

University of Nebraska

Control of RR Corn III

Trial ID: L0717
Location: Havelock

Study Dir.: Kevin Horky
Investigator: Dr. Mark Bernards

GENERAL TRIAL INFORMATION

Study Director: Kevin Horky **Title:** Research Technician
Affiliation: University of Nebraska Lincoln
Postal Code: 68583
Investigator: Dr. Mark Bernards **Title:** Ext. Weed Specialist
Affiliation: University of Nebraska Lincoln
Postal Code: 68583

TRIAL LOCATION

City: Lincoln
State/Prov.: NE
Postal Code: 68583

Conducted Under GLP (Y/N): N **Conducted Under GEP (Y/N):** N

Crop 1: ZEAMX CORN, FIELD **Variety:** Dekalb 6019 RR
Planting Date: 18/Apr/2007 **Planting Method:** planted
Rate: 21000 seeds/acre **Depth:** 1.5 in
Row Spacing: 30 in **Seed Bed:** medium
Soil Moisture: good **Emergence Date:** 30/Apr/2007

SITE AND DESIGN

Plot Width, Unit: 10 FT **Plot Length, Unit:** 30 FT **Reps:** 3
Site Type: field
Tillage Type: conventional **Study Design:** RANDOMIZED COMPLETE BLOCK

MAINTENANCE

Field Prep./Maintenance: Field was disked once, Anhydrous Ammonia was applied at rate of 120 lbs Nitrogen / acre. Field was then field cultivated once.

SOIL DESCRIPTION

% Sand: 7 **% OM:** 2.7 **Texture:** Silt Loam
% Silt: 69 **pH:** 6.8 **Soil Name:** Sharpesburg
% Clay: 23 **CEC:** 26 **Fert. Level:** good

APPLICATION DESCRIPTION

	A	B	C
Application Date:	18/Apr/2007	10/May/2007	17/May/2007
Time of Day:	3:00 pm	12:30 pm	10:30 am
Application Method:	Spray	Spray	Spray
Application Timing:	pre	epost	mpost
Applic. Placement:	BROSOI	BROFOL	BROFOL
Air Temp., Unit:	75 F	83 F	60 F
% Relative Humidity:	16	22	35
Wind Velocity, Unit:	4 mph	3 mph	7 mph
Dew Presence (Y/N):	n	n	n
Soil Temp., Unit:	10 C	14 C	14 C
Soil Moisture:	good	good	good
% Cloud Cover:	15	10	2

CROP STAGE AT EACH APPLICATION

	A	B	C
Crop 1 Code, Stage:	ZEAMX	ZEAMX	ZEAMX
Stage Scale:	pre	V1	V3
Height, Unit:		3.5 in	6.5

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APPLICATION EQUIPMENT

	A	B	C
Appl. Equipment:	IH cub	IH cub	IH cub
Operating Pressure:	30	30	30
Nozzle Type:	XR	Turbo Tee	Turbo Tee
Nozzle Size:	11010	11015	11015
Nozzle Spacing, Unit:	15 in	15 in	15 in
Nozzles/Row:	2	2	2
Boom Length, Unit:	15 ft	10 ft	10 ft
Boom Height, Unit:	18 in	24 in	24 in
Ground Speed, Unit:	3 mph	3 mph	3 mph
Carrier:	water	water	water
Spray Volume, Unit:	10 gpa	15 gpa	15 gpa
Propellant:	air	air	air

Trial Comments

Monsanto protocol 46-04

Data requested

% CHL 21DAT

% NEC 21 DAT dead plants as % of initial stand

epost = 3 inch corn

mpost = 6 inch corn

plant early for frost damage around april 9

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Weed Code						ZEAMX	ZEAMX	ZEAMX
Rating Data Type						PHYCHL	PHYNEC	PHYSTU
Rating Unit						%	%	inches
Rating Date						31/May/2007	31/May/2007	31/May/2007
Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	Plot	1	2	3
1	Check				101	0	0	0
					208	0	0	0
					312	0	0	0
					Mean =	0	0	0
2	Harness Xtra	2.6	qt/a	pre	102	0	0	2
	Liberty	0.42	lb ai/a	epost	205	0	0	5
	COC	0.5	% v/v	epost	303	10	0	4
					Mean =	3	0	4
3	Harness Xtra	2.6	qt/a	pre	103	30	0	6
	Liberty	0.42	lb ai/a	mpost	214	30	10	8
	COC	1	% v/v	mpost	308	60	10	8
					Mean =	40	7	7
4	Harness Xtra	2.6	qt/a	pre	104	20	5	8
	Gramoxone Max	0.5625	lb ai/a	epost	212	20	0	6
	COC	0.5	% v/v	epost	302	20	0	5
					Mean =	20	2	6
5	Harness Xtra	2.6	qt/a	pre	105	0	0	4
	Gramoxone Max	0.6375	lb ai/a	mpost	201	20	0	4
	COC	0.5	% v/v	mpost	311	30	0	6
					Mean =	17	0	5
6	Harness Xtra	2.6	qt/a	pre	106	10	0	3
	Gramoxone Max	0.28	lb ai/a	epost	211	0	0	3
	COC	0.5	% v/v	epost	307	0	0	2
					Mean =	3	0	3
7	Harness Xtra	2.6	qt/a	pre	107	10	0	2
	Gramoxone Max	0.28	lb ai/a	mpost	203	10	0	3
	COC	0.5	% v/v	mpost	310	0	0	2
					Mean =	7	0	2
8	Harness Xtra	2.6	qt/a	pre	108	20	50	6
	Gramoxone Max	0.28	lb ai/a	epost	213	45	40	10
	COC	0.5	% v/v	epost	314	50	40	8
	Sencor	0.14	lb ai/a	epost				
				Mean =	38	43	8	
9	Harness Xtra	2.6	qt/a	pre	109	10	2	3
	Gramoxone Max	0.28	lb ai/a	mpost	215	20	0	3
	COC	0.5	% v/v	mpost	306	10	15	6
	Sencor	0.14	lb ai/a	mpost				
				Mean =	13	6	4	
10	Harness Xtra	2.6	qt/a	pre	110	30	80	12
	Gramoxone Max	0.5625	lb ai/a	epost	202	10	95	15
	COC	0.5	% v/v	epost	305	50	90	15
	Sencor	0.14	lb ai/a	epost				
				Mean =	30	88	14	

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Rating Data Type						PHYCHL	PHYNEC	PHYSTU
Rating Unit						%	%	inches
Rating Date						31/May/2007	31/May/2007	31/May/2007
Trt No.	Treatment Name	Rate	Unit	Grow Stg	Plot	1	2	3
11	Harness Xtra	2.6	qt/a	pre	111	30	10	8
	Gramoxone Max	0.6375	lb ai/a	mpost	210	30	10	10
	COC	0.5	% v/v	mpost	301	70	20	10
	Sencor	0.14	lb ai/a	mpost				
	Mean =					43	13	9
12	Harness Xtra	2.6	qt/a	pre	112	20	20	7
	Gramoxone Max	0.28	lb ai/a	epost	206	20	5	8
	COC	1	qt/a	epost	304	60	30	10
	Lorox	0.5	lb ai/a	epost				
	Mean =					33	18	8
13	Harness Xtra	2.6	qt/a	pre	113	0	0	2
	Gramoxone Max	0.28	lb ai/a	mpost	204	20	5	4
	COC	1	qt/a	mpost	315	10	0	4
	Lorox	0.5	lb ai/a	mpost				
	Mean =					10	2	3
14	Harness Xtra	2.6	qt/a	pre	114	0	0	2
	Gramoxone Max	0.5625	lb ai/a	epost	207	30	10	6
	COC	1	qt/a	epost	309	10	0	8
	Lorox	0.5	lb ai/a	epost				
	Mean =					13	3	5
15	Harness Xtra	2.6	qt/a	pre	115	20	0	6
	Gramoxone Max	0.6375	lb ai/a	mpost	209	20	0	6
	COC	1	qt/a	mpost	313	40	0	10
	Lorox	0.5	lb ai/a	mpost				
	Mean =					27	0	7

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Rating Unit					%	%	inches
Rating Date					31/May/2007	31/May/2007	31/May/2007
Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	1	2	3
1	Check				0 c	0 d	0 g
2	Harness Xtra	2.6	qt/a	pre	3 c	0 d	4 ef
	Liberty	0.42	lb ai/a	epost			
	COC	0.5	% v/v	epost			
3	Harness Xtra	2.6	qt/a	pre	40 ab	7 d	7 bcd
	Liberty	0.42	lb ai/a	mpost			
	COC	1	% v/v	mpost			
4	Harness Xtra	2.6	qt/a	pre	20 abc	2 d	6 b-e
	Gramoxone Max	0.5625	lb ai/a	epost			
	COC	0.5	% v/v	epost			
5	Harness Xtra	2.6	qt/a	pre	17 abc	0 d	5 def
	Gramoxone Max	0.6375	lb ai/a	mpost			
	COC	0.5	% v/v	mpost			
6	Harness Xtra	2.6	qt/a	pre	3 c	0 d	3 fg
	Gramoxone Max	0.28	lb ai/a	epost			
	COC	0.5	% v/v	epost			
7	Harness Xtra	2.6	qt/a	pre	7 bc	0 d	2 fg
	Gramoxone Max	0.28	lb ai/a	mpost			
	COC	0.5	% v/v	mpost			
8	Harness Xtra	2.6	qt/a	pre	38 ab	43 b	8 bc
	Gramoxone Max	0.28	lb ai/a	epost			
	COC	0.5	% v/v	epost			
	Sencor	0.14	lb ai/a	epost			
9	Harness Xtra	2.6	qt/a	pre	13 abc	6 d	4 ef
	Gramoxone Max	0.28	lb ai/a	mpost			
	COC	0.5	% v/v	mpost			
	Sencor	0.14	lb ai/a	mpost			
10	Harness Xtra	2.6	qt/a	pre	30 abc	88 a	14 a
	Gramoxone Max	0.5625	lb ai/a	epost			
	COC	0.5	% v/v	epost			
	Sencor	0.14	lb ai/a	epost			
11	Harness Xtra	2.6	qt/a	pre	43 a	13 cd	9 b
	Gramoxone Max	0.6375	lb ai/a	mpost			
	COC	0.5	% v/v	mpost			
	Sencor	0.14	lb ai/a	mpost			
12	Harness Xtra	2.6	qt/a	pre	33 abc	18 c	8 bc
	Gramoxone Max	0.28	lb ai/a	epost			
	COC	1	qt/a	epost			
	Lorox	0.5	lb ai/a	epost			
13	Harness Xtra	2.6	qt/a	pre	10 abc	2 d	3 ef
	Gramoxone Max	0.28	lb ai/a	mpost			
	COC	1	qt/a	mpost			
	Lorox	0.5	lb ai/a	mpost			
14	Harness Xtra	2.6	qt/a	pre	13 abc	3 d	5 c-f
	Gramoxone Max	0.5625	lb ai/a	epost			
	COC	1	qt/a	epost			
	Lorox	0.5	lb ai/a	epost			

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Rating Date					31/May/2007	31/May/2007	31/May/2007
Trt No.	Treatment Name	Rate	Unit	Grow Stg	1	2	3
15	Harness Xtra	2.6	qt/a	pre	27 abc	0 d	7 bcd
	Gramoxone Max	0.6375	lb ai/a	mpost			
	COC	1	qt/a	mpost			
	Lorox	0.5	lb ai/a	mpost			
LSD (P=.05)					20.1	9.0	2.2
Standard Deviation					12.0	5.4	1.3
CV					60.46	44.32	22.93
Grand Mean					19.89	12.16	5.78
Bartlett's X2					10.27	5.951	8.434
P(Bartlett's X2)					0.592	0.653	0.814
Replicate F					5.767	0.922	7.456
Replicate Prob(F)					0.0080	0.4094	0.0025
Treatment F					4.351	59.604	20.362
Treatment Prob(F)					0.0005	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.