

Roundup Ready Corn Burndown with Clethodim.

Project Code: 07-ARC-3-E120 Location: Agronomy Research Center
 Investigator: Bryan Young

Investigator: Bryan Young, Associate Professor, Southern Illinois University

City State Zip Country: Carbondale IL 62901 USA
 Trial Status: Final Updated: 1-23-08

Objective:

Evaluate control of Roundup Ready Corn 2 in a replant situation using Select Max at two rates and two timings, focusing on lower organic matter and/or sandy soils.

Crop 1: ZEAMX corn, field Variety: 33P70 RR2
 Planting Method: Seeded Planting Date: 4-23-07
 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, 2006
 Field Prep./Maintenance: N 148 LB/A, P205 46 LB/A, K20 60 LB/A

Soil Name: Weir % OM: 1.1 pH: 6.7 CEC: 9.1
 Texture: Silt loam Fert. Level: P1: 65 LB/A, K: 227 LB/A

APPLICATION DESCRIPTION

	A	B
Application Date:	5-7-07	5-18-07
Time of Day:	9:30	11:00
Application Method:	Spray	Spray
Application Timing:	V1-2	V4-5
Applic. Placement:	BROFOL	BROFOL
Air Temp., Unit:	73 F	64 F
% Relative Humidity:	56	60
Wind Velocity, Unit:	3-6 MPH	0-5 MPH
Dew Presence (Y/N):	N	N
Soil Temp., Unit:	64 F	60 F
Soil Moisture:	ABONOR	NORMAL
% Cloud Cover:	20	0

CROP STAGE AT EACH APPLICATION

	A	B
Crop 1 Code, Stage:	ZEAMX V2	ZEAMX V4-V5
Height, Unit:	4-5 IN	6-8 IN

APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	CO2 sprayer	CO2 sprayer
Operating Pressure:	40 PSI	40 PSI
Nozzle Type:	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA

NOTES:

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Weed Code	ZEAMX	ZEAMX	ZEAMX	ZEAMX
Crop Code				
Rating Data Type	Control	Control	STARED	STARED
Rating Unit	Percent	Percent	Percent	Percent
Rating Date		6-15-07		6-15-07
Trt-Eval Interval	14 DAT	Canopy	14 DAT	Canopy

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Prod Rate	Prod Unit	Grow Stg	Appl Code				
1	SELECT MAX-VC-1650	0.97	EC	0.03	lb ai/a	4	fl oz/a	V1-2	A	97 a	98 ab	99 ab	99 a
1	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	V1-2	A				
1	AMS	100	DRY	2.5	lb ai/a	2.5	lb/a	V1-2	A				
2	SELECT MAX-VC-1650	0.97	EC	0.03	lb ai/a	4	fl oz/a	V1-2	A	99 a	99 ab	100 a	100 a
2	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V1-2	A				
2	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	V1-2	A				
2	AMS	100	DRY	2.5	lb ai/a	2.5	lb/a	V1-2	A				
3	SELECT MAX-VC-1650	0.97	EC	0.045	lb ai/a	6	fl oz/a	V1-2	A	98 a	98 ab	99 ab	99 a
3	DEGREE XTRA	4	L	2	lb ai/a	2	qt/a	V1-2	A				
3	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	V1-2	A				
3	AMS	100	DRY	2.5	lb ai/a	2.5	lb/a	V1-2	A				
4	SELECT MAX-VC-1650	0.97	EC	0.06	lb ai/a	8	fl oz/a	V1-2	A	100 a	100 a	100 a	100 a
4	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	V1-2	A				
4	AMS	100	DRY	2.5	lb ai/a	2.5	lb/a	V1-2	A				
5	GRAMOXONE INTEON	2	SL	0.5	lb ai/a	2	pt/a	V1-2	A	97 a	97 abc	98 ab	98 ab
5	SENCOR	75	WG	0.094	lb ai/a	2	oz/a	V1-2	A				
5	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	V1-2	A				
5	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	V1-2	A				
6	LIBERTY	1.67	EC	0.44	lb ai/a	34	fl oz/a	V1-2	A	94 bc	91 c	88 d	89 c
6	AMS	100	DRY	3.0	lb ai/a	3	lb/a	V1-2	A				
7	SELECT MAX-VC-1650	0.97	EC	0.03	lb ai/a	4	fl oz/a	V4-5	B	94 bc	93 bc	91 bcd	91 bc
7	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	V4-5	B				
7	AMS	100	DRY	2.5	lb ai/a	2.5	lb/a	V4-5	B				
8	SELECT MAX-VC-1650	0.97	EC	0.03	lb ai/a	4	fl oz/a	V4-5	B	92 c	82 d	89 cd	89 c
8	ROUNDUP ORIG MAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	V4-5	B				
8	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	V4-5	B				
8	AMS	100	DRY	2.5	lb ai/a	2.5	lb/a	V4-5	B				
9	SELECT MAX-VC-1650	0.97	EC	0.045	lb ai/a	6	fl oz/a	V4-5	B	88 d	60 e	85 d	74 d
9	DEGREE XTRA	4	L	2	lb ai/a	2	qt/a	V4-5	B				
9	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	V4-5	B				
9	AMS	100	DRY	2.5	lb ai/a	2.5	lb/a	V4-5	B				
10	SELECT MAX-VC-1650	0.97	EC	0.06	lb ai/a	8	fl oz/a	V4-5	B	97 ab	95 abc	97 abc	97 ab
10	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	V4-5	B				
10	AMS	100	DRY	2.5	lb ai/a	2.5	lb/a	V4-5	B				
11	GRAMOXONE INTEON	2	SL	0.5	lb ai/a	2	pt/a	V4-5	B	98 a	97 abc	99 ab	98 a
11	SENCOR	75	WG	0.094	lb ai/a	2	oz/a	V4-5	B				
11	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	V4-5	B				
11	PRIME OIL COC	100	LIQ	1.0	% v/v	1	% v/v	V4-5	B				
12	LIBERTY	1.67	EC	0.44	lb ai/a	34	fl oz/a	V4-5	B	81 e	51 f	70 e	65 e
12	AMS	100	DRY	3.0	lb ai/a	3	lb/a	V4-5	B				
LSD (P=.05)										3.5	7.0	8.6	7.0
Replicate F										0.603	1.575	0.270	0.369
Replicate Prob(F)										0.6176	0.2139	0.8469	0.7761
Treatment F										19.859	44.298	8.867	21.188
Treatment Prob(F)										0.0001	0.0001	0.0001	0.0001

Means followed by same letter do not significantly differ (P=.05, LSD)

Trial Comments

1. Protocol: Monsanto.
2. Ratings: Corn control and visual stand reduction at 14 DAT and crop canopy closure.
3. Crop may be destroyed after final rating.
4. Blanket PRE application of atrazine (1.5 lbai/A) to all plots 10 ft wide, applied 4-24-07.
5. Blanket POST application of Roundup Original Max (22 fl oz/A) + AMS (2.0%) if needed.
6. DAT = Days after either V1-2 or V4-5 application. STARED = Stand reduction. Canopy = Canopy closure.
7. Ratings at 14 days after the V1-2 or V4-5 application were on 5-21-07 and 6-1-07, respectively. Ratings at canopy closure were 39 and 28 days after the V1-2 or V4-5 application, respectively.