

Control of Volunteer Roundup Ready Corn.

01-11A-W40

OBJECTIVE: Compare Select and Assure II for control of volunteer Roundup Ready corn.

SUMMARY: Select plus Prime Oil and Select plus Roundup Ultra Max controlled 99% of 8 inch volunteer Roundup Ready Corn. Similarly, Select plus Prime Oil and Assure II plus Roundup Ultra Max controlled 99% of 12 inch volunteer Roundup Ready corn. However, at 28 days after treatment, Select plus Roundup Ultra Max controlled only 63% of 12 inch volunteer corn. Adding Activator-90 to Select plus Roundup Ultra Max increased 12 inch volunteer corn control to 90%.

HERBICIDES

ASSURE II 0.88 EC
ROUNDUP ULTRA MAX 3.7 SL
SELECT 2 EC

WEEDS

corn, volunteer

CROP

corn, field as an assay

Bryan Young

PLANT, SOIL AND GENERAL AGRICULTURE DEPARTMENT

SOUTHERN ILLINOIS UNIVERSITY

Control of Volunteer Roundup Ready Corn.

Project Code: 01-11A-W40 Location: Belleville Research Center

Investigator: Bryan Young, Assistant Professor, Southern Illinois University

City State Zip Country: Belleville IL 62221 USA
Trial Status: Final Initiation Date: 4-25-01**Objective:**

Compare Select and Assure II for control of volunteer Roundup Ready corn.

Weed Code Common Name Scientific Name

1. ZEAMX corn, volunteer Zea mays L.

Crop 1: ZEAMX corn, field **Variety:** DK 626 RR
Planting Method: Seeded **Planting Date:** 5-11-01
Rate: 28000 S/A **Depth:** 1.5 IN
Row Spacing: 30 IN**Plot Width, Unit:** 10 FT **Plot Length, Unit:** 26 FT **Reps:** 3
Tillage Type: Reduced-Till **Study Design:** Randomized complete block
Previous Crop, Year: GLXMA, 2000
Field Prep./Maintenance: N 150 LB/A, P205 0 LB/A, K20 150 LB/A**Soil Name:** Weir **% OM:** 1.5 **pH:** 6.0 **CEC:** 12
Texture: Silt loam **Fert. Level:** P1: 81 LB/A, K: 247 LB/A**APPLICATION DESCRIPTION**

	A	B
Application Date:	6-1-01	6-8-01
Time of Day:	16:00	8:00
Application Method:	Spray	Spray
Application Timing:	8"CN	12"CN
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	72 F	68 F
% Relative Humidity:	50	80
Wind Velocity, Unit:	5 MPH	0-3 MPH
Soil Moisture:	ABONOR	ABONOR

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	ZEAMX V4	ZEAMX V6
Height, Unit:	8 IN	10-12 ZEAM

WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code:	ZEAMX	ZEAMX
Stage(leaves):	4	6
Height(inches):	8	10-12
Density:	Medium	Medium

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	8002	8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	20 GPA	20 GPA

NOTES: NOT HARVESTED.

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Southern Illinois University

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Weed Code										ZEAMX	ZEAMX
Rating Data Type										Control	Control
Rating Unit										Percent	Percent
Trt-Eval Interval										14 DAT	28 DAT

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code		
1	NONTREATED									0	0
2	SELECT	2	EC	0.05	LB A/A	3.2	OZ/A	8"CN	A	99	99
2	PRIME OIL COC	100	LIQ	1.0	PT/A	1	PT/A	8"CN	A		
2	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	8"CN	A		
3	SELECT	2	EC	0.05	LB A/A	3.2	OZ/A	8"CN	A	99	99
3	ROUNDUP ULTRA MAX	3.7	SL	0.58	LB AE/A	20	OZ/A	8"CN	A		
3	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	8"CN	A		
4	SELECT	2	EC	0.063	LB A/A	4	OZ/A	12"CN	B	99	99
4	PRIME OIL COC	100	LIQ	1.0	PT/A	1	PT/A	12"CN	B		
4	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	12"CN	B		
5	SELECT	2	EC	0.063	LB A/A	4	OZ/A	12"CN	B	67	63
5	ROUNDUP ULTRA MAX	3.7	SL	0.58	LB AE/A	20	OZ/A	12"CN	B		
5	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	12"CN	B		
6	SELECT	2	EC	0.063	LB A/A	4	OZ/A	12"CN	B	93	90
6	ROUNDUP ULTRA MAX	3.7	SL	0.58	LB AE/A	20	OZ/A	12"CN	B		
6	ACTIVATOR 90	100	LIQ	0.125	% V/V	0.125	%V/V	12"CN	B		
6	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	12"CN	B		
7	ASSURE II	0.88	EC	0.0344	LB A/A	5	OZ/A	12"CN	B	99	99
7	ROUNDUP ULTRA MAX	3.7	SL	0.58	LB AE/A	20	OZ/A	12"CN	B		
7	AMS	100	DRY	2.5	LB A/A	2.5	LB/A	12"CN	B		
LSD (P=.05)										9.8	5.1
Replicate F										0.172	1.170
Replicate Prob(F)										0.8441	0.3435
Treatment F										134.961	500.574
Treatment Prob(F)										0.0001	0.0001

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Trial Comments

1. Protocol: Valent.
2. Blanket PRE application of Bicep II Magnum at 2.1 qt/A to all plots including nontreated on 5-14-01.
3. DAT = days after treatment.
14 days after 8"CN and 12"CN applications was on 6-15-01 and 6-22-01, respectively.
28 days after 8"CN and 12"CN applications was on 6-29-01 and 7-6-01, respectively.