

## Radius Comparisions in Corn - 2.

Project Code: 05-21N-M120 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.	XANST cocklebur, common	Xanthium strumarium L.

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

**Plot Width, Unit:** 10 FT **Plot Length, Unit:** 30 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:** Ebbert **% OM:** 2.7 **pH:** 6.2 **CEC:** 14  
**Texture:** Silt loam **Fert. Level:** P1: 115 LB/A, K: 500 LB/A

**APPLICATION DESCRIPTION**

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**Application Date:** 05-06-05  
**Time of Day:** 8:45  
**Application Method:** Spray  
**Application Timing:** PRE  
**Applic. Placement:** BROSIO  
**Air Temp., Unit:** 60 F  
**% Relative Humidity:** 44  
**Wind Velocity, Unit:** 5 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:**

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Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code	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	06-03-05	05-20-05	06-03-05	06-24-05	05-20-05	06-03-05	06-24-05
										14 DA-A	28 DA-A	14 DA-A	28 DA-A	49 DA-A	14 DA-A	28 DA-A	49 DA-A
1	NONTREATED									0	0	0	0	0	0	0	0
2	RADIUS	4	SC	0.5	lb ai/a	16	fl oz/a	PRE	A	0	0	96	95	86	93	97	95
	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	0	0	96	98	92	90	95	90
	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	0	0	96	98	85	88	96	94
	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	0	0	95	88	42	87	98	97
6	LUMAX	3.94	L	2.96	lb ai/a	3	qt/a	PRE	A	0	0	95	92	47	93	98	98
7	LEXAR	3.7	L	2.78	lb ai/a	3	qt/a	PRE	A	0	0	95	85	42	93	99	97
8	LEXAR	3.7	L	3.24	lb ai/a	3.5	qt/a	PRE	A	0	0	96	95	68	95	99	98
9	HARNESS XTRA	5.6	L	3.5	lb ai/a	2.5	qt/a	PRE	A	0	0	98	98	87	93	93	87
	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	0	0	99	97	93	92	94	70
	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	0	0	99	98	92	90	95	90
	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	0	0	97	97	82	90	96	90
	BALANCE PRO	4	SC	0.047	lb ai/a	1.5	fl oz/a	PRE	A								
LSD (P=.05)										0.0	0.0	3.2	4.5	17.7	4.7	4.7	12.9
Replicate F										0.000	0.000	3.448	0.446	0.153	24.711	1.891	4.770
Replicate Prob(F)										1.0000	1.0000	0.0498	0.6461	0.8589	0.0001	0.1757	0.0190
Treatment F										0.000	0.000	658.800	331.845	23.370	271.794	311.302	38.959
Treatment Prob(F)										1.0000	1.0000	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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Project Code: 05-21N-M120 Location: Belleville Research Center  
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Weed Code	XANST	XANST	XANST
Crop Code			
Rating Data Type	Control	Control	Control
Rating Unit	Percent	Percent	Percent
Rating Date	05-20-05	06-03-05	06-24-05
Trt-Eval Interval	14 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
2	RADIUS	4	SC	0.5	lb ai/a	16	fl oz/a	PRE	A	72	80	43
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	77	82	43
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	75	88	42
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	83	53
6	LUMAX	3.94	L	2.96	lb ai/a	3	qt/a	PRE	A	58	82	32
7	LEXAR	3.7	L	2.78	lb ai/a	3	qt/a	PRE	A	82	92	62
8	LEXAR	3.7	L	3.24	lb ai/a	3.5	qt/a	PRE	A	75	94	68
9	HARNESS XTRA	5.6	L	3.5	lb ai/a	2.5	qt/a	PRE	A	83	93	48
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	83	93	58
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	78	94	79
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	73	85	60
12	BALANCE PRO	4	SC	0.047	lb ai/a	1.5	fl oz/a	PRE	A			
LSD (P=.05)										16.2	8.8	31.0
Replicate F										1.890	0.991	0.825
Replicate Prob(F)										0.1748	0.3879	0.4511
Treatment F										17.042	75.591	3.637
Treatment Prob(F)										0.0001	0.0001	0.0048

## 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.