

Evaluation of Lexar in Corn.

Project Code: 04-21S-E60 Location: Belleville Research Center
 Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA
 Trial Status: Final Updated: 10-11-04

Objective:

Evaluate the performance of the experimental Lexar for preemergence applications in corn.

Weed Code	Common Name	Scientific Name
1. SETFA	foxtail, giant	Setaria faberi Herrm.
2. XANST	cocklebur, common	Xanthium strumarium L.
3. ABUTH	velvetleaf	Abutilon theophrasti Medicus
4. AMBEL	ragweed, common	Ambrosia artemisiifolia L.
5. IPOSS	morningglory, species	Ipomoea sp.

Crop 1: ZEAMX corn, field Variety: DKC 60-17 RR
 Planting Method: Seeded Planting Date: 5-11-04
 Rate: 28000 S/A Depth: 1.5 IN
 Row Spacing: 30 IN

Plot Width, Unit: 10 FT Plot Length, Unit: 30 FT Reps: 4
 Tillage Type: Reduced-Till Study Design: Randomized complete block
 Previous Crop, Year: GLXMA, 2003

Field Prep./Maintenance: N 150 LB/A, P205 50 LB/A, K20 100 LB/A

Soil Name: Ebbert % OM: 2.7 pH: 6.2 CEC: 14
 Texture: Silt loam Fert. Level: P1: 115 LB/A, K: 500 LB/A

APPLICATION DESCRIPTION

A

Application Date: 5-11-04
 Time of Day: 19:00
 Application Method: Spray
 Application Timing: PRE
 Applic. Placement: BROFOL
 Air Temp., Unit: 78 F
 % Relative Humidity: 56
 Wind Velocity, Unit: 8 MPH
 Soil Moisture: NORMAL

CROP STAGE AT EACH APPLICATION

A

Crop 1 Code, Stage: ZEAMX NA
 Height, Unit: NA NA

APPLICATION EQUIPMENT

A

Appl. Equipment: CO2 sprayer
 Operating Pressure: 40 PSI
 Nozzle Type: Flat fan
 Nozzle Size: 8003
 Boom Length, Unit: 7.5 FT
 Spray Volume, Unit: 20 GPA

NOTES:

Harvested 9-27-04, (2) 30 inch rows x 27 ft.

Southern Illinois University

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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	ZEAMX Yield bu/A	ZEAMX Injury Percent	ZEAMX Injury Percent	ZEAMX Injury Percent	ZEAMX Injury Percent	SETFA Control Percent	SETFA Control Percent	SETFA Control Percent	XANST Control Percent	XANST Control Percent	XANST Control Percent	ABUTH Control Percent	ABUTH Control Percent	ABUTH Control Percent
						9-27-04	5-25-04	6-1-04	6-15-04	7-13-04	6-1-04	6-15-04	7-13-04	6-1-04	6-15-04	7-13-04	6-1-04	6-15-04	7-13-04
							7 DAE	14 DAE	28 DA-A	56 DA-A	14 DAE	28 DA-A	56 DA-A	14 DAE	28 DA-A	56 DA-A	14 DAE	28 DA-A	56 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	Yield	Injury	Injury	Injury	Injury	Control	Control	Control	Control	Control	Control				
1	NONTREATED									98	0	0	0	0	0	0	0	0	0	0	0			
2	LEXAR	3.7	L	2.31	LB A/A	2.5	QT/A	PRE	A	188	0	0	0	0	99	99	99	95	94	79	99			
3	LEXAR	3.7	L	2.78	LB A/A	3.0	QT/A	PRE	A	179	0	0	0	0	99	99	99	94	95	85	99			
4	LEXAR	3.7	L	3.24	LB A/A	3.5	QT/A	PRE	A	182	0	0	0	0	99	99	99	95	95	86	99			
5	BICEP II MAGNUM	5.5	L	2.9	LB A/A	2.1	QT/A	PRE	A	176	0	0	0	0	99	99	99	90	86	71	99			
6	LUMAX	3.94	L	2.46	LB A/A	2.5	QT/A	PRE	A	185	0	0	0	0	99	99	99	96	96	90	99			
7	LEXAR	3.7	L	2.78	LB A/A	3.0	QT/A	PRE	A	186	0	0	0	0	99	99	99	96	97	94	99			
7	PRINCEP	90	WG	1.0	LB A/A	1.11	LB/A	PRE	A															
8	GUARDSMAN MAX	5	L	1.88	LB A/A	3.0	PT/A	PRE	A	166	0	0	0	0	99	99	99	93	90	73	99			
9	HARNESS XTRA	5.6	L	2.8	LB A/A	2.0	QT/A	PRE	A	204	0	0	0	0	99	99	99	94	90	80	99			
10	EPIC	58	WG	0.362	LB A/A	10	OZ/A	PRE	A	182	0	0	0	0	99	99	99	89	86	71	99			
11	KEYSTONE	5.25	L	3.4	LB A/A	2.6	QT/A	PRE	A	172	0	0	0	0	99	99	99	96	91	78	99			
12	KEYSTONE	5.25	L	3.4	LB A/A	2.6	QT/A	PRE	A	181	0	0	0	0	99	99	99	96	97	93	99			
12	HORNET	68.5	WG	0.128	LB A/A	3	OZ/A	PRE	A															
13	LUMAX	3.94	L	2.46	LB A/A	2.5	QT/A	PRE	A	189	0	0	0	0	99	99	99	92	95	90	99			
13	AATREX	90	WG	1.0	LB A/A	1.11	LB/A	PRE	A															
LSD (P=.05)										41.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	5.4	9.3	0.2	1.9	1.9	
Replicate F										0.898	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.452	0.782	1.001	0.972	2.879	2.879
Replicate Prob(F)										0.4517	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0268	0.5119	0.4037	0.4168	0.0498	0.0498
Treatment F										3.022	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	296.594	190.031	56.586	152396.813	1652.299	1652.299
Treatment Prob(F)										0.0050	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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Weed Code	AMBEL	AMBEL	AMBEL	IPOSS	IPOSS	IPOSS
Crop Code						
Rating Data Type	Control	Control	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent	Percent	Percent
Rating Date	6-1-04	6-15-04	7-13-04	6-1-04	6-15-04	7-13-04
Trt-Eval Interval	14 DAE	28 DA-A	56 DA-A	14 DAE	28 DA-A	56 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	AMBEL 14 DAE	AMBEL 28 DA-A	AMBEL 56 DA-A	IPOSS 14 DAE	IPOSS 28 DA-A	IPOSS 56 DA-A
1	NONTREATED									0	0	0	0	0	0
2	LEXAR	3.7	L	2.31	LB A/A	2.5	QT/A	PRE	A	99	99	99	99	97	97
3	LEXAR	3.7	L	2.78	LB A/A	3.0	QT/A	PRE	A	99	99	99	99	98	98
4	LEXAR	3.7	L	3.24	LB A/A	3.5	QT/A	PRE	A	99	99	99	99	99	99
5	BICEP II MAGNUM	5.5	L	2.9	LB A/A	2.1	QT/A	PRE	A	99	98	98	99	97	97
6	LUMAX	3.94	L	2.46	LB A/A	2.5	QT/A	PRE	A	99	99	99	99	98	98
7	LEXAR	3.7	L	2.78	LB A/A	3.0	QT/A	PRE	A	99	99	99	99	98	98
7	PRINCEP	90	WG	1.0	LB A/A	1.11	LB/A	PRE	A						
8	GUARDSMAN MAX	5	L	1.88	LB A/A	3.0	PT/A	PRE	A	99	97	97	99	97	97
9	HARNESS XTRA	5.6	L	2.8	LB A/A	2.0	QT/A	PRE	A	99	98	98	99	96	96
10	EPIC	58	WG	0.362	LB A/A	10	OZ/A	PRE	A	98	99	99	97	86	86
11	KEYSTONE	5.25	L	3.4	LB A/A	2.6	QT/A	PRE	A	99	99	99	99	98	98
12	KEYSTONE	5.25	L	3.4	LB A/A	2.6	QT/A	PRE	A	99	99	99	99	98	98
12	HORNET	68.5	WG	0.128	LB A/A	3	OZ/A	PRE	A						
13	LUMAX	3.94	L	2.46	LB A/A	2.5	QT/A	PRE	A	99	99	99	99	98	98
13	AATREX	90	WG	1.0	LB A/A	1.11	LB/A	PRE	A						
LSD (P=.05)										0.8	1.3	1.3	0.9	4.2	4.2
Replicate F										0.972	1.241	1.241	0.972	1.903	1.903
Replicate Prob(F)										0.4168	0.3095	0.3095	0.4168	0.1471	0.1471
Treatment F										9513.681	3626.658	3626.658	7125.417	342.807	342.807
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

Trial Comments

1. Protocol: Syngenta.
2. Ratings: CI 7 and 14 DAE; WC 2, 4 and 8 WAE.
3. Yield.
4. DAE = Days after emergence.
5. Harvested 9-27-04, (2) 30 inch rows x 27 ft.