

Purdue University

Fall Burndown Tank-Mix Treatments for 2004 Corn

Trial ID: 03F-PPAC-CORN
Location: PPAC

Study Dir.:
Investigator: Dr. Bill Johnson

GENERAL TRIAL INFORMATION

Investigator: Dr. Bill Johnson

TRIAL LOCATION

Unit: x

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	STEME	Chickweed, Common	Stellaria media (L.) VILL./CYR.
2.	LAMAM	Henbit	Lamium amplexicaule L.
3.	LAMPU	Deadnettle, purple	Lamium purpureum L.
4.	ERICA	Horseweed (marestail)	Conyza canadensis L.

Crop 1: GLXMA SOYBEAN
Row Spacing: 7 IN

Variety: Harvest Residue

Crop 2: ZEAMX CORN, FIELD
Planting Date: 29/Apr/2004
Row Spacing: 30 IN

Planting Method: planted

SITE AND DESIGN

Plot Width, Unit: 10 FT

Plot Length, Unit: 30 FT

Reps: 4

Study Design: RANDOMIZED COMPLETE BLOCK

APPLICATION DESCRIPTION

	A	B
Application Date:	11/Nov/2003	14/Apr/2004
Time of Day:	12:00 CST	7:15 am
Application Method:	SPRAY	SPRAY
Application Timing:	FALBD	SPRING
Applic. Placement:	BROFOL	BROSOI
Air Temp., Unit:	61 F	35 F
% Relative Humidity:	90	50
Wind Velocity, Unit:	4 MPH	1 MPH
Soil Temp., Unit:	10 C	36 F
Soil Moisture:	WET	dry surf.
% Cloud Cover:	100	0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	GLXMA	GLXMA
Stage Scale:	Residue	Residue
Height, Unit:	25 %	25 %
Crop 2 Code, Stage:	ZEAMX	ZEAMX

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WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	STEME	STEME
Stage Scale:	4 inch	
Density, Unit:	11 FT2	
Weed 2 Code, Stage:	LAMAM	LAMAM
Stage Scale:	1-4 inch	
Density, Unit:	3-4 FT2	
Weed 3 Code, Stage:	LAMPU	LAMPU
Stage Scale:	2 inch	
Density, Unit:	6 FT2	
Weed 4 Code, Stage:	ERICA 1.5 inch	ERICA
Stage Scale:	rosette	
Density, Unit:	<1 FT2	

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO2 Backp	CO2 Backp
Operating Pressure:	25 psi	25 psi
Nozzle Type:	VS	VS
Nozzle Size:	8002	8002
Nozzle Spacing, Unit:	20 IN	20 IN
Boom Length, Unit:	10 FT	10 FT
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	water	water
Spray Volume, Unit:	15 gpa	15 gpa

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					STEME	LAMAM	LAMPU	ERICA	STEME
					biomass	biomass	biomass	biomass	biomass
					%control	%control	%control	%control	%control
					14/Apr/2004	14/Apr/2004	14/Apr/2004	14/Apr/2004	27/Apr/2004
					NA	NA	NA	NA	NA
					2-8"	1-6"	1-6"	2-3"	8-10"
					1-4 FT2	1-6 FT2	1-6 FT2	1 FT2	1-4 FT2
					Jeff & Reece	Jeff & Reece	Jeff & Reece	Jeff & Reece	Earl & Reece
					155 DA-A	155 DA-A	155 DA-A	155 DA-A	13 DA-B
					0	0	0	0	0
Trt No.	Treatment Name	Rate	Grow Stg	Appl Code	1	2	3	4	5
1	Untreated Check				0 b	0 b	0 b	0 b	0 c
2	Princep	1 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	100 a
	2,4-D Ester	0.5 lb ai/a	FALBD	A					
	AMS		FALBD	A					
	Lumax	2.47 lb ai/a	SPRING	B					
	Atrazine	1 lb ai/a	SPRING	B					
	AMS		SPRING	B					
3	Touchdown Total	0.586 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	100 a
	2,4-D Ester	0.5 lb ai/a	FALBD	A					
	AMS		FALBD	A					
	Lumax	2.47 lb ai/a	SPRING	B					
	Atrazine	1 lb ai/a	SPRING	B					
	AMS		SPRING	B					
4	Sencor 75DF	0.47 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	92 ab
	2,4-D Ester	1 lb ai/a	FALBD	A					
	Crop Oil Conc		FALBD	A					
	AMS		FALBD	A					
5	Axiom	0.765 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	89 b
	2,4-D Ester	1 lb ai/a	FALBD	A					
	Crop Oil Conc		FALBD	A					
	AMS		FALBD	A					
6	Basis	0.0234 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	96 ab
	2,4-D Ester	0.5 lb ai/a	FALBD	A					
	Crop Oil Conc		FALBD	A					
	AMS		FALBD	A					
7	Princep	1 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	99 a
	Basis	0.0155 lb ai/a	FALBD	A					
	2,4-D Ester	0.5 lb ai/a	FALBD	A					
	Crop Oil Conc		FALBD	A					
	AMS		FALBD	A					
8	Express	0.0047 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	97 a
	Basis	0.0155 lb ai/a	FALBD	A					
	2,4-D Ester	0.5 lb ai/a	FALBD	A					
	Crop Oil Conc		FALBD	A					
	AMS		FALBD	A					
9	Express	0.0155 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	96 ab
	2,4-D Ester	0.5 lb ai/a	FALBD	A					
	Crop Oil Conc		FALBD	A					
	AMS		FALBD	A					
10	Roundup Weathermax	0.77 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	96 ab
	2,4-D Ester	0.5 lb ai/a	FALBD	A					
	AMS		FALBD	A					
11	Sencor 75DF	0.234 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	95 ab
	Python	0.05 lb ai/a	FALBD	A					
	2,4-D Ester	0.5 lb ai/a	FALBD	A					
	AMS		FALBD	A					

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Weed Code					STEME	LAMAM	LAMPU	ERICA	STEME
Rating Data Type					biomass	biomass	biomass	biomass	biomass
Rating Unit					%control	%control	%control	%control	%control
Rating Date					14/Apr/2004	14/Apr/2004	14/Apr/2004	14/Apr/2004	27/Apr/2004
Crop Stage					NA	NA	NA	NA	NA
Weed Stage					2-8"	1-6"	1-6"	2-3"	8-10"
Weed Density, Unit					1-4 FT2	1-6 FT2	1-6 FT2	1 FT2	1-4 FT2
Assessed By					Jeff & Reece	Jeff & Reece	Jeff & Reece	Jeff & Reece	Earl & Reece
Trt-Eval Interval					155 DA-A	155 DA-A	155 DA-A	155 DA-A	13 DA-B
# Subsamples, Dec.					0	0	0	0	0
Trt	Treatment	Rate	Grow	Appl	1	2	3	4	5
No.	Name	Unit	Stg	Code					
12	Callisto	0.094 lb ai/a	FALBD	A	99 a	99 a	99 a	100 a	93 ab
	2,4-D Ester	0.5 lb ai/a	FALBD	A					
	Crop Oil Conc		FALBD	A					
	AMS		FALBD	A					
LSD (P=.05)					0.0	0.0	0.0	0.0	4.8
Standard Deviation					0.0	0.0	0.0	0.0	3.3
CV					0.0	0.0	0.0	0.0	3.8
Grand Mean					90.75	90.75	90.75	91.67	87.79
Bartlett's X2					0.0	0.0	0.0	0.0	19.586
P(Bartlett's X2)					0.021*
Replicate F					0.000	0.000	0.000	0.000	2.239
Replicate Prob(F)					1.0000	1.0000	1.0000	1.0000	0.1021
Treatment F					0.000	0.000	0.000	0.000	278.540
Treatment Prob(F)					1.0000	1.0000	1.0000	1.0000	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.

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Weed Code					LAMAM	ERICA	STEME	LAMAM	ERICA	
Rating Data Type					biomass	biomass	biomass	biomass	biomass	
Rating Unit					%control	%control	%control	%control	%control	
Rating Date					27/Apr/2004	27/Apr/2004	2/Jun/2004	2/Jun/2004	2/Jun/2004	
Crop Stage					NA	NA				
Weed Stage					1-8"	4-6"	3-7"	3-12"	10-18"	
Weed Density, Unit					2-6 FT2	1 FT2	8-16FT2	3-5 FT2	1-3 M2	
Assessed By					Earl & Reece	Earl & Reece	Bill & Reece	Bill & Reece	Bill & Reece	
Trt-Eval Interval					13 DA-B	13 DA-B	49 DA-B	49 DA-B	49 DA-B	
# Subsamples, Dec.					0	0	0	0	0	
Trt	Treatment	Rate	Rate Unit	Grow Stg	Appl Code	6	7	8	9	10
1	Untreated Check					0 d	0 b	0 f	0 d	0 b
2	Princep	1 lb ai/a	FALBD	A		100 a	100 a	100 a	100 a	100 a
	2,4-D Ester	0.5 lb ai/a	FALBD	A						
	AMS		FALBD	A						
	Lumax	2.47 lb ai/a	SPRING	B						
	Atrazine	1 lb ai/a	SPRING	B						
	AMS		SPRING	B						
3	Touchdown Total	0.586 lb ai/a	FALBD	A		100 a	100 a	100 a	100 a	100 a
	2,4-D Ester	0.5 lb ai/a	FALBD	A						
	AMS		FALBD	A						
	Lumax	2.47 lb ai/a	SPRING	B						
	Atrazine	1 lb ai/a	SPRING	B						
	AMS		SPRING	B						
4	Sencor 75DF	0.47 lb ai/a	FALBD	A		88 bc	100 a	18 ef	0 d	94 a
	2,4-D Ester	1 lb ai/a	FALBD	A						
	Crop Oil Conc		FALBD	A						
	AMS		FALBD	A						
5	Axiom	0.765 lb ai/a	FALBD	A		93 ab	100 a	29 de	0 d	99 a
	2,4-D Ester	1 lb ai/a	FALBD	A						
	Crop Oil Conc		FALBD	A						
	AMS		FALBD	A						
6	Basis	0.0234 lb ai/a	FALBD	A		98 a	98 a	75 ab	86 ab	70 a
	2,4-D Ester	0.5 lb ai/a	FALBD	A						
	Crop Oil Conc		FALBD	A						
	AMS		FALBD	A						
7	Princep	1 lb ai/a	FALBD	A		99 a	99 a	93 a	54 c	99 a
	Basis	0.0155 lb ai/a	FALBD	A						
	2,4-D Ester	0.5 lb ai/a	FALBD	A						
	Crop Oil Conc		FALBD	A						
	AMS		FALBD	A						
8	Express	0.0047 lb ai/a	FALBD	A		98 ab	94 a	64 bc	76 b	54 a
	Basis	0.0155 lb ai/a	FALBD	A						
	2,4-D Ester	0.5 lb ai/a	FALBD	A						
	Crop Oil Conc		FALBD	A						
	AMS		FALBD	A						
9	Express	0.0155 lb ai/a	FALBD	A		83 c	97 a	48 cd	6 d	56 a
	2,4-D Ester	0.5 lb ai/a	FALBD	A						
	Crop Oil Conc		FALBD	A						
	AMS		FALBD	A						
10	Roundup Weathermax	0.77 lb ai/a	FALBD	A		89 bc	100 a	14 ef	0 d	85 a
	2,4-D Ester	0.5 lb ai/a	FALBD	A						
	AMS		FALBD	A						
11	Sencor 75DF	0.234 lb ai/a	FALBD	A		93 ab	100 a	63 bc	0 d	80 a
	Python	0.05 lb ai/a	FALBD	A						
	2,4-D Ester	0.5 lb ai/a	FALBD	A						
	AMS		FALBD	A						

