Research and Extension Center Quadris, Quilt, and Tilt Programs in Rice**

Trial ID: 06-WS-24

Location: DREC

Crop Name Rating Date Rating Data Type Rating Unit								Rice 50% Head DAE	Rice 12-Sep-06 Yield bu/A	Rice 2-Nov-06 Total Mill %	Rice 2-Nov-06 Whole Mill %
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Unit	Appl Code	2	5	8	9
1	Nontreated							80	a	158	b
2	Quadrис Quilt	2.08 1.67	SC SC	6 14	FL OZ/A FL OZ/A	PD + 7 Boot	A B	80	a	183	a
3	Quadrис Tilt	2.08 3.6	SC EC	6 4	FL OZ/A FL OZ/A	PD + 7 Boot	A B	80	a	177	a
Standard Deviation								0.0	10.3	0.4	1.7
CV								0.0	5.96	0.6	2.68

Means followed by same letter do not significantly differ ( $P=.05$ , Duncan's New MRT)

# Mississippi State University Delta Research and Extension Center

## Fungicide Program Evaluation

Trial ID: 6906

Location: DREC

**Objectives:**

To compare rice response to fungicide sources, application rates, and timings.

**Conclusions:**

This experiment evaluated fungicide programs targeting different rice diseases on a conventional (Cheniere) and Clearfield (CL131) rice variety. Although plots were inoculated with *Rhizoctonia solani*, no sheath blight developed due to the hot, dry conditions that persisted during July. Therefore, no sheath blight control observations were collected. For each variety, no differences in maturity, rice yield, whole grain, or total milling were detected.

**Crop Description**

**Crop 1:** ORYSA *Oryza sativa*

Rice

**Variety:** Various

**BBCH Scale:** BRIC

**Planting Method:** Drill                   **Rate, Unit:** 80 LB/A

**Depth, Unit:** 1 IN

**Row Spacing, Unit:** 8 IN

**Seed Bed:** Smooth                   **Soil Temperature, Unit:** 71 F

**Soil Moisture:** Adequate                   **Emergence Date:** 13-May-04

**Harvest Date:** 12-Sep-06                   **Harvest Equipment:** Mitsubishi VM-13

**Harvested Width, Unit:** 2.66 FT                   **Harvested Length, Unit:** 15 FT

**% Standard Moisture:** 12.0

**Site and Design**

**Plot Width, Unit:** 5.33 FT                   **Site Type:** Field

**Plot Length, Unit:** 15 FT                   **Tillage Type:** Conventional

**Replications:** 4                           **Study Design:** Randomized Complete Block (Factorial treatment arrangement)

**% Slope:** 0.1                           **Soil Drainage:** G Good

**Maintenance**

No.	Date	Maintenance Treatment Name	Form Conc	Form Type	Rate	Rate Unit
1.	4-May-06	Command	3	ME	1.33	PT/A
2.	4-May-06	Aim	2	EC	1.67	FL OZ/A
3.	4-May-06	Agri-Dex		L	1.67	% V/V
4.	1-Jun-06	SuperWham	4	EC	4	QT/A
5.	1-Jun-06	Facet	75	DF	0.67	LB/A
6.	1-Jun-06	Permit	75	DF	1	OZ/A
7.	1-Jun-06	Agri-Dex		L	1.67	% V/V
8.	1-Jun-06	Urea (46:0:0)	46	GR	325	LB/A

**Field Prep./Maintenance:**

Tillage - Triple-K, 3-May-06.

**Mississippi State University Delta Research and Extension Center**  
**Fungicide Program Evaluation**

Trial ID: 6906

Location: DREC

**Soil Description**

% Sand: 11 % OM: 2.1 Texture: Silty clay  
% Silt: 30 pH: 8.2 Soil Name: Sharkey  
% Clay: 59 CEC: 34.2 Fert. Level: Excellent

**Additional Measured Elements**

Element	Quantity	Unit
P	246	LB/A
K	587	LB/A
Ca	9545	LB/A
Mg	2307	LB/A
S	299	LB/A
Zn	4.5	LB/A

**Moisture Conditions**

**Overall Moisture Conditions:** Below Normal

**Closest Weather Station:** MSU-DREC

**Distance:** 0.5 **Unit:** MI

	Date	Type
1.	22-May-06	Flush
2.	3-Jun-06	Flood
3.	31-Aug-06	Drain

**Application Description**

	A	B
<b>Application Date:</b>	14-Jul-06	31-Jul-06
<b>Time of Day:</b>	7:30 am	7:00 am
<b>Application Method:</b>	Broadcast	Broadcast
<b>Application Timing:</b>	PD+14	PD+28
<b>Application Placement:</b>	Foliar	Foliar
<b>Applied By:</b>	JAB	JAB, LCV
<b>Air Temperature, Unit:</b>	84 F	86 F
<b>% Relative Humidity:</b>	73	89
<b>Wind Velocity, Unit:</b>	4 MPH	3 MPH
<b>Wind Direction:</b>	SW	SW
<b>Dew Presence (Y/N):</b>	Y	Y
<b>Soil Moisture:</b>	Flood	Flood
<b>% Cloud Cover:</b>	0	0

**Crop Stage At Each Application**

	A	B
<b>Crop 1 Code:</b>	ORYSA	ORYSA
<b>Stage Majority, Percent:</b>	PD+14	Boot
<b>Stage Minimum, Percent:</b>	PD+14	Boot
<b>Stage Maximum, Percent:</b>	PD+14	Boot
<b>Height, Unit:</b>	33 IN	40 IN
<b>Height Minimum, Maximum:</b>	31 35	38 42

**Mississippi State University Delta Research and Extension Center**  
**Fungicide Program Evaluation**

Trial ID: 6906

Location: DREC

**Application Equipment**

	<b>A</b>	<b>B</b>
<b>Appl. Equipment:</b>	CO2 backpack	CO2 backpack
<b>Operating Pressure, Unit:</b>	24 PSI	24 PSI
<b>Nozzle Type:</b>	TT	TT
<b>Nozzle Size:</b>	11001	11001
<b>Nozzle Spacing, Unit:</b>	16 IN	16 IN
<b>Boom Length, Unit:</b>	64 IN	64 IN
<b>Boom Height, Unit:</b>	18 IN	18 IN
<b>Ground Speed, Unit:</b>	2 MPH	2 MPH
<b>Carrier:</b>	Water	Water
<b>Spray Volume, Unit:</b>	15 GPA	15 GPA

**Date      By      Notes**

30-Jun-06 JAB      Plots were inoculated with *Rhizoctonia solani*.

7-Jul-06 JAB      No sheath blight had developed, so plots were inoculated a second time with *Rhizoctonia solani*.

14-Jul-06 JAB      No sheath blight present at PD+14 application.

31-Jul-06 JAB      No sheath blight present at Boot application.

**Mississippi State University Delta Research and Extension Center**  
**Fungicide Program Evaluation**

Trial ID: 6906

Location: DREC

Crop Name								Rice	Rice	Rice	Rice
Rating Date								50% Head	12-Sep-06	1-Nov-06	1-Nov-06
Rating Data Type								DAE	Yield	Total Mill	Whole Mill
Trt No.	Treatment Name	Form Conc	Form Type	Other Rate	Other Rate	Growth Unit	Appl Stage	Appl Code			
1	Cheniere Nontreated							2	5	8	9
2	Cheniere Quadris	2.08 SC	6.15	FL OZ/A	PD+14	A		82 a	179 ab	72 a	64 abc
3	Cheniere Quadris	2.08 SC	12.3	FL OZ/A	PD+14	A		81 a	175 abc	71 abc	63 a-e
4	Cheniere Quadris Stratego	2.08 SC 2.08 SC	6.15 6.8	FL OZ/A	PD+14 PD+28	A B		82 a	189 a	71 a-e	63 a-e
5	Cheniere Stratego	2.08 SC	6.8	FL OZ/A	PD+28	B		81 a	185 a	71 ab	64 a-d
6	Cheniere Quilt	1.67 SC	8.4	FL OZ/A	PD+28	B		82 a	179 ab	72 a	64 ab
7	Cheniere Quadris Quilt	2.08 SC 1.67 SC	6.15 8.4	FL OZ/A	PD+14 PD+28	A B		81 a	181 a	71 a-d	63 a-e
8	Cheniere Quadris Tilt	2.08 SC 3.6 EC	12.3 3.9	FL OZ/A	PD+14 PD+28	A B		81 ab	188 a	71 a-d	64 a-d
9	Cheniere Quadris Tilt	2.08 SC 3.6 EC	6.15 3.9	FL OZ/A	PD+14 PD+28	A B		81 a	184 a	71 ab	65 ab
10	Cheniere Quilt	1.67 SC	7.7	FL OZ/A	PD+28	B		82 a	189 a	72 a	63 a-e
11	CL131 Nontreated							79 c	154 d	70 de	59 b-f
12	CL131 Quadris	2.08 SC	6.15	FL OZ/A	PD+14	A		78 c	157 d	70 de	57 c-f
13	CL131 Quadris	2.08 SC	12.3	FL OZ/A	PD+14	A		79 bc	160 cd	70 de	57 Ef
14	CL131 Quadris Stratego	2.08 SC 2.08 SC	6.15 6.8	FL OZ/A	PD+14 PD+28	A B		79 c	156 d	71 b-e	54 F
15	CL131 Stratego	2.08 SC	6.8	FL OZ/A	PD+28	B		79 c	153 d	71 b-e	54 F
16	CL131 Quilt	1.67 SC	8.4	FL OZ/A	PD+28	B		79 bc	156 d	70 e	57 c-f
17	CL131 Quadris Quilt	2.08 SC 1.67 SC	6.15 8.4	FL OZ/A	PD+14 PD+28	A B		79 c	161 cd	70 cde	57 d-f
18	CL131 Quadris Tilt	2.08 SC 3.6 EC	12.3 3.9	FL OZ/A	PD+14 PD+28	A B		79 c	164 bcd	70 de	54 F
19	CL131 Quadris Tilt	2.08 SC 3.6 EC	6.15 3.9	FL OZ/A	PD+14 PD+28	A B		78 c	153 d	70 e	53 F
20	CL131 Quilt	1.67 SC	7.7	FL OZ/A	PD+28	B		79 c	151 d	70 de	54 ff
Standard Deviation								0.9	9.9	0.5	3.6
CV								1.08	5.82	0.74	6.11

Means followed by same letter do not significantly differ (P=.05, Duncan's New MRT)

## **Appendix I**

### **Abbreviations**

## Abbreviations Used in Rice Weed and Pest Management Research

<u>Abbreviation</u>	<u>Definition</u>
A	Acre
AI	Air induction nozzle
ASN	As needed
bu/A	Bushels per acre
Ca	Calcium
COC	Crop oil concentrate
D or d	day
DA	Days after
DPRE	Delayed preemergence application made after planting but prior to crop emergence
DAE	Days after emergence
DAP	Days after planting
DAT	Days after treatment
DG	Drift guard nozzle
DPP	Days prior to planting
EPOST	Early postemergence application made to rice in the one- to two-leaf growth stage
F	Fahrenheit
FL OZ/A	Fluid ounces product per acre
FT	Feet
FT2	Square feet
GPA	Gallons per acre
Head	Crop or weed panicle visible
IE	Internode elongation
IN or in	Inches
lb	Pounds
LB/A	Pounds product per acre
LB A/A or lb ai/A	Pounds active ingredient per acre
Ldg-Rate	Lodging rate in percent
Ldg-Type	Lodging type on a scale of 1 to 5 where 1 = slightly leaning and 5 = complete
lf	Leaf
K	Potassium
LPOST	Late postemergence application made to rice in the four-leaf to one-tiller growth stage
Mg	Magnesium
MI	Miles
MPH	Miles per hour
MPOST	Mid postemergence application made to rice in the three- to four-leaf growth stage
NA	Information not available/applicable
NIS	Non-ionic surfactant
OZ/A	Ounces product per acre
P	Phosphorus
PD	Panicle differentiation
PI	Panicle initiation
PRE	Preemergence application made prior to or at planting
PRFLD	Prior to permanent flood establishment
PTFLD	After permanent flood establishment
PT/A	Pints product per acre
QT/A	Quarts product per acre
S	Sulfur
til	Tillers
Total Mill	Percent of rice kernels left after milling
TT	Turbo TeeJet nozzle
UAN	Urea-ammonium nitrate solution
VS	Visible stainless steel nozzle
Whole Mill	Percent of unbroken kernels left after milling
XR	Extended range nozzle
Zn	Zinc
50% Head	Number of days from crop emergence until 50% panicle exertion

## Common Rice Weeds of Mississippi

<u>Bayer Code</u>	<u>Common Name</u>	<u>Scientific Name</u>
AESIN	Indian jointvetch	<i>Aeschynomene indica</i>
AESVI	northern jointvetch	<i>Aeschynomene virginica</i>
ALRPH	alligatorweed	<i>Alternanthera philoxeroides</i>
AMMCO	purple ammannia (redstem)	<i>Ammannia coccinea</i>
BRAPP	broadleaf signalgrass	<i>Brachiaria platyphylla</i>
CNPPA	Texasweed	<i>Caperonia palustris</i>
COMDI	spreading dayflower	<i>Commelina diffusa</i>
CYPIR	rice flatsedge	<i>Cyperus iria</i>
CYPES	yellow nutsedge	<i>Cyperus esculentus</i>
ECHCG	barnyardgrass	<i>Echinochloa crus-galli</i>
ECLAL	eclipta	<i>Eclipta prostrata</i>
HETLI	ducksalad	<i>Heteranthera limosa</i>
IPOHE	ivyleaf morningglory	<i>Ipomoea hederacea</i>
IPOLA	pitted morningglory	<i>Ipomoea lacunosa</i>
LEFFA	bearded sprangletop (loosehead)	<i>Leptochloa fascicularis</i>
LEFPA	Amazon sprangletop (tighthead)	<i>Leptochloa panicoides</i>
ORYSA	red rice	<i>Oryza sativa</i>
PANDI	fall panicum	<i>Panicum dichotomiflorum</i>
PANRA	browntop millet	<i>Brachiaria ramosa</i>
POLPE	ladysthumb	<i>Polygonum aviculare</i>
POLPY	Pennsylvania smartweed	<i>Polygonum pensylvanicum</i>
SEBEX	hemp sesbania	<i>Sesbania exaltata</i>

## **Appendix II**

### **List of Chemicals**

## List of Herbicides

<u>Trade Name</u>	<u>Formulation</u>	<u>Manufacturer</u>	<u>Common Name</u>	<u>Chemical Name</u>
Aim	2 EC	FMC	carfentrazone	ethyl $\alpha$ ,2-dichloro-5-[4-(difluoromethyl)-4,5-dihydro-3-methyl-5-oxo-1H-1,2,4-triazol-1-yl]-4-fluorobenzene propanoate
Beyond	1 AS	BASF	imazamox	2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-(methoxymethyl)-3-pyridinecarboxylic acid
Clearpath	75 DF	BASF	quinclorac (0.62 lb ai/lb) + imazethapyr (0.13 lb ai/lb)	3,7-dichloro-8-quinolinecarboxylic acid + ( $\pm$ )-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid
Clincher SF	2.38 EC	Dow AgroSciences	cyhalofop-butyl	2-[4-(4-cyano-2-fluorophenoxy)phenoxy] propanoic acid, butyl ester, (R)
Command	3 ME	FMC	clomazone	2-(2-chlorophenyl)methyl-4,4-dimethyl-3-isoxazolidinone
Facet	75 DF	BASF	quinclorac	3,7-dichloro-8-quinolinecarboxylic acid
Grandstand R	3 SL	Dow AgroSciences	triclopyr	3,5,6-trichloro-2-pyridinyloxyacetic acid
Grasp	2 SC	Dow AgroSciences	penoxsulam	(2-(2,2-difluoroethoxy)-6-trifluoromethyl-N-(5,8-dimethoxy[1,2,4]triazolo-[1,5c]pyrimidin-2-yl)benzenesulfonamide)
Londax	60 DF	DuPont	bensulfuron	methyl-2-[[[[[4,6-dimethoxypyrimidin-2-yl)amino]-carbonyl]amino]sulfonyl]methyl] benzoate
Newpath	2 AS	BASF	imazethapyr	( $\pm$ )-2-[4,5-dihydro-4-methyl-4-(1-methylethyl)-5-oxo-1H-imidazol-2-yl]-5-ethyl-3-pyridinecarboxylic acid
Permit	75 DF	Gowan	halosulfuron	methyl 5-{[(4,6-dimethoxy-2-pyrimidinyl) amino] carbonylamino-sulfonyl}-3-chloro-1-methyl-1-H-pyrazole-4-carboxylate
Prowl EC	3.3 EC	BASF	pendimethalin	N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine
Prowl H2O	3.8 CS	BASF	pendimethalin	N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine
Regiment	80 WP	Valent	bispyribac-sodium	sodium 2,6-bis [4,6-dimethoxy pyrimidin-2-yl)oxy] benzoate
Ricestar HT	0.58 EC	Bayer	fenoxyaprop-p-ethyl	( $\pm$ )-ethyl 2-[4-[(6-chloro-2-benzoxazolyl) oxy]phenoxy]propanoate
Stam M-4	4 EC	Dow AgroSciences	propanil	3',4'-dichloropropionanilide

### List of Herbicides (continued)

<u>Trade Name</u>	<u>Formulation</u>	<u>Manufacturer</u>	<u>Common Name</u>	<u>Chemical Name</u>
Super Wham	4 EC	RiceCo	propanil	3',4'-dichloropropionanilide
Ultra Blazer	2 L	BASF	acifluorfen	sodium 5-[2-chloro-4-(trifluoromethyl)phenoxy]-2-nitrobenzoate
NA	10 WP	DuPont	DPX-KF081	NA
NA	50 WG	Isagro	IR5878 (orthosulfamuron)	NA
NA	75 DG	Valent	V-10142	NA

### List of Fungicides

<u>Trade Name</u>	<u>Formulation</u>	<u>Manufacturer</u>	<u>Common Name</u>	<u>Chemical Name</u>
Quadris	2.08 SC	Syngenta	azoxystrobin	methyl (E)-2-{2-[6-(2-cyanophenoxy) pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate
Quilt	1.67 SC	Syngenta	azoxystrobin (1.04 lb ai/gal) + propiconazole (0.63 lb ai/gal)	methyl (E)-2-{2-[6-(2-cyanophenoxy) pyrimidin-4-yloxy]phenyl}-3-methoxyacrylate + 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole
Stratego	2.08 SC	Bayer	trifloxystrobin (1.04 lb ai/gal) + propiconazole (0.63 lb ai/gal)	methyl 2-methoxyimino-2-[2-[1-[3-(trifluoromethyl)phenyl] ethylideneaminoxyethyl]phenyl]-acetate + 1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole
Tilt	3.6 EC	Syngenta	propiconazole	1-[[2-(2,4-dichlorophenyl)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4-triazole

### List of Spray Adjuvants

<u>Trade Name</u>	<u>Formulation</u>	<u>Manufacturer</u>	<u>Common Name</u>	<u>Composition</u>
Agri-Dex	99%	Helena	crop oil concentrate	paraffin base petroleum oil (84%), polyol fatty acid esters and polyethoxylated derivatives (15%)
Dyne-A-Pak	100%	Helena	methylated seed oil	blend of alkanolamides, alkanoates, trisiloxane, carbamides, methylated seed oil, and urea-ammonium nitrate solution
Kinetic HV	99%	Helena	nonionic surfactant	blend of polyalkyleneoxide modified polydimethylsiloxane and polyoxypropylene-polyoxyethylene block copolymers
Induce	90%	Helena	nonionic surfactant	blend of alkyl aryl polyoxylkane ether and free fatty acids
Urea-ammonium nitrate	33%	NA	fertilizer	Blend of urea and ammonium nitrate solution

## **Appendix III**

### **Rainfall Data**

## Rainfall Data for the Delta Research and Extension Center in 2006

<b>Day of month</b>	<b>May</b>	<b>June</b>	<b>July</b>	<b>August</b>	<b>September</b>
1	0	0.03	0	0	0
2	0	0.48	0	0	0
3	0	0	0	0	0
4	0	0	0	0	0
5	0.36	0	0.37	0	0
6	0	0	0.78	0	0
7	0.19	0	0	0	0
8	0	0	0	0	0
9	0	0	0	0	0
10	0.83	0	0	0	0
11	0.68	0	0	0	0
12	0	0	0	1.11	0.06
13	0	0	0	0.38	0.13
14	0	0	0	0	0
15	0	0	0	0	0
16	0	0	0.63	0	0
17	0.22	0	0	0	0
18	0	0	0	0	0.64
19	0	0.58	0	0	0.19
20	0	0	0	0	0
21	0	0	0	0	0
22	0	0	0	0.01	0
23	0	0	0	0	0
24	0	0.45	0	0	1.70
25	0	0.21	0	0	0
26	0	0.06	0	0	0
27	0	0	0	0	0
28	0	0	0	0	0
29	0	0	0	0	0
30	0.52	0	0	0.01	0
31	0.06	-	0	0	-
<b>Total</b>	<b>2.86</b>	<b>1.81</b>	<b>1.78</b>	<b>1.51</b>	<b>2.72</b>

# Mississippi State UNIVERSITY



*Printed on Recycled Paper*

Mention of a trademark or proprietary product does not constitute a guarantee or warranty of the product by the Mississippi Agricultural and Forestry Experiment Station and does not imply its approval to the exclusion of other products that also may be suitable.

Discrimination based upon race, color, religion, sex, national origin, age, disability, or veteran's status is a violation of federal and state law and MSU policy and will not be tolerated. Discrimination based upon sexual orientation or group affiliation is a violation of MSU policy and will not be tolerated.

**msu**cares.com