

LSU Northeast Research Station

Evaluation of Harmony Extra, Harmony GT and Express for weed control in rice.

Trial ID: MR06R105
Location:

Study Dir.:
Investigator: Bill Williams

GENERAL TRIAL INFORMATION

Investigator: Bill Williams

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	ORYRU	Wild red rice	Oryza rufipogon
2.	ECHCG	Common barnyardgrass	Echinochloa crus-galli
3.	SEBEX	Hemp sesbania	Sesbania exaltata
4.	LEFPA	Tighthead sprangletop	Leptochloa panicoides
5.	BRAPP	Broadleaf signalgrass	Brachiaria platyphylla

Crop 1: ORYSA RICE

Variety: Cocodrie

Planting Date: 6/1/06

Planting Method: DRILLED

Rate: 90 LB/A

Depth: 0.25 IN

Row Spacing: 8 IN

Spacing Within Row: 5 IN

Seed Bed: MEDIUM

Soil Moisture: DRY

SITE AND DESIGN

Plot Width, Unit: 6.67 FT Plot Length, Unit: 15 FT Reps: 3

Site Type: RICE PADDY

Tillage Type: CONVENTIONAL-TILL

Study Design: RANDOMIZED COMPLETE BLOCK

SOIL DESCRIPTION

% Sand: 14

% OM: 1.3

Texture: Silt loam

% Silt: 70

pH: 5.8

Soil Name: gigger silt loam

% Clay: 16

CEC: 5.8

Fert. Level: EXCELLENT

MOISTURE CONDITIONS

	Date	Amount	Unit	Type
1.	6/8/06			Flush
2.	6/13/06			Flush
3.	6/17/06	0.05	IN	RAIN
4.	6/18/06	0.01	IN	RAIN
5.	6/19/06	0.03	IN	RAIN
6.	6/21/06	0.01	IN	RAIN
7.	6/23/06	0.22	IN	RAIN
8.	6/24/06	0.01	IN	RAIN
9.	7/2/06	0.01	IN	RAIN
10.	7/3/06			Fertilize
11.	7/3/06	0.34	IN	RAIN
12.	7/4/06	0.38	IN	RAIN
13.	7/5/06			Flood
14.	7/5/06	0.33	IN	RAIN
15.	7/6/06	0.06	IN	RAIN
16.	7/7/06	0.01	IN	RAIN
17.	7/16/06	0.07	IN	RAIN
18.	7/19/06	1.25	IN	RAIN
19.	7/20/06	0.01	IN	RAIN
20.	7/22/06	1.37	IN	RAIN
21.	7/23/06	0.01	IN	RAIN
22.	7/26/06	0.14	IN	RAIN
23.	7/27/06	0.24	IN	RAIN
24.	7/28/06	0.01	IN	RAIN

LSU Northeast Research Station

Overall Moisture Conditions: Dry

Closest Weather Station: Macon Ridge Research Station Distance: 0.25 Unit: MI

APPLICATION DESCRIPTION

	A	B	C
Application Date:	6/1/06	6/10/06	6/16/06
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	1-2 LF	POST
Applic. Placement:	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	92 F	94 F	89 7
% Relative Humidity:	68	63	
Wind Velocity, Unit:	2 S	2 S	4 S
Soil Temp., Unit:	81 F	67 F	81 F
Soil Moisture:	DRY	DRY	DRY
% Cloud Cover:	20	30	20

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ORYSA	ORYSA	ORYSA
Stage Scale:	N/A	2 LF	
Height, Unit:		2 IN	

WEED STAGE AT EACH APPLICATION

	A	B	C
Weed 1 Code, Stage:	ORYRU	ORYRU	ORYRU
Stage Scale:	N/A	1 LF	
Density, Unit:		2 IN	
Weed 2 Code, Stage:	ECHCG	ECHCG	ECHCG
Stage Scale:	N/A	2 LF	
Density, Unit:		.5 IN	
Weed 3 Code, Stage:	SEBEX	SEBEX	SEBEX
Stage Scale:	N/A	COT	
Density, Unit:		.5 IN	
Weed 4 Code, Stage:	LEFPA	LEFPA	LEFPA
Stage Scale:	N/A	1 LF	
Density, Unit:		.25 IN	
Weed 5 Code, Stage:	BRAPP	BRAPP	BRAPP
Stage Scale:	N/A	1 LF	
Density, Unit:		.25 IN	

APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	Backpack	Backpack	Backpack
Operating Pressure:	31	31	31
Nozzle Type:	Greenleaf	Greenleaf	Greenleaf
Nozzle Size:	11002	11002	11002
Nozzle Spacing, Unit:	20 IN	20 IN	20 IN
Nozzles/Row:	4	4	4
Carrier:	WATER	WATER	WATER
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA
Propellant:	CO2	CO2	CO2

LSU Northeast Research Station

Evaluation of Harmony Extra, Harmony GT and Express for weed control in rice

Trial ID: MR06R105

Study Dir.:

Location:

Investigator: Bill Williams

Crop Code	ORYSA VIGOR C REDUCTION	ORYSA VIGOR C REDUCTION	ORYSA VIGOR C REDUCTION	ORYSA INJURY C GENERAL	ORYSA STAND C REDUCTION	ORYSA GRAIN C YIELD	ORYSA GRAIN C YIELD
Part Rated	%	%	%	%	%	lb/pt	BU
Rating Data Type	6/13/06	6/20/06	7/20/06	6/20/06	6/20/06	10/3/06	10/3/06
Rating Unit	12 DA-A	19 DA-A	49 DA-A	19 DA-A	19 DA-A	124 DA-A	124 DA-A
Rating Date							
Trt-Eval Interval							
ARM Action Codes							
# Subsamples, Dec.							TY1 0
Trt Treatment	1	2	3	4	5	6	7
No. Name Rate Unit							
1 Command Arroso 1.3 pt/a 5 qt/a	6.7 a	0.0 a	1.7 a	0.0 a	0.0 a	13.03 a	196 a
2 Command Harmony Extra Arroso 1.3 pt/a 0.5 oz/a 5 qt/a	3.3 a	0.0 a	3.3 a	0.0 a	0.0 a	11.17 a	168 a
3 Command Harmony Extra Arroso 1.3 pt/a 1.0 oz/a 5 qt/a	0.0 a	0.0 a	0.0 a	0.0 a	0.0 a	14.03 a	211 a
4 Command Harmony Extra Arroso 1.3 pt/a 2.0 oz/a 5 qt/a	6.7 a	3.3 a	1.7 a	0.0 a	0.0 a	13.33 a	200 a
5 Command Harmony GT Arroso 1.3 pt/a 0.33 oz/a 5 qt/a	1.7 a	0.0 a	1.7 a	0.0 a	0.0 a	14.00 a	210 a
6 Command Harmony GT Arroso 1.3 pt/a 0.66 oz/a 5 qt/a	1.7 a	0.0 a	1.7 a	0.0 a	0.0 a	13.10 a	197 a
7 Command Harmony GT Arroso 1.3 pt/a 1.33 oz/a 5 qt/a	3.3 a	0.0 a	1.7 a	0.0 a	0.0 a	12.47 a	187 a
8 Command Express Arroso 1.3 pt/a 0.166 oz/a 5 qt/a	3.3 a	0.0 a	0.0 a	0.0 a	0.0 a	13.03 a	196 a
9 Command Express Arroso 1.3 pt/a 0.333 oz/a 5 qt/a	16.7 a	0.0 a	0.0 a	0.0 a	0.0 a	13.60 a	204 a
10 Command Express Arroso 1.3 pt/a 0.666 oz/a 5 qt/a	16.7 a	0.0 a	0.0 a	0.0 a	0.0 a	12.47 a	187 a
11 Command Harmony Extra Arroso 1.3 pt/a 0.5 oz/a	10.0 a	3.3 a	0.0 a	0.0 a	0.0 a	14.43 a	217 a
12 Command Harmony GT Arroso 1.3 pt/a 0.33 oz/a	6.7 a	0.0 a	0.0 a	0.0 a	0.0 a	14.07 a	211 a
13 Command Express Arroso 1.3 pt/a 0.166 oz/a	6.7 a	3.3 a	1.7 a	0.0 a	0.0 a	12.53 a	188 a
14 Command Harmony Extra NIS Arroso 1.3 pt/a 0.5 oz/a 0.25 % v/v 5 qt/a	3.3 a	6.7 a	0.0 a	0.0 a	0.0 a	13.83 a	208 a
15 Command Harmony Extra NIS Arroso 1.3 pt/a 1 oz/a 0.25 % v/v 5 qt/a	3.3 a	10.0 a	0.0 a	0.0 a	0.0 a	13.53 a	203 a
16 Command Harmony GT NIS Arroso 1.3 pt/a 0.33 oz/a 0.25 % v/v 5 qt/a	3.3 a	10.0 a	0.0 a	0.0 a	0.0 a	12.83 a	193 a
17 Command Harmony GT NIS Arroso 1.3 pt/a 0.66 oz/a 0.25 % v/v 5 qt/a	6.7 a	16.7 a	1.7 a	0.0 a	0.0 a	14.23 a	214 a

LSU Northeast Research Station

Crop Code	ORYSA VIGOR C	ORYSA VIGOR C	ORYSA VIGOR C	ORYSA INJURY C	ORYSA STAND C	ORYSA GRAIN C	ORYSA GRAIN C
Part Rated	REDUCTION	REDUCTION	REDUCTION	GENERAL	REDUCTION	YIELD	YIELD
Rating Data Type	%	%	%	%	%	lb/plt	BU
Rating Unit							
Rating Date	6/13/06	6/20/06	7/20/06	6/20/06	6/20/06	10/3/06	10/3/06
Trt-Eval Interval	12 DA-A	19 DA-A	49 DA-A	19 DA-A	19 DA-A	124 DA-A	124 DA-A
ARM Action Codes							TY1
# Subsamples, Dec.							0
Trt Treatment	Rate	Rate	Rate	Rate	Rate	Rate	Rate
No. Name	Unit	Unit	Unit	Unit	Unit	Unit	Unit
18 Command	1.3 pt/a						
Express	0.166 oz/a						
NIS	0.25 % v/v						
Arroso	5 qt/a						
19 Command	1.3 pt/a						
Express	0.333 oz/a						
NIS	0.25 % v/v						
Arroso	5 qt/a						
20 Command	1.3 pt/a						
Arroso	5 qt/a						
LSD (P=.05)	12.51	13.47	4.10	0.00	0.00	2.695	40.5
Standard Deviation	7.58	8.16	2.48	0.00	0.00	1.633	24.6
CV	128.09	244.95	248.24	0.0	0.0	12.37	12.37
Bartlett's X2	24.789	9.304	3.561	0.0	0.0	23.962	23.961
P(Bartlett's X2)	0.131	0.317	0.938	.	.	0.198	0.198
Replicate F	36.571	10.000	2.637	0.000	0.000	3.351	3.350
Replicate Prob(F)	0.0001	0.0003	0.0846	1.0000	1.0000	0.0457	0.0457
Treatment F	1.000	1.000	0.626	0.000	0.000	0.726	0.726
Treatment Prob(F)	0.4823	0.4823	0.8618	1.0000	1.0000	0.7699	0.7700

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes
TY1 = 15.03333*[C6]