

Purdue University

Lumax and Camix in corn

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

Study Dir.:
Investigator: Dr. Bill Johnson

GENERAL TRIAL INFORMATION

Investigator: Dr. Bill Johnson

TRIAL LOCATION

City: Wanatah
State/Prov.: Indiana
Postal Code: 46390
Country: USA

Unit: xx

COOPERATOR/LANDOWNER

Cooperator: Pinney Purdue Agricultural Center

Country: USA

Phone No: 219-733-2379

Fax No: call first

Address 1: 11402 South Co. Line Road

City: Wanatah

State/Prov: IN

Postal Code: 46390

Conducted Under GLP (Y/N): N

Conducted Under GEP (Y/N): N

CROP AND WEED DESCRIPTION

Weed	Code	Common Name	Scientific Name
1.	AMBTR	Giant ragweed	Ambrosia trifida
2.	ABUTH	Velvetleaf	Abutilon theophrasti
3.	CHEAL	lambsquarters, common	Chenopodium album
4.	SETFA	Giant foxtail	Setaria faberi
5.	IPOHE	Morningglory, Ivy leaf	Ipomoea hederacea

Crop 1: ZEAMX CORN, FIELD

Variety: DK 60-17

Planting Date: 7/May/2003

Planting Method: JD 1650 Finger pickup

Rate: 30800 S/A

Depth: 1.5 IN

Row Spacing: 30 IN

Seed Bed: Conventional

SITE AND DESIGN

Plot Width, Unit: 10 FT

Plot Length, Unit: 50 FT

Reps: 4

Tillage Type: Conventional

Study Design: RANDOMIZED COMPLETE BLOCK

MAINTENANCE

Field Prep./Maintenance:

May 16, 2003 - Blanket treatment of plot area with Roundup Weathermax

SOIL DESCRIPTION

% OM: 2.1

Texture: Coarse

pH: 6.5

Soil Name: Tracey Sand

CEC: 6.9

Fert. Level: Bray P - 48; Potassium - 155 (high)

Closest Weather Station: PPAC (Campbell Scientific)

Distance: 1000 Unit: FT

APPLICATION DESCRIPTION

	A
Application Date:	13/May/2003
Application Method:	spray
Applic. Placement:	BROSOI
Air Temp., Unit:	81 F
% Relative Humidity:	31
Wind Velocity, Unit:	6.5 mph
Soil Temp., Unit:	19 C

CROP STAGE AT EACH APPLICATION

	A
Crop 1 Code, Stage:	ZEAMX

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WEED STAGE AT EACH APPLICATION

	A
Weed 1 Code, Stage:	AMBTR
Weed 2 Code, Stage:	ABUTH
Weed 3 Code, Stage:	CHEAL
Weed 4 Code, Stage:	SETFA
Weed 5 Code, Stage:	IPOHE

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Trial ID: 03-PPAC-CORN-LUCA
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Weed Code		ZEAMX	ZEAMX	AMBTR	ABUTH	CHEAL	SETFA		
Crop Code									
Part Rated									
Rating Data Type									
Rating Unit									
Rating Date		22/May/2003	30/May/2003	12/Jun/2003	12/Jun/2003	12/Jun/2003	12/Jun/2003		
Crop Stage									
Crop Stage Scale									
Weed Stage				2-4"	0.5 - 1"	0.5 - 1"	1 - 2"		
Weed Density, Unit				1-2 FT2	1 M2	1 FT2	2-3 FT2		
Assessed By									
Trt-Eval Interval		9 DA-A	17 DA-A	30 DA-A	30 DA-A	30 DA-A	30 DA-A		
# Subsamples, Dec.		0	0	0	0	0	0		
Trt Treatment	Rate	Rate Unit	Grow Stg	1	2	3	4	5	6
1 Untreated				0 b	0 c	0 b	0 c	0 b	0 b
2 Lumax	2.94642	lb ai/a	pre	6 ab	6 bc	93 a	100 a	100 a	100 a
3 Bicep Lite II Magnum	3	lb ai/a	pre	6 ab	5 bc	81 a	88 b	100 a	100 a
4 Harness Xtra	3.0089	lb ai/a	pre	11 ab	14 ab	87 a	95 ab	100 a	100 a
5 Epic	0.54464	lb ai/a	pre	16 a	19 a	92 a	99 a	100 a	100 a
6 Keystone LA	3.1	lb ai/a	pre	8 ab	6 bc	86 a	95 ab	100 a	100 a
7 Keystone LA Hornet WDG	3.1 0.147	lb ai/a lb ai/a	pre pre	10 ab	11 abc	95 a	99 a	100 a	100 a
8 Keystone LA Balance Pro	1.55 0.09375	lb ai/a lb ai/a	pre pre	14 a	19 a	92 a	100 a	100 a	100 a
9 Keystone LA Balance Pro			pre pre	10 ab	10 abc	91 a	100 a	100 a	100 a
10 Axiom Hornet WDG	0.97857 0.147	lb ai/a lb ai/a	pre pre	8 ab	11 abc	87 a	95 ab	100 a	100 a
11 G-Max Lite	2.19642	lb ai/a	pre	8 ab	11 abc	83 a	94 ab	100 a	100 a
12 Degree Xtra	3.75	lb ai/a	pre	8 ab	5 bc	80 a	88 b	100 a	100 a
13 Camix	2.20535	lb ai/a	pre	6 ab	8 abc	89 a	100 a	100 a	100 a
14 Camix Princep	2.20535 1	lb ai/a lb ai/a	pre pre	5 ab	10 abc	95 a	100 a	100 a	100 a
LSD (P=.05)				7.7	7.3	12.6	7.0	0.0	0.0
Standard Deviation				5.4	5.1	8.8	4.9	0.0	0.0
CV				65.09	53.24	10.74	5.48	0.0	0.0
Grand Mean				8.23	9.64	82.16	89.38	92.86	92.86
Bartlett's X2				8.059	13.731	16.36	10.829	0.0	0.0
P(Bartlett's X2)				0.708	0.318	0.175	0.146	.	.
Replicate F				2.202	1.937	2.075	3.041	0.000	0.000
Replicate Prob(F)				0.1032	0.1396	0.1193	0.0402	1.0000	1.0000
Treatment F				2.172	4.179	29.943	113.324	0.000	0.000
Treatment Prob(F)				0.0310	0.0003	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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Weed Code				AMBTR	ABUTH	CHEAL	SETFA	IPOHE	ZEAMX
Crop Code									
Part Rated									
Rating Data Type									
Rating Unit									
Rating Date				10/Jul/2003	10/Jul/2003	10/Jul/2003	10/Jul/2003	10/Jul/2003	10/Jul/2003
Crop Stage									V7
Crop Stage Scale									36"
Weed Stage				12-36"	6-12"	6-18"	6-18"	2-4"	
Weed Density, Unit				1-2 FT2	1 M2	1 FT2	20 FT2	1 FT2	
Assessed By				Reece & Jeff					
Trt-Eval Interval				58 DA-A					
# Subsamples, Dec.				0	0	0	0	0	0
Trt No.	Treatment Name	Rate	Grow Stg	7	8	9	10	11	12
1	Untreated			0 b	0 c	0 b	0 c	0 b	0 a
2	Lumax	2.94642 lb ai/a	pre	88 a	100 a	100 a	100 a	97 a	0 a
3	Bicep Lite II Magnum	3 lb ai/a	pre	72 a	78 b	100 a	100 a	92 a	0 a
4	Harness Xtra	3.0089 lb ai/a	pre	78 a	87 ab	98 a	99 a	90 a	0 a
5	Epic	0.54464 lb ai/a	pre	91 a	99 a	100 a	100 a	87 a	0 a
6	Keystone LA	3.1 lb ai/a	pre	72 a	83 b	100 a	99 a	83 a	0 a
7	Keystone LA Hornet WDG	3.1 lb ai/a 0.147 lb ai/a	pre pre	93 a	98 a	100 a	100 a	88 a	0 a
8	Keystone LA Balance Pro	1.55 lb ai/a 0.09375 lb ai/a	pre pre	93 a	100 a	100 a	97 a	79 a	0 a
9	Keystone LA Balance Pro		pre pre	88 a	99 a	100 a	94 b	85 a	0 a
10	Axiom Hornet WDG	0.97857 lb ai/a 0.147 lb ai/a	pre pre	86 a	97 a	100 a	100 a	81 a	0 a
11	G-Max Lite	2.19642 lb ai/a	pre	72 a	88 ab	100 a	100 a	88 a	0 a
12	Degree Xtra	3.75 lb ai/a	pre	73 a	90 ab	100 a	100 a	97 a	0 a
13	Camix	2.20535 lb ai/a	pre	89 a	100 a	100 a	100 a	83 a	0 a
14	Camix Princep	2.20535 lb ai/a 1 lb ai/a	pre pre	92 a	100 a	100 a	100 a	79 a	0 a
LSD (P=.05)				16.0	9.1	2.0	3.2	22.0	0.0
Standard Deviation				11.2	6.3	1.4	2.2	15.4	0.0
CV				14.44	7.31	1.51	2.41	19.09	0.0
Grand Mean				77.48	86.91	92.61	92.04	80.52	0.0
Bartlett's X2				27.178	41.177	9.909	35.16	33.999	0.0
P(Bartlett's X2)				0.007*	0.001*	0.007*	0.001*	0.001*	.
Replicate F				4.122	1.308	0.816	0.898	4.810	0.000
Replicate Prob(F)				0.0124	0.2856	0.4927	0.4509	0.0060	1.0000
Treatment F				18.136	67.380	1455.096	574.503	9.663	0.000
Treatment Prob(F)				0.0001	0.0001	0.0001	0.0001	0.0001	1.0000

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Weed Code							
Crop Code				ZEAMX	ZEAMX	ZEAMX	
Part Rated				GRAIN	GRAIN	GRAIN	
Rating Data Type				WEIFRE	MOICON	YIELD	
Rating Unit				LB	%	bu/ac	
Rating Date				29/Oct/2003	29/Oct/2003	29/Oct/2003	
Crop Stage				Harvest	Harvest	Harvest	
Crop Stage Scale							
Weed Stage							
Weed Density, Unit							
Assessed By							
Trt-Eval Interval				169 DA-A	169 DA-A	169 DA-A	
# Subsamples, Dec.							
Trt No.	Treatment Name	Rate	Rate Unit	Grow Stg	13	14	15
1	Untreated				17 b	27 a	50 b
2	Lumax	2.94642	lb ai/a	pre	42 a	27 a	124 a
3	Bicep Lite II Magnum	3	lb ai/a	pre	35 a	26 a	107 a
4	Harness Xtra	3.0089	lb ai/a	pre	33 a	29 a	97 a
5	Epic	0.54464	lb ai/a	pre	42 a	27 a	124 a
6	Keystone LA	3.1	lb ai/a	pre	36 a	27 a	108 a
7	Keystone LA Hornet WDG	3.1 0.147	lb ai/a lb ai/a	pre pre	45 a	28 a	134 a
8	Keystone LA Balance Pro	1.55 0.09375	lb ai/a lb ai/a	pre pre	43 a	27 a	128 a
9	Keystone LA Balance Pro			pre pre	39 a	28 a	116 a
10	Axiom Hornet WDG	0.97857 0.147	lb ai/a lb ai/a	pre pre	41 a	26 a	123 a
11	G-Max Lite	2.19642	lb ai/a	pre	35 a	26 a	105 a
12	Degree Xtra	3.75	lb ai/a	pre	35 a	26 a	106 a
13	Camix	2.20535	lb ai/a	pre	43 a	26 a	131 a
14	Camix Princep	2.20535 1	lb ai/a lb ai/a	pre pre	45 a	26 a	137 a
LSD (P=.05)					9.1	2.7	26.8
Standard Deviation					6.4	1.9	18.8
CV					16.76	6.99	16.51
Grand Mean					38.01	26.88	113.68
Bartlett's X2					13.967	29.923	19.629
P(Bartlett's X2)					0.376	0.005*	0.105
Replicate F					1.068	4.756	1.162
Replicate Prob(F)					0.3738	0.0064	0.3366
Treatment F					5.266	0.621	5.462
Treatment Prob(F)					0.0001	0.8219	0.0001

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