

Roundup Ready Alfalfa Evaluation.

Trial ID: 08-7 Location: Belleville Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: Belleville IL 62221 USA
 Trial Status: FINAL Initiation Date: 04-11-06

Objectives: Evaluate the performance of RR alfalfa in terms of crop response, weed control and yield compared with standard herbicide treatments.

Crop 1: MEDSA alfalfa Variety: DKC-RR05-060104
 Planting Method: Seeded Planting Date: 04-11-06
 Rate, Unit: 18 lb/A

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 29 FT Tillage Type: REDUCED-TILL
 Replications: 4 Study Design: Randomized Complete Block

 % OM: 1.8 Texture: SILT LOAM
 pH: 6.4 Soil Name: CASEYVILLE
 CEC: 8 Fert. Level: P1 87 LB/A, K 415 LB/A

Application Description

	A	B	C	D
Application Date:	04-11-06	05-19-06	06-09-06	05-30-06
Time of Day:	8:00	11:00	10:00	9:00
Application Method:	Spray	Spray	Spray	Spray
Application Timing:	PPI	1-2 Trifo	3WA-B	3-4 Trifo
Application Placement:	BROSOI	BROFOL	BROFOL	BROFOL
Air Temperature, Unit:	60 F	76 F	84 F	76 F
% Relative Humidity:	70	54	72	94
Wind Velocity, Unit:	5 MPH	1-2 MPH	1-2 MPH	1-3 MPH
Dew Presence (Y/N):	N	N	N	N
Soil Moisture:	NORMAL	NORMAL	NORMAL	NORMAL

	A	B	C	D
Crop stage at application:	NA	1-2T	10-14T	3-4T
Height Min, Max (inch):		1 3	7 9	4 5

Pest Stage At Each Application

Application Date: 04-11-06 05-19-06 06-09-06 05-30-06

Application Equipment

	A	B	C	D
Appl. Equipment:	CO2 sprayer	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA	15 GPA

Roundup Ready Alfalfa Evaluation.

Trial ID: 08-7

Location: Belleville Res. Center

Pest Code
Crop Code
Rating Date
Rating Data Type
Rating Unit
Rating Timing
Trt-Eval Interval

MEDSA MEDSA
08-17-07 08-21-08
Plants Plants
1.0 sqft 1.0 sqft

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code		
1	NONTREATED									37.2 a	9.8 a
2	ROUNDUP W-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	1-2Trifol	B	31.7 abc	8.8 a
2	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	1-2Trifol	B		
2	ROUNDUP W-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	3WA-B	C		
2	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	3WA-B	C		
3	ROUNDUP W-MAX	4.5	SL	1.5	lb ae/a	42.7	fl oz/a	1-2Trifol	B	36.3 ab	8.4 a
3	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	1-2Trifol	B		
3	ROUNDUP W-MAX	4.5	SL	1.5	lb ae/a	42.7	fl oz/a	3WA-B	C		
3	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	3WA-B	C		
4	ROUNDUP W-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	3-4Trifol	D	30.9 bc	8.8 a
4	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	3-4Trifol	D		
5	ROUNDUP W-MAX	4.5	SL	1.5	lb ae/a	42.7	fl oz/a	3-4Trifol	D	30.3 c	8.3 a
5	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	3-4Trifol	D		
6	TREFLAN	4	EC	0.75	lb ai/a	1.5	pt/a	PPI	A	34.0 abc	9.3 a
7	PURSUIT	2	SL	0.063	lb ai/a	4	oz/a	3-4Trifol	D	33.2 abc	8.7 a
7	ACTIVATOR 90	100	LIQ	0.25	% v/v	0.25	% v/v	3-4Trifol	D		
7	AMS	100	DRY	1.8	% w/w	15	lb/100 gal	3-4Trifol	D		
8	TREFLAN	4	EC	0.75	lb ai/a	1.5	pt/a	PPI	A	36.3 ab	8.7 a
8	ROUNDUP W-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	3-4Trifol	D		
8	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	3-4Trifol	D		
9	ROUNDUP W-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	3-4Trifol	D	32.0 abc	9.2 a
9	PURSUIT	2	SL	0.063	lb ai/a	4	oz/a	3-4Trifol	D		
9	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	3-4Trifol	D		
10	ROUNDUP W-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	1-2Trifol	B	34.6 abc	9.8 a
10	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	1-2Trifol	B		
10	ROUNDUP W-MAX	4.5	SL	0.75	lb ae/a	21.3	fl oz/a	3WA-B	C		
10	AMS	100	DRY	2.0	% w/w	17	lb/100 gal	3WA-B	C		
LSD (P=.05)										5.58	1.66
Replicate F										0.719	0.471
Replicate Prob(F)										0.5494	0.7050
Treatment F										1.572	0.786
Treatment Prob(F)										0.1739	0.6308

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

Trial Comments

1. Protocol: Monsanto (continuation of SIU project code 06-7).
2. Ratings: End of season - assess weed control and alfalfa stand density per square foot.
3. Maintain pest control over entire area as needed and record details of all applications.
4. 1.0 sqft = 1.0 square foot.
5. Harvest data not reported.