

LSU Northeast Research Station

Effect of Ryz-Up on rice root inhibition caused by ALS inhibiting herbicides.

Trial ID: MR06R108
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 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

Overall Moisture Conditions: Dry

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

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APPLICATION DESCRIPTION

	A	B	C
Application Date:	6/1/06	6/20/06	6/27/06
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	1-2 LF	3-4 LF	4-5 LF
Applic. Placement:	BROFOL	BROFOL	BROFOL
Air Temp., Unit:	92 F	93 F	88 F
% Relative Humidity:	68	66	34
Wind Velocity, Unit:	2 S	3 S	7 N
Soil Temp., Unit:	81 F	82 F	86 F
Soil Moisture:	DRY	DRY	DRY
% Cloud Cover:	30	20	0

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ORYSA	ORYSA	ORYSA
Stage Scale:	N/A	4 LF	1 TILL
Height, Unit:		3 IN	8 IN

WEED STAGE AT EACH APPLICATION

	A	B	C
Stage Scale:	N/A		

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

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Trial ID: MR06R108

Study Dir.:

Location:

Investigator: Bill Williams

Crop Code	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA	ORYSA		
Part Rated	PLATOT C	PLATOT C	PLATOT C	PLATOT C	PLATOT C	PLATOT C	STEM C	STEM C	ROOT C	ROOT C		
Rating Data Type	PHYGEN	PHYGEN	VIGRED	VIGRED	VIGRED	VIGRED	STARED	STARED	LENGTH	LENGTH		
Rating Unit	%	%	%	%	%	%	%	%	CM	CM		
Rating Date	6/13/06	6/20/06	7/13/06	7/20/06	7/25/06	7/13/06	7/25/06	7/13/06	7/21/06	7/21/06		
ARM Action Codes												
# Subsamples, Dec.												
Trt No.	Treatment Name	Rate	Unit	1	2	3	4	5	6	7	8	9
1	Command Facet RiceShot	1.33 0.5 4	pt/a lb/a qt/a	40.0 a	0.0 a	0.0 a	3.3 a	0.0 a	0.0 c	0.0 a	6.667 a	33.267 a
2	Command Facet RiceShot Regiment Kinetic	1.33 0.5 4 0.5 0.125	pt/a lb/a qt/a oz/a % v/v	40.0 a	0.0 a	1.7 a	3.3 a	0.0 a	5.0 abc	0.0 a	6.667 a	6.483 a
3	Command Facet RiceShot Regiment Ryz-Up Kinetic	1.33 0.5 4 0.5 1 0.125	pt/a lb/a qt/a oz/a oz/a % v/v	40.0 a	0.0 a	0.0 a	3.3 a	0.0 a	3.3 bc	0.0 a	6.417 a	8.233 a
4	Command Facet RiceShot Regiment Kinetic	1.33 0.5 4 0.75 0.125	pt/a lb/a qt/a oz/a % v/v	40.0 a	0.0 a	3.3 a	3.3 a	0.0 a	5.0 abc	0.0 a	5.833 a	6.700 a
5	Command Facet RiceShot Regiment Ryz-Up Kinetic	1.33 0.5 4 0.75 1 0.125	pt/a lb/a qt/a oz/a oz/a % v/v	40.0 a	0.0 a	1.7 a	3.3 a	0.0 a	6.7 abc	0.0 a	6.250 a	6.650 a
6	Command Facet RiceShot Regiment Kinetic	1.33 0.5 4 1 0.125	pt/a lb/a qt/a oz/a % v/v	40.0 a	0.0 a	1.7 a	3.3 a	0.0 a	0.0 c	0.0 a	5.667 a	5.750 a
7	Command Facet RiceShot Regiment Ryz-Up Kinetic	1.33 0.5 4 1 1 0.125	pt/a lb/a qt/a oz/a oz/a % v/v	40.0 a	0.0 a	0.0 a	1.7 a	0.0 a	10.0 a	0.0 a	7.417 a	6.383 a
8	Command Facet RiceShot Grasp Agridex	1.33 0.5 4 2.0 2.5	pt/a lb/a qt/a oz/a % v/v	40.0 a	0.0 a	0.0 a	0.0 a	0.0 a	3.3 bc	0.0 a	6.583 a	10.333 a
9	Command Facet RiceShot Grasp Ryz-Up Agridex	1.33 0.5 4 2.0 1 2.5	pt/a lb/a qt/a oz/a oz/a % v/v	40.0 a	0.0 a	1.7 a	6.7 a	0.0 a	5.0 abc	0.0 a	5.500 a	4.617 a
10	Command Facet RiceShot Grasp Agridex	1.33 0.5 4 3 2.5	pt/a lb/a qt/a oz/a % v/v	40.0 a	0.0 a	1.7 a	1.7 a	0.0 a	1.7 bc	0.0 a	6.333 a	7.583 a

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Crop Code	ORLYSA	ORLYSA	ORLYSA	ORLYSA	ORLYSA	ORLYSA	ORLYSA	ORLYSA	ORLYSA
Part Rated	PLATOT C	PLATOT C	PLATOT C	PLATOT C	PLATOT C	STEM C	STEM C	ROOT C	ROOT C
Rating Data Type	PHYGEN	PHYGEN	VIGRED	VIGRED	VIGRED	STARED	STARED	LENGTH	LENGTH
Rating Unit	%	%	%	%	%	%	%	CM	CM
Rating Date	6/13/06	6/20/06	7/13/06	7/20/06	7/25/06	7/13/06	7/25/06	7/13/06	7/21/06
ARM Action Codes									
# Subsamples, Dec.									
Trt Treatment	1	2	3	4	5	6	7	8	9
No. Name Rate Unit									
11 Command 1.33 pt/a	40.0 a	0.0 a	0.0 a	1.7 a	0.0 a	1.7 bc	0.0 a	7.417 a	7.000 a
Facet 0.5 lb/a									
RiceShot 4 qt/a									
Grasp 3 oz/a									
Ryz-Up 1 oz/a									
Agridex 2.5 % v/v									
12 Command 1.33 pt/a	40.0 a	0.0 a	3.3 a	5.0 a	0.0 a	1.7 bc	0.0 a	5.583 a	7.017 a
Facet 0.5 lb/a									
RiceShot 4 qt/a									
Grasp 4 oz/a									
Agridex 2.5 % v/v									
13 Command 1.33 pt/a	40.0 a	0.0 a	3.3 a	1.7 a	0.0 a	8.3 ab	0.0 a	6.667 a	8.683 a
Facet 0.5 lb/a									
RiceShot 4 qt/a									
Grasp 4 oz/a									
Ryz-Up 1 oz/a									
Agridex 2.5 % v/v									
LSD (P=.05)	0.00	0.00	3.90	5.24	0.00	4.05	0.00	1.6427	19.6227
Standard Deviation	0.00	0.00	2.31	3.11	0.00	2.40	0.00	0.9748	11.6438
CV	0.0	0.0	163.89	105.45	0.0	60.44	0.0	15.27	127.52
Bartlett's X2	0.0	0.0	3.399	2.222	0.0	4.721	0.0	10.352	110.124
P(Bartlett's X2)	.	.	0.846	0.994	.	0.909	.	0.585	0.001*
Replicate F	0.000	0.000	14.520	0.066	0.000	24.111	0.000	0.673	0.929
Replicate Prob(F)	1.0000	1.0000	0.0001	0.9360	1.0000	0.0001	1.0000	0.5196	0.4087
Treatment F	0.000	0.000	1.000	0.884	0.000	4.944	0.000	1.230	1.207
Treatment Prob(F)	1.0000	1.0000	0.4777	0.5735	1.0000	0.0004	1.0000	0.3199	0.3331

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.

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Crop Code				ORYSA	ORYSA	ORYSA
Part Rated				ROOT C	GRAIN C	GRAIN C
Rating Data Type				LENGTH	YIELD	YIELD
Rating Unit				CM	lb/plt	BU
Rating Date				8/4/06	10/3/06	10/3/06
ARM Action Codes						TY1
# Subsamples, Dec.						0
Trt No.	Treatment Name	Rate	Unit	10	11	12
1	Command Facet RiceShot	1.33 0.5 4	pt/a lb/a qt/a	11.750 ab	10.47 a	157 a
2	Command Facet RiceShot Regiment Kinetic	1.33 0.5 4 0.5 0.125	pt/a lb/a qt/a oz/a % v/v	10.233 ab	11.53 a	173 a
3	Command Facet RiceShot Regiment Ryz-Up Kinetic	1.33 0.5 4 0.5 1 0.125	pt/a lb/a qt/a oz/a oz/a % v/v	11.700 ab	10.27 a	154 a
4	Command Facet RiceShot Regiment Kinetic	1.33 0.5 4 0.75 0.125	pt/a lb/a qt/a oz/a % v/v	11.567 ab	6.97 bc	105 bc
5	Command Facet RiceShot Regiment Ryz-Up Kinetic	1.33 0.5 4 0.75 1 0.125	pt/a lb/a qt/a oz/a oz/a % v/v	9.283 b	8.63 ab	130 ab
6	Command Facet RiceShot Regiment Kinetic	1.33 0.5 4 1 0.125	pt/a lb/a qt/a oz/a % v/v	10.683 ab	10.90 a	164 a
7	Command Facet RiceShot Regiment Ryz-Up Kinetic	1.33 0.5 4 1 1 0.125	pt/a lb/a qt/a oz/a oz/a % v/v	11.833 ab	10.60 a	159 a
8	Command Facet RiceShot Grasp Agridex	1.33 0.5 4 2.0 2.5	pt/a lb/a qt/a oz/a % v/v	11.417 ab	11.57 a	174 a
9	Command Facet RiceShot Grasp Ryz-Up Agridex	1.33 0.5 4 2.0 1 2.5	pt/a lb/a qt/a oz/a oz/a % v/v	11.133 ab	9.03 ab	136 ab
10	Command Facet RiceShot Grasp Agridex	1.33 0.5 4 3 2.5	pt/a lb/a qt/a oz/a % v/v	11.000 ab	6.23 c	94 c
11	Command Facet RiceShot Grasp Ryz-Up Agridex	1.33 0.5 4 3 1 2.5	pt/a lb/a qt/a oz/a oz/a % v/v	10.950 ab	10.13 a	152 a

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Crop Code	ORYSA	ORYSA	ORYSA
Part Rated	ROOT C	GRAIN C	GRAIN C
Rating Data Type	LENGTH	YIELD	YIELD
Rating Unit	CM	lb/plt	BU
Rating Date	8/4/06	10/3/06	10/3/06
ARM Action Codes			TY1
# Subsamples, Dec.			0
Trt Treatment			
No. Name Rate Unit	10	11	12
12 Command 1.33 pt/a	12.667 a	11.17 a	168 a
Facet 0.5 lb/a			
RiceShot 4 qt/a			
Grasp 4 oz/a			
AgriDex 2.5 % v/v			
13 Command 1.33 pt/a	11.467 ab	11.57 a	174 a
Facet 0.5 lb/a			
RiceShot 4 qt/a			
Grasp 4 oz/a			
Ryz-Up 1 oz/a			
AgriDex 2.5 % v/v			
LSD (P=.05)	1.5905	1.847	27.8
Standard Deviation	0.9438	1.096	16.5
CV	8.42	11.04	11.04
Bartlett's X2	16.488	5.065	5.065
P(Bartlett's X2)	0.17	0.956	0.956
Replicate F	0.779	13.384	13.384
Replicate Prob(F)	0.4701	0.0001	0.0001
Treatment F	2.340	7.540	7.540
Treatment Prob(F)	0.0368	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)

Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

ARM Action Codes

TY1 = 15.03333*[C11]