LSU Northeast Research Station

Grasp for postflood weed control in drill-seeded rice.

Trial ID: SJ06R009 Protocol ID: SJ06R009
Location: Study Director:
Investigator: Bill Williams

General Trial Information

Investigator: Bill Williams

Conclusions:

Grasp alone and combinations with various herbicides were evaluated for post flood weed control. Grasp alone was less effective than Clincher and Regiment at controlling barnyardgrass post flood. Tank mixing Grasp with Stam did improve barnyardgrass control, resulting in control similar to that of Clincher. Grasp did not control sprangletop and appeared to antagonize sprangletop control when mixed with Clincher. Grasp and Regiment resulted in excellent sesbania control post flood. Tank mixing Grasp with Clincher, Facet, Grandstand, Permit, Londax or Stam had little effect on sesbania control.

Crop Description

Crop 1: ORYSA Oryza sativa Common rice
Variety: Trainasse
BBCH Scale: BRIC **Planting Date:** 5/24/06
Planting Method: DRILLED **Rate, Unit:** 100 LB/A
Depth, Unit: 1 IN
Row Spacing, Unit: 8 IN
Seed Bed: MEDIUM
Soil Moisture: DRY **Emergence Date:** 5/31/06
Harvest Equipment: Small plot combine
Harvested Width, Unit: 5 FT **Harvested Length, Unit:** 12 FT
% Standard Moisture: 12.0

Pest Description

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

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

Pest 3 Type: W **Code:** SEBEX Sesbania exaltata
Common Name: Hemp sesbania

Site and Design

Plot Width, Unit: 6.67 FT **Site Type:** FIELD
Plot Length, Unit: 15 FT **Tillage Type:** CONVENTIONAL-TILL
Replications: 3 **Study Design:** Randomized Complete Block

Maintenance

No.	Date	Maintenance Treatment Name	Rate	Rate Unit
1.	6/27/06	Prilled urea	300	LB/A

Soil Description

Description Name: Bay 4 - North End
% Sand: 24 **% OM:** 2.11 **Texture:** Clay
% Silt: 34 **pH:** 6.94 **Soil Name:** Sharkey
% Clay: 42 **CEC:** 21.9 **Fert. Level:** Excellent

Moisture Conditions

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

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	Date	Time	Amount	Unit	Type	Interval	Unit
1.	5/26/06				Flush		
2.	5/28/06	5:00 pm	0.18	In	Rain	1	Hou
3.	5/29/06	2:30 pm	0.46	In	Rain	2.5	Hou
4.	5/30/06	1:30 pm	0.79	In	Rain	3	Hou
5.	6/2/06	6:30 pm	0.03	In	Rain	1	Hou
6.	6/5/06				Flush		
7.	6/12/06				Flush		
8.	6/17/06	7:00 pm	0.03	In	Rain	1	Hou
9.	6/18/06	10:00 p	0.01	In	Rain	1	Hou
10.	6/19/06	10:00 p	0.05	In	Rain	1	Hou
11.	6/20/06	2:30 pm	0.19	In	Rain	1	Hou
12.	6/24/06	9:00 pm	0.07	In	Rain	1	Hou
13.	6/27/06				Fertilizer		
14.	6/28/06				Permanent Flood		
15.	7/3/06	1:00 pm	0.07	In	Rain	0.5	Hou
16.	7/4/06	3:00 pm	0.69	In	Rain	1.5	Hou
17.	7/4/06	7:00 am				1	Hou
18.	7/5/06	12:00 a	1.25	In	Rain	0.75	Hou
19.	7/5/06	6:00pm				1.5	Hou
20.	7/6/06	6:00 pm	0.35	In	Rain	3.5	Hou
21.	7/11/06	2:00 pm	0.45	In	Rain	2	Hou

Application Description

	A	B	C
Application Date:	5/25/06	7/7/06	7/12/06
Time of Day:	8:30	11:00	1:00
Application Method:	SPRAY	SPRAY	SPRAY
Application Timing:	PRE	7-10 DAAF	10-14 DAB
Application Placement:	BANSOI	BANFOL	BANFOL
Air Temperature, Unit:	72 F	84 F	89 F
% Relative Humidity:	68	67	77
Wind Velocity, Unit:	3 MPH	3 MPH	6 MPH
Wind Direction:	N	S	S
Soil Temperature, Unit:	81 F	83 F	84 F
Soil Moisture:	DRY	WET	WET
% Cloud Cover:	30	30	60

Crop Stage At Each Application

	A	B	C
Crop 1 Code, BBCH Scale:	ORYSA BRIC	ORYSA BRIC	ORYSA BRIC
Stage Scale Used:	BBCH	BBCH	BBCH
Stage Majority, Percent:	N/A	2-4 TILL 100	3-4 TILL 100
Height, Unit:		7 IN	17 IN
Height Minimum, Maximum:		6 8	16 18

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Pest Stage At Each Application

	A	B	C
Pest 1 Code, Disc., Scale:	ECHCG W	ECHCG W	ECHCG W
Stage Majority, Percent:	N/A	3-4 TI	Flower 100
Height, Unit:		17 IN	17 IN
Height Minimum, Maximum:		16 18	16 18
Pest 2 Code, Disc., Scale:	LEFPA W	LEFPA W	LEFPA W
Stage Majority, Percent:	N/A	1-2 TI 100	1-2 T 100
Height, Unit:		19 IN	19 IN
Height Minimum, Maximum:		18 20	18 20
Pest 3 Code, Disc., Scale:	SEBEX W	SEBEX W	SEBEX W
Stage Majority, Percent:	N/A		
Height, Unit:		21 IN	23 IN
Height Minimum, Maximum:		20 22	22 24

Application Equipment

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

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Grasp for postflood weed control in drill-seeded rice.

Trial ID: SJ06R009 Protocol ID: SJ06R009
Location: Study Director:
Investigator: Bill Williams

Trt No.	Treatment Name	Rate	Rate Unit	1	2	3	4	5	6
Pest Type				W Weed					W Weed
Pest Code				ECHCG	ECHCG	ECHCG	ECHCG	ECHCG	LEFPA
Pest Name				Common barn>	Common barn>	Common barn>	Common barn>	Common barn>	Amazon spra>
Part Rated				PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Date				5/31/06	6/9/06	7/18/06	7/25/06	8/9/06	5/31/06
Rating Data Type				Control	Control	Control	Control	Control	Control
Rating Unit				%	%	%	%	%	%
Days After First/Last Applic.				6 6	15 15	54 6	61 13	76 28	6 6
Trt-Eval Interval				6 DA-A	15 DA-A	11 DA-B	13 DA-C	28 DA-C	6 DA-A
Plant-Eval Interval				7 DP-1	16 DP-1	55 DP-1	62 DP-1	77 DP-1	7 DP-1
1	Command	0.8	pt/a	95.0 a	78.3 a	66.7 e	66.7 d	50.0 e	95.0 a
	Grasp	2.3	oz/a						
	Agridex	2.5	% v/v						
2	Command	0.8	pt/a	95.0 a	78.3 a	76.7 cd	80.0 c	66.7 d	95.0 a
	Grasp	2.5	oz/a						
	Agridex	2.5	% v/v						
3	Command	0.8	pt/a	95.0 a	78.3 a	80.0 bc	80.0 c	66.7 d	95.0 a
	Grasp	2.8	oz/a						
	Agridex	2.5	% v/v						
4	Command	0.8	pt/a	95.0 a	78.3 a	80.0 bc	80.0 c	66.7 d	95.0 a
	Grasp	2.5	oz/a						
	Clincher	15	oz/a						
	Agridex	2.5	% v/v						
5	Command	0.8	pt/a	95.0 a	78.3 a	80.0 bc	80.0 c	66.7 d	95.0 a
	Grasp	2.5	oz/a						
	Facet	0.5	lb/a						
	Agridex	2.5	% v/v						
6	Command	0.8	pt/a	95.0 a	78.3 a	76.7 cd	80.0 c	66.7 d	95.0 a
	Grasp	2.5	oz/a						
	Grandstand	8	oz/a						
	Agridex	2.5	% v/v						
7	Command	0.8	pt/a	95.0 a	78.3 a	70.0 de	80.0 c	66.7 d	95.0 a
	Grasp	2.5	oz/a						
	Permit	0.5	oz/a						
	Agridex	2.5	% v/v						
8	Command	0.8	pt/a	95.0 a	78.3 a	76.7 cd	80.0 c	66.7 d	95.0 a
	Grasp	2.5	oz/a						
	Londax	0.75	oz/a						
	Agridex	2.5	% v/v						
9	Command	0.8	pt/a	95.0 a	78.3 a	91.7 a	83.3 bc	83.3 bc	95.0 a
	Grasp	2.5	oz/a						
	Stam M4	4	qt/a						
	Agridex	2.5	% v/v						
10	Command	0.8	pt/a	95.0 a	78.3 a	76.7 cd	90.0 ab	86.7 ab	95.0 a
	Grasp	2.5	oz/a						
	Agridex	2.5	% v/v						
	Clincher	15	oz/a						
	Agridex	2.5	% v/v						
11	Command	0.8	pt/a	95.0 a	78.3 a	90.0 a	90.0 ab	86.7 ab	95.0 a
	Clincher	15	oz/a						
	Agridex	2.5	% v/v						
	Grasp	2.5	oz/a						
	Agridex	2.5	% v/v						
12	Command	0.8	pt/a	95.0 a	78.3 a	90.0 a	91.7 a	93.3 a	95.0 a
	Clincher	15	oz/a						
	Agridex	2.5	% v/v						
	Clincher	10	oz/a						
	Agridex	2.5	% v/v						

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Pest Type				W Weed								W Weed
Pest Code				ECHCG	ECHCG	ECHCG	ECHCG	ECHCG	LEFPA
Pest Name				Common barn>	Common barn>	Common barn>	Common barn>	Common barn>	Amazon spra>
Part Rated				PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Date				5/31/06	6/9/06	7/18/06	7/25/06	8/9/06	5/31/06
Rating Data Type				Control	Control	Control	Control	Control	Control
Rating Unit				%	%	%	%	%	%
Days After First/Last Applic.				6 6	15 15	54 6	61 13	76 28	6 6
Trt-Eval Interval				6 DA-A	15 DA-A	11 DA-B	13 DA-C	28 DA-C	6 DA-A
Plant-Eval Interval				7 DP-1	16 DP-1	55 DP-1	62 DP-1	77 DP-1	7 DP-1
Trt No.	Treatment Name	Rate	Rate Unit	1	2	3	4	5	6
13	Command	0.8	pt/a	95.0 a	76.7 a	91.7 a	80.0 c	73.3 d	95.0 a
	Facet	0.5	lb/a						
	Stam M4	4	qt/a						
14	Command	0.8	pt/a	95.0 a	78.3 a	90.0 a	83.3 bc	85.0 ab	95.0 a
	Clincher	15	oz/a						
	Agridex	2.5	% v/v						
15	Command	0.8	pt/a	95.0 a	78.3 a	86.7 ab	86.7 abc	76.7 cd	95.0 a
	Regiment	0.6	oz/a						
	Dyne-A-Pak	1	% v/v						
16	Command	0.8	pt/a	95.0 a	78.3 a	0.0 f	0.0 e	0.0 f	95.0 a
LSD (P=.05)				0.00	1.20	5.52	5.11	6.87	0.00
Standard Deviation				0.00	0.72	3.31	3.07	4.12	0.00
CV				0.0	0.92	4.33	3.98	5.98	0.0
Bartlett's X2				0.0	2.338	2.054	1.093	1.112	0.0
P(Bartlett's X2)				.	1.00	0.957	0.895	1.00	.
Replicate F				0.000	289.000	4.747	0.055	10.521	0.000
Replicate Prob(F)				1.0000	0.0001	0.0162	0.9462	0.0003	1.0000
Treatment F				0.000	1.000	130.114	145.266	81.454	0.000
Treatment Prob(F)				1.0000	0.4801	0.0001	0.0001	0.0001	1.0000

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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Trt No.	Treatment Name	Rate	Rate Unit	7	8	9	10	11	12
Pest Type								W Weed	
Pest Code				LEFPA	LEFPA	LEFPA	LEFPA	SEBEX	SEBEX
Pest Name				Amazon spra>	Amazon spra>	Amazon spra>	Amazon spra>	Hemp sesban>	Hemp sesban>
Part Rated				PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Date				6/9/06	7/18/06	7/25/06	8/9/06	5/31/06	6/9/06
Rating Data Type				Control	Control	Control	Control	Control	Control
Rating Unit				%	%	%	%	%	%
Days After First/Last Applic.				15 15	54 6	61 13	76 28	6 6	15 15
Trt-Eval Interval				15 DA-A	11 DA-B	13 DA-C	28 DA-C	6 DA-A	15 DA-A
Plant-Eval Interval				16 DP-1	55 DP-1	62 DP-1	77 DP-1	7 DP-1	16 DP-1
1	Command	0.8	pt/a	83.3 a	56.7 a	53.3 c	50.0 e	0.0 a	0.0 a
	Grasp	2.3	oz/a						
	Agridex	2.5	% v/v						
2	Command	0.8	pt/a	83.3 a	53.3 a	53.3 c	50.0 e	0.0 a	0.0 a
	Grasp	2.5	oz/a						
	Agridex	2.5	% v/v						
3	Command	0.8	pt/a	83.3 a	53.3 a	53.3 c	50.0 e	0.0 a	0.0 a
	Grasp	2.8	oz/a						
	Agridex	2.5	% v/v						
4	Command	0.8	pt/a	83.3 a	53.3 a	56.7 c	50.0 e	0.0 a	0.0 a
	Grasp	2.5	oz/a						
	Clincher	15	oz/a						
	Agridex	2.5	% v/v						
5	Command	0.8	pt/a	83.3 a	53.3 a	53.3 c	50.0 e	0.0 a	0.0 a
	Grasp	2.5	oz/a						
	Facet	0.5	lb/a						
	Agridex	2.5	% v/v						
6	Command	0.8	pt/a	83.3 a	53.3 a	53.3 c	50.0 e	0.0 a	0.0 a
	Grasp	2.5	oz/a						
	Grandstand	8	oz/a						
	Agridex	2.5	% v/v						
7	Command	0.8	pt/a	83.3 a	53.3 a	53.3 c	50.0 e	0.0 a	0.0 a
	Grasp	2.5	oz/a						
	Permit	0.5	oz/a						
	Agridex	2.5	% v/v						
8	Command	0.8	pt/a	83.3 a	53.3 a	53.3 c	50.0 e	0.0 a	0.0 a
	Grasp	2.5	oz/a						
	Londax	0.75	oz/a						
	Agridex	2.5	% v/v						
9	Command	0.8	pt/a	83.3 a	56.7 a	70.0 bc	50.0 e	0.0 a	0.0 a
	Grasp	2.5	oz/a						
	Stam M4	4	qt/a						
	Agridex	2.5	% v/v						
10	Command	0.8	pt/a	83.3 a	56.7 a	76.7 ab	73.3 c	0.0 a	0.0 a
	Grasp	2.5	oz/a						
	Agridex	2.5	% v/v						
	Clincher	15	oz/a						
	Agridex	2.5	% v/v						
11	Command	0.8	pt/a	83.3 a	53.3 a	86.7 ab	83.3 b	0.0 a	0.0 a
	Clincher	15	oz/a						
	Agridex	2.5	% v/v						
	Grasp	2.5	oz/a						
	Agridex	2.5	% v/v						
12	Command	0.8	pt/a	83.3 a	56.7 a	91.7 a	90.0 a	0.0 a	0.0 a
	Clincher	15	oz/a						
	Agridex	2.5	% v/v						
	Clincher	10	oz/a						
	Agridex	2.5	% v/v						
13	Command	0.8	pt/a	83.3 a	56.7 a	83.3 ab	66.7 d	0.0 a	0.0 a
	Facet	0.5	lb/a						
	Stam M4	4	qt/a						
14	Command	0.8	pt/a	83.3 a	56.7 a	83.3 ab	76.7 c	0.0 a	0.0 a
	Clincher	15	oz/a						
	Agridex	2.5	% v/v						

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Pest Type											
Pest Code							LEFPA	LEFPA	LEFPA	LEFPA	W Weed SEBEX	SEBEX
Pest Name							Amazon spra>	Amazon spra>	Amazon spra>	Amazon spra>	Hemp sesban>	Hemp sesban>
Part Rated							PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P	PLATOT P
Rating Date							6/9/06	7/18/06	7/25/06	8/9/06	5/31/06	6/9/06
Rating Data Type							Control	Control	Control	Control	Control	Control
Rating Unit							%	%	%	%	%	%
Days After First/Last Applic.							15 15	54 6	61 13	76 28	6 6	15 15
Trt-Eval Interval							15 DA-A	11 DA-B	13 DA-C	28 DA-C	6 DA-A	15 DA-A
Plant-Eval Interval							16 DP-1	55 DP-1	62 DP-1	77 DP-1	7 DP-1	16 DP-1
Trt No.	Treatment Name	Rate	Rate Unit									
							7	8	9	10	11	12
15	Command	0.8	pt/a				83.3 a	56.7 a	53.3 c	50.0 e	0.0 a	0.0 a
	Regiment	0.6	oz/a									
	Dyne-A-Pak	1	% v/v									
16	Command	0.8	pt/a				83.3 a	53.3 a	53.3 c	50.0 e	0.0 a	0.0 a
LSD (P=.05)							0.00	9.69	11.93	4.85	0.00	0.00
Standard Deviation							0.00	5.81	7.16	2.91	0.00	0.00
CV							0.0	10.6	11.13	4.95	0.0	0.0
Bartlett's X2							0.0	0.0	8.865	0.0	0.0	0.0
P(Bartlett's X2)							1.00	1.00	0.884	1.00	.	.
Replicate F							0.000	0.802	0.132	0.738	0.000	0.000
Replicate Prob(F)							1.0000	0.4576	0.8767	0.4867	1.0000	1.0000
Treatment F							0.000	0.259	12.886	71.279	0.000	0.000
Treatment Prob(F)							1.0000	0.9961	0.0001	0.0001	1.0000	1.0000

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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Pest Type						
Pest Code				SEBEX	SEBEX	SEBEX
Pest Name				Hemp sesban>	Hemp sesban>	Hemp sesban>
Part Rated				PLATOT P	PLATOT P	PLATOT P
Rating Date				7/18/06	7/25/06	8/9/06
Rating Data Type				Control	Control	Control
Rating Unit				%	%	%
Days After First/Last Applic.				54 6	61 13	76 28
Trt-Eval Interval				11 DA-B	13 DA-C	28 DA-C
Plant-Eval Interval				55 DP-1	62 DP-1	77 DP-1
Trt No.	Treatment Name	Rate	Rate Unit	13	14	15
1	Command	0.8	pt/a	91.7 a	83.3 b	80.0 c
	Grasp	2.3	oz/a			
	Agridex	2.5	% v/v			
2	Command	0.8	pt/a	91.7 a	90.0 ab	95.0 a
	Grasp	2.5	oz/a			
	Agridex	2.5	% v/v			
3	Command	0.8	pt/a	91.7 a	90.0 ab	95.0 a
	Grasp	2.8	oz/a			
	Agridex	2.5	% v/v			
4	Command	0.8	pt/a	91.7 a	90.0 ab	95.0 a
	Grasp	2.5	oz/a			
	Clincher	15	oz/a			
	Agridex	2.5	% v/v			
5	Command	0.8	pt/a	93.3 a	93.3 a	95.0 a
	Grasp	2.5	oz/a			
	Facet	0.5	lb/a			
	Agridex	2.5	% v/v			
6	Command	0.8	pt/a	91.7 a	93.3 a	95.0 a
	Grasp	2.5	oz/a			
	Grandstand	8	oz/a			
	Agridex	2.5	% v/v			
7	Command	0.8	pt/a	93.3 a	93.3 a	95.0 a
	Grasp	2.5	oz/a			
	Permit	0.5	oz/a			
	Agridex	2.5	% v/v			
8	Command	0.8	pt/a	91.7 a	86.7 ab	90.0 ab
	Grasp	2.5	oz/a			
	Londax	0.75	oz/a			
	Agridex	2.5	% v/v			
9	Command	0.8	pt/a	95.0 a	93.3 a	95.0 a
	Grasp	2.5	oz/a			
	Stam M4	4	qt/a			
	Agridex	2.5	% v/v			
10	Command	0.8	pt/a	91.7 a	83.3 b	95.0 a
	Grasp	2.5	oz/a			
	Agridex	2.5	% v/v			
	Clincher	15	oz/a			
	Agridex	2.5	% v/v			
11	Command	0.8	pt/a	85.0 a	85.0 ab	86.7 b
	Clincher	15	oz/a			
	Agridex	2.5	% v/v			
	Grasp	2.5	oz/a			
	Agridex	2.5	% v/v			
12	Command	0.8	pt/a	0.0 c	0.0 d	0.0 e
	Clincher	15	oz/a			
	Agridex	2.5	% v/v			
	Clincher	10	oz/a			
	Agridex	2.5	% v/v			
13	Command	0.8	pt/a	76.7 b	73.3 c	66.7 d
	Facet	0.5	lb/a			
	Stam M4	4	qt/a			
14	Command	0.8	pt/a	0.0 c	0.0 d	0.0 e
	Clincher	15	oz/a			
	Agridex	2.5	% v/v			

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Pest Type								
Pest Code						SEBEX	SEBEX	SEBEX
Pest Name						Hemp sesban>	Hemp sesban>	Hemp sesban>
Part Rated						PLATOT P	PLATOT P	PLATOT P
Rating Date						7/18/06	7/25/06	8/9/06
Rating Data Type						Control	Control	Control
Rating Unit						%	%	%
Days After First/Last Applic.						54 6	61 13	76 28
Trt-Eval Interval						11 DA-B	13 DA-C	28 DA-C
Plant-Eval Interval						55 DP-1	62 DP-1	77 DP-1
Trt No.	Treatment Name	Rate	Rate Unit			13	14	15
15	Command	0.8	pt/a			88.3 a	90.0 ab	90.0 ab
	Regiment	0.6	oz/a					
	Dyne-A-Pak	1	% v/v					
16	Command	0.8	pt/a			0.0 c	0.0 d	0.0 e
LSD (P=.05)						7.15	5.10	3.46
Standard Deviation						4.29	3.06	2.07
CV						5.84	4.27	2.83
Bartlett's X2						14.887	3.391	0.0
P(Bartlett's X2)						0.188	0.907	1.00
Replicate F						3.601	0.167	0.484
Replicate Prob(F)						0.0397	0.8467	0.6211
Treatment F						219.161	413.439	962.065
Treatment Prob(F)						0.0001	0.0001	0.0001

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