

Radius Comparisons in Corn - 1.

Project Code: 05-52-W50 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:** 11-14-05

Objective:

Compare weed control and crop tolerance of various Radius rates to other products.

Weed Code	Common Name	Scientific Name
1.	SETFA foxtail, giant	Setaria faberi Herrm.
2.	ABUTH velvetleaf	Abutilon theophrasti Medicus
3.	AMBTR ragweed, giant	Ambrosia trifida L.
4.	IPOHE morningglory, ivyleaf	Ipomoea hederacea (L.) Jacq.

Crop 1: ZEAMX corn, field **Variety:** 33P65 RR
Planting Method: Seeded **Planting Date:** 5-6-05
Rate: 28000 S/A **Depth:** 1.5 IN
Row Spacing: 30 IN

Plot Width, Unit: 10 FT **Plot Length, Unit:** 25 FT **Reps:** 3
Tillage Type: Reduced-Till **Study Design:** Randomized complete block
Previous Crop, Year: GLXMA, 2004

Field Prep./Maintenance: N 150 LB/A, P205 0 LB/A, K20 100 LB/A

Soil Name: Weir **% OM:** 2.2 **pH:** 6.9 **CEC:** 9
Texture: Silt loam **Fert. Level:** P1: 107 LB/A, K: 420 LB/A

APPLICATION DESCRIPTION

Application Date: 05-06-05
Time of Day: 19:15
Application Method: Spray
Application Timing: PRE
Applic. Placement: BROSIO
Air Temp., Unit: 76 F
% Relative Humidity: 30
Wind Velocity, Unit: 2 MPH
Soil Moisture: NORMAL

CROP STAGE AT EACH APPLICATION

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

APPLICATION EQUIPMENT

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:

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Weed Code	Crop Code	Rating Data Type	Rating Unit	Rating Date	Trt-Eval Interval	ZEAMX Injury Percent	ZEAMX Injury Percent	SETFA Control Percent	SETFA Control Percent	SETFA Control Percent	ABUTH Control Percent	ABUTH Control Percent	ABUTH Control Percent				
						05-20-05 14 DA-A	06-03-05 28 DA-A	05-20-05 14 DA-A	06-03-05 28 DA-A	06-24-05 49 DA-A	05-20-05 14 DA-A	06-03-05 28 DA-A	06-24-05 49 DA-A				
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code								
1	NONTREATED									0	0	0	0				
2	RADIUS	4 SC		0.5 lb ai/a		16 fl oz/a		PRE	A	0	0	99	94				
2	AATREX	90 WG		1.5 lb ai/a		1.67 lb/a		PRE	A			95	92				
3	RADIUS	4 SC		0.625 lb ai/a		20 fl oz/a		PRE	A	0	0	98	96				
3	AATREX	90 WG		1.5 lb ai/a		1.67 lb/a		PRE	A			92	92				
4	RADIUS	4 SC		0.75 lb ai/a		24 fl oz/a		PRE	A	0	0	99	97				
4	AATREX	90 WG		1.5 lb ai/a		1.67 lb/a		PRE	A			94	97				
5	LUMAX	3.94 L		2.46 lb ai/a		2.5 qt/a		PRE	A	0	0	97	91				
6	LUMAX	3.94 L		2.96 lb ai/a		3 qt/a		PRE	A	0	0	99	87				
7	LEXAR	3.7 L		2.78 lb ai/a		3 qt/a		PRE	A	0	0	66	60				
8	LEXAR	3.7 L		3.24 lb ai/a		3.5 qt/a		PRE	A	0	0	98	87				
9	HARNESS XTRA	5.6 L		3.5 lb ai/a		2.5 qt/a		PRE	A	0	0	99	97				
9	BALANCE PRO	4 SC		0.047 lb ai/a		1.5 fl oz/a		PRE	A			96	96				
10	HARNESS XTRA	5.6 L		3.5 lb ai/a		2.5 qt/a		PRE	A	0	0	98	97				
10	HORNET	68.5 WG		0.171 lb ai/a		4 oz/a		PRE	A			91	92				
11	KEYSTONE	5.25 L		3.54 lb ai/a		2.7 qt/a		PRE	A	0	0	99	98				
11	HORNET	68.5 WG		0.128 lb ai/a		3 oz/a		PRE	A			90	97				
12	GUARDSMAN MAX	5 L		2.5 lb ai/a		4 pt/a		PRE	A	0	0	98	97				
12	BALANCE PRO	4 SC		0.047 lb ai/a		1.5 fl oz/a		PRE	A			80	98				
LSD (P=.05)										0.0	0.0	28.0	26.0	30.8	26.5	26.2	27.0
Replicate F										0.000	0.000	0.948	1.114	0.288	1.181	1.353	0.704
Replicate Prob(F)										1.0000	1.0000	0.4029	0.3461	0.7524	0.3257	0.2791	0.5052
Treatment F										0.000	0.000	9.271	10.171	7.358	9.834	9.973	9.074
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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Weed Code	AMBTR	AMBTR	IPOHE	IPOHE
Crop Code				
Rating Data Type	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent
Rating Date	06-03-05	06-24-05	06-03-05	06-24-05
Trt-Eval Interval	28 DA-A	49 DA-A	28 DA-A	49 DA-A

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code				
1	NONTREATED									0	0	0	0
2	RADIUS	4	SC	0.5	lb ai/a	16	fl oz/a	PRE	A	75	87	38	39
2	AATREX	90	WG	1.5	lb ai/a	1.67	lb/a	PRE	A				
3	RADIUS	4	SC	0.625	lb ai/a	20	fl oz/a	PRE	A	60	67	37	29
3	AATREX	90	WG	1.5	lb ai/a	1.67	lb/a	PRE	A				
4	RADIUS	4	SC	0.75	lb ai/a	24	fl oz/a	PRE	A	72	92	37	33
4	AATREX	90	WG	1.5	lb ai/a	1.67	lb/a	PRE	A				
5	LUMAX	3.94	L	2.46	lb ai/a	2.5	qt/a	PRE	A	63	87	45	38
6	LUMAX	3.94	L	2.96	lb ai/a	3	qt/a	PRE	A	70	89	47	43
7	LEXAR	3.7	L	2.78	lb ai/a	3	qt/a	PRE	A	33	59	23	17
8	LEXAR	3.7	L	3.24	lb ai/a	3.5	qt/a	PRE	A	93	82	52	35
9	HARNESS XTRA	5.6	L	3.5	lb ai/a	2.5	qt/a	PRE	A	77	92	43	29
9	BALANCE PRO	4	SC	0.047	lb ai/a	1.5	fl oz/a	PRE	A				
10	HARNESS XTRA	5.6	L	3.5	lb ai/a	2.5	qt/a	PRE	A	94	89	55	63
10	HORNET	68.5	WG	0.171	lb ai/a	4	oz/a	PRE	A				
11	KEYSTONE	5.25	L	3.54	lb ai/a	2.7	qt/a	PRE	A	83	87	57	49
11	HORNET	68.5	WG	0.128	lb ai/a	3	oz/a	PRE	A				
12	GUARDSMAN MAX	5	L	2.5	lb ai/a	4	pt/a	PRE	A	77	83	47	45
12	BALANCE PRO	4	SC	0.047	lb ai/a	1.5	fl oz/a	PRE	A				
LSD (P=.05)										28.6	35.5	20.7	19.2
Replicate F										1.337	2.456	1.850	8.054
Replicate Prob(F)										0.2832	0.1090	0.1809	0.0024
Treatment F										7.281	4.596	4.855	6.003
Treatment Prob(F)										0.0001	0.0012	0.0008	0.0002

Trial Comments

1. Protocol: Bayer.
2. Ratings: CI 11 to 14 and 26 to 34 DAT. WC 11 to 14, 26 to 34, and 45-59 DAT.
3. Yield preferred but optional.
4. DA-A = Days after PRE application.
5. Not harvested.