

Miscellaneous Including Alfalfa and Wheat

Southern Illinois University

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

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: 5-19-11

Objectives: Evaluate weed control and crop response of Roundup Ready alfalfa to between cuttings herbicide applications.

Crop 1: MEDSA Alfalfa Variety: DKC-RR05-06104 Description: RR
 Planting Method: SEEDED Planting Date: 4-11-06
 Rate, Unit: 18 LB/A

Pest 1 Type: W Code: POAAN Poa annua L. bluegrass, annual
 Pest 2 Type: W Code: DIGSA Digitaria sanguinalis (L.) Scop. crabgrass, large
 Pest 3 Type: W Code: AMATA Amaranthus rudis Sauer waterhemp, common

Plot Width, Unit: 10 FT Site Type: FIELD
 Plot Length, Unit: 30 FT Tillage Type: NO-TILL
 Replications: 4 Study Design: Randomized Complete Block

Prior Crops, Year
 1. MEDSA 2010

Field Prep./Maintenance: N ___ LB/A, P205 ___ LB/A, K20 ___ LB/A

% OM: 1.9 Texture: SILT LOAM
 pH: 6.9 Soil Name: CASEYVILLE
 CEC: 7 Fert. Level: P1: 71 LB/A, K: 287 LB/A

Application Description

	A	B	C
Application Date:	5-19-11		6-29-11
Time of Day:	10:00	See	11:45
Application Method:	Spray	comments	Spray
Application Timing:	2-4DA-1ST	21DA-A	AS-NEEDED
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	RFK		LAH
Air Temperature, Unit:	65 F		82 F
% Relative Humidity:	78		56
Wind Velocity, Unit:	0 MPH		3 MPH
Wind Direction:			SE
Dew Presence (Y/N):	N		N
Soil Temperature, Unit:	65 F		76 F
Soil Moisture:	NORMAL		ABONOR
% Cloud Cover:	10		0

Crop stage at application: 19-5-11 29-6-11
 4T NA NA 10+ T
 Height Min, Max (inch): 2 2 NA NA 8 12

Pest Stage At Each Application

	5-19-11	6-29-11
Weed Code:	POAAN	POAAN
Stage Majority (leaves):	4 NA NA	
Stage Min, Max:	3 5	
Height Majority:	4 IN	
Height Min, Max:	2 4	
Density, Unit:	0.01 FT2	
Weed Code:	DIGSA	DIGSA
Stage Majority (leaves):	NA NA 3	
Stage Min, Max:		2 3
Height Majority:		3 IN
Height Min, Max:		1 3
Density, Unit:		0.01 FT2
Weed Code:	AMATA	AMATA
Stage Majority (leaves):	NA NA NA	

Application Equipment

	CO2 sprayer	CO2 sprayer	CO2 sprayer
Operating Pressure:	30 PSI	30 PSI	30 PSI
Nozzle Type:	Flat fan	Flat fan	Flat fan
Nozzle Size:	XR 8002	XR 8002	XR 8002
Boom Length, Unit:	7.5 FT	7.5 FT	7.5 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

Pest Code								MEDSA	MEDSA	MEDSA	MEDSA	MEDSA	MEDSA	MEDSA									
Crop Code								6-16-11	6-16-11	6-16-11	6-16-11	6-16-11	6-16-11	6-16-11									
Rating Date								Yield	Moisture	CP	ICP	ACP	DP	ADF									
Rating Data Type								dw t/A	Percent	Percent	Percent	Percent	Percent	Percent									
Rating Unit								Cutting 2	Cutting 2	Cutting 2	Cutting 2	Cutting 2	Cutting 2	Cutting 2									
Rating Timing								28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A									
Trt-Eval Interval								28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A									
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code														
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	1.36	ab	77.1	ab	21.5	ab	0.93	a	21.5	ab	14.9	ab	31.0	a-d
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	1.40	ab	77.6	a	22.2	a	0.98	a	22.2	a	15.3	a	30.5	a-d
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	1.38	ab	77.6	a	20.6	b	0.98	a	20.6	b	14.2	b	32.7	a
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A														
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	1.39	ab	76.3	b	21.5	ab	0.98	a	21.5	ab	14.8	ab	30.8	a-d
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	1.34	ab	77.6	a	21.3	ab	0.93	a	21.3	ab	14.7	ab	31.4	a-d
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	1.31	b	77.6	a	21.0	ab	0.98	a	21.0	ab	14.5	ab	32.6	ab
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A														
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	1.43	ab	77.3	ab	21.5	ab	0.98	a	21.5	ab	14.8	ab	32.3	abc
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	1.12	c	77.3	ab	22.2	a	0.93	a	22.2	a	15.4	a	29.6	d
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
9	NONTREATED									1.49	a	76.6	ab	21.7	ab	1.03	a	21.7	ab	14.9	ab	30.9	a-d
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	1.36	ab	77.0	ab	21.3	ab	0.93	a	21.3	ab	14.7	ab	31.1	a-d
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	1.40	ab	77.1	ab	21.4	ab	0.98	a	21.4	ab	14.8	ab	30.7	a-d
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	1.40	ab	77.0	ab	21.6	ab	0.90	a	21.6	ab	15.0	ab	31.0	a-d
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	1.30	b	77.0	ab	22.2	a	0.95	a	22.2	a	15.4	a	30.2	cd
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	1.33	ab	77.3	ab	21.5	ab	0.95	a	21.5	ab	14.9	ab	31.3	a-d
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A														
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	1.39	ab	76.3	b	21.6	ab	0.98	a	21.6	ab	14.9	ab	30.3	bcd
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code														
16	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	1.08	c	76.9	ab	21.6	ab	0.95	a	21.6	ab	14.9	ab	30.6	a-d
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
16	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
LSD (P=.05)										0.167		1.20		1.49		0.127		1.49		1.00		2.35	
Replicate F										1.595		4.965		2.538		2.745		2.538		2.481		2.254	
Replicate Prob(F)										0.2038		0.0046		0.0685		0.0539		0.0685		0.0731		0.0950	
Treatment F										3.253		0.959		0.670		0.486		0.670		0.726		1.072	
Treatment Prob(F)										0.0011		0.5114		0.7989		0.9356		0.7989		0.7456		0.4073	

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

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

Pest Code																							
Crop Code																							
Rating Date																							
Rating Data Type																							
Rating Unit																							
Rating Timing																							
Trt-Eval Interval																							
		MEDSA	MEDSA	MEDSA	MEDSA	MEDSA	MEDSA	MEDSA															
		6-16-11	6-16-11	6-16-11	6-16-11	6-16-11	6-16-11	6-16-11															
		NDF	TDN	EE	NEI	NEm	NEg	RFV															
		Percent	Percent	Ther/CWT	Mcal/LB	Mcal/LB	Mcal/LB																
		Cutting 2	Cutting 2	Cutting 2	Cutting 2	Cutting 2	Cutting 2	Cutting 2															
		28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A	28 DA-A															
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code														
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	43.0	ab	65.5	abc	55.7	a-d	0.68	ab	0.68	a-d	0.41	a-d	140.6	ab
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	42.3	ab	66.0	abc	56.2	a-d	0.68	ab	0.69	a-d	0.42	abc	143.9	ab
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	44.1	a	63.8	c	54.1	d	0.66	b	0.65	cd	0.38	d	134.4	b
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A														
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	42.3	ab	65.7	abc	56.0	a-d	0.68	ab	0.68	a-d	0.41	a-d	143.3	ab
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	43.2	ab	65.1	abc	55.4	a-d	0.67	ab	0.67	a-d	0.40	a-d	139.1	ab
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	43.6	a	63.8	c	54.2	cd	0.66	b	0.65	d	0.39	cd	135.5	b
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A														
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	44.3	a	64.2	bc	54.5	bcd	0.66	b	0.66	bcd	0.39	bcd	134.3	b
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	40.9	b	67.0	a	57.1	a	0.69	a	0.70	a	0.43	a	150.0	a
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
9	NONTREATED									42.8	ab	65.6	abc	55.9	a-d	0.68	ab	0.68	a-d	0.41	a-d	141.2	ab
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	42.3	ab	65.4	abc	55.7	a-d	0.67	ab	0.68	a-d	0.41	a-d	142.4	ab
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	42.3	ab	65.8	abc	56.1	a-d	0.68	ab	0.68	a-d	0.42	a-d	143.0	ab
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	42.7	ab	65.6	abc	55.8	a-d	0.68	ab	0.68	a-d	0.41	a-d	141.2	ab
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	42.1	ab	66.4	ab	56.6	ab	0.68	ab	0.69	ab	0.42	ab	145.1	ab
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	43.4	a	65.2	abc	55.5	a-d	0.67	ab	0.67	a-d	0.41	a-d	138.5	ab
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A														
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	42.0	ab	66.3	abc	56.5	abc	0.68	ab	0.69	abc	0.42	ab	145.1	ab
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code														
16	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	42.4	ab	66.0	abc	56.2	a-d	0.68	ab	0.68	a-d	0.41	a-d	143.3	ab
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
16	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
LSD (P=.05)										2.46		2.52		2.31		0.028		0.037		0.034		11.75	
Replicate F										2.367		2.269		2.222		2.585		2.164		2.110		2.583	
Replicate Prob(F)										0.0834		0.0934		0.0986		0.0648		0.1055		0.1122		0.0650	
Treatment F										1.000		1.057		1.061		1.037		1.048		1.158		1.050	
Treatment Prob(F)										0.4716		0.4198		0.4171		0.4383		0.4277		0.3375		0.4267	

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

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

Pest Code										MEDSA	MEDSA	MEDSA	MEDSA
Crop Code										6-16-11	6-16-11	6-16-11	6-16-11
Rating Date										P	CA	K	MG
Rating Data Type										Percent	Percent	Percent	Percent
Rating Unit										Cutting 2	Cutting 2	Cutting 2	Cutting 2
Rating Timing										28 DA-A	28 DA-A	28 DA-A	28 DA-A
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0.31	ab	1.45	a 2.96 abc 0.29 ab
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	0.32	ab	1.50	a 2.95 abc 0.29 ab
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0.30	b	1.45	a 2.95 abc 0.28 b
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	0.31	ab	1.46	a 2.95 abc 0.29 ab
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0.30	b	1.47	a 2.96 abc 0.28 ab
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0.30	b	1.48	a 2.92 abc 0.28 b
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	0.31	ab	1.45	a 2.98 abc 0.28 ab
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	0.33	a	1.44	a 3.09 a 0.29 ab
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
9	NONTREATED									0.32	ab	1.43	a 2.90 bc 0.29 ab
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0.31	ab	1.44	a 3.01 abc 0.28 ab
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	0.31	ab	1.45	a 2.95 abc 0.30 ab
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	0.31	ab	1.47	a 2.96 abc 0.28 ab
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0.32	ab	1.43	a 3.04 ab 0.29 ab
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0.31	ab	1.48	a 2.92 abc 0.29 ab
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	0.31	ab	1.49	a 2.84 c 0.30 a
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

Pest Code										MEDSA		MEDSA		MEDSA		MEDSA		MEDSA		MEDSA			
Crop Code										7-15-11		7-15-11		7-15-11		7-15-11		7-15-11		7-15-11			
Rating Date										Yield		Moisture		CP		ICP		ACP		DP			
Rating Data Type										dw t/A		Percent		Percent		Percent		Percent		Percent			
Rating Unit										Cutting 3		Cutting 3		Cutting 3		Cutting 3		Cutting 3		Cutting 3			
Rating Timing										16 DA-C		16 DA-C		16 DA-C		16 DA-C		16 DA-C		16 DA-C			
Trt-Eval Interval																							
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code														
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	1.12	a	77.5	abc	21.7	ab	1.20	a	21.7	ab	14.7	ab	33.8	b
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	1.12	a	78.2	abc	22.0	ab	1.15	a	22.0	ab	14.9	a	34.2	b
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	1.18	a	78.2	abc	20.7	b	1.18	a	20.7	b	14.0	b	36.3	a
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A														
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	1.25	a	78.0	abc	21.7	ab	1.18	a	21.7	ab	14.7	ab	34.5	b
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	1.18	a	78.0	abc	21.6	ab	1.15	a	21.6	ab	14.6	ab	34.3	b
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	1.16	a	78.3	abc	21.8	ab	1.23	a	21.8	ab	14.7	ab	34.6	ab
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A														
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	1.30	a	78.8	a	22.5	a	1.15	a	22.5	a	15.2	a	33.4	b
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	1.19	a	78.0	abc	22.0	ab	1.25	a	22.0	ab	14.8	ab	34.4	b
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
9	NONTREATED									1.24	a	78.6	ab	22.5	a	1.18	a	22.5	a	15.2	a	33.3	b
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	1.20	a	77.2	bc										
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	1.14	a	78.1	abc										
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	1.16	a	77.6	abc										
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	1.16	a	77.2	bc										
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	1.21	a	77.0	c										
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A														
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A														
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	1.19	a	77.6	abc										
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A														
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B														
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C														

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

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

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code							
16	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	1.13	a	76.9	c			
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A							
16	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A							
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B							
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C							
LSD (P=.05)										0.205	1.45	1.36	0.101	1.36	0.89	1.85
Replicate F										0.403	2.267	2.331	0.998	2.331	2.288	1.311
Replicate Prob(F)										0.7513	0.0936	0.0997	0.4107	0.0997	0.1041	0.2938
Treatment F										0.510	1.261	1.293	1.038	1.293	1.452	1.904
Treatment Prob(F)										0.9217	0.2655	0.2935	0.4363	0.2935	0.2265	0.1063

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

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

Pest Code										MEDSA		MEDSA		MEDSA		MEDSA		MEDSA		MEDSA	
Crop Code										7-15-11		7-15-11		7-15-11		7-15-11		7-15-11		7-15-11	
Rating Date										NDF		TDN		EE		NEI		NEm		NEg	
Rating Data Type										Percent		Percent		Ther/CWT		Mcal/LB		Mcal/LB		Mcal/LB	
Rating Unit										Cutting 3		Cutting 3		Cutting 3		Cutting 3		Cutting 3		Cutting 3	
Rating Timing										16 DA-C		16 DA-C		16 DA-C		16 DA-C		16 DA-C		16 DA-C	
Trt-Eval Interval																					
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code												
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	44.8 b	62.5 a	53.0 a	0.64 a	0.63 a	0.37 a	130.1 a					
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	44.8 b	62.2 a	52.7 a	0.64 a	0.63 a	0.36 a	129.6 a					
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	46.8 a	59.9 b	50.6 b	0.61 b	0.59 b	0.33 b	120.5 b					
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A												
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	45.4 ab	61.8 a	52.4 a	0.64 a	0.62 a	0.36 a	127.2 ab					
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	45.2 ab	62.0 a	52.5 a	0.64 a	0.63 a	0.36 a	128.2 ab					
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	44.9 b	61.7 ab	52.2 ab	0.64 a	0.62 ab	0.36 ab	128.5 ab					
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A												
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	44.2 b	62.9 a	53.4 a	0.65 a	0.64 a	0.38 a	132.4 a					
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	45.0 ab	61.9 a	52.4 a	0.63 ab	0.62 a	0.36 a	128.4 ab					
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
9	NONTREATED									44.8 b	63.1 a	53.5 a	0.65 a	0.64 a	0.38 a	131.0 a					
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A												
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B												
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C												
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A												
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B												
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C												
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A												
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B												
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C												
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A												
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B												
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C												
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A												
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A												
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B												
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C												
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A												
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A												
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B												
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C												

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

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

MEDSA MEDSA MEDSA MEDSA
7-15-11 7-15-11 7-15-11 7-15-11
P CA K MG
Percent Percent Percent Percent
Cutting 3 Cutting 3 Cutting 3 Cutting 3
16 DA-C 16 DA-C 16 DA-C 16 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0.31	ab	1.51	a 3.02 a 0.29 ab
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	0.31	ab	1.49	a 3.10 a 0.28 ab
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0.29	b	1.46	a 3.05 a 0.28 b
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	0.30	b	1.53	a 3.00 a 0.29 ab
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0.30	b	1.51	a 3.07 a 0.28 ab
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0.31	ab	1.51	a 3.08 a 0.28 ab
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	0.31	ab	1.54	a 3.13 a 0.30 a
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	0.31	ab	1.52	a 3.04 a 0.29 ab
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
9	NONTREATED									0.33	a	1.47	a 3.11 a 0.28 ab
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A				
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

Pest Code								MEDSA	MEDSA	MEDSA	MEDSA		
Crop Code								6-2-11	6-9-11	6-30-11	7-7-11		
Rating Date								Stunt	Stunt	Stunt	Stunt		
Rating Data Type								Percent	Percent	Percent	Percent		
Rating Unit								17 DA Cut1	24 DA Cut1	14 DA Cut2	21 DA Cut2		
Rating Timing								14 DA-A	21 DA-A	1 DA-C	8 DA-C		
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0	c	0	c
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A			0	a
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	0	c	0	c
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A			0	a
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0	c	0	c
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A			0	a
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	0	c	0	c
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A			0	a
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0	c	0	c
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A			0	a
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0	c	0	c
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A			0	a
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	0	c	0	c
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A			0	a
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	25	a	25	a
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A			0	a
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
9	NONTREATED									0	c	0	c
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0	c	0	c
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A			0	a
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	0	c	0	c
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A			0	a
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	0	c	0	c
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A			0	a
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0	c	0	c
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A			0	a
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0	c	0	c
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A			0	a
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	0	c	0	c
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A			0	a
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

Pest Code				MEDSA		MEDSA		MEDSA		MEDSA			
Crop Code				6-2-11		6-9-11		6-30-11		7-7-11			
Rating Date				Stunt		Stunt		Stunt		Stunt			
Rating Data Type				Percent		Percent		Percent		Percent			
Rating Unit				17 DA Cut1		24 DA Cut1		14 DA Cut2		21 DA Cut2			
Rating Timing				14 DA-A		21 DA-A		1 DA-C		8 DA-C			
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
16	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	15	b	15	b
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A			0	a
16	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
LSD (P=.05)										0.0	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000

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

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

Pest Code								MEDSA	MEDSA	MEDSA	MEDSA		
Crop Code								6-2-11	6-9-11	6-30-11	7-7-11		
Rating Date								Chlorosis	Chlorosis	Chlorosis	Chlorosis		
Rating Data Type								Percent	Percent	Percent	Percent		
Rating Unit								17 DA Cut1	24 DA Cut1	14 DA Cut2	21 DA Cut2		
Rating Timing								14 DA-A	21 DA-A	1 DA-C	8 DA-C		
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
9	NONTREATED									0 a	0 a	0 a	0 a
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

Pest Code				MEDSA		MEDSA		MEDSA		MEDSA			
Crop Code				6-2-11		6-9-11		6-30-11		7-7-11			
Rating Date				Chlorosis		Chlorosis		Chlorosis		Chlorosis			
Rating Data Type				Percent		Percent		Percent		Percent			
Rating Unit				17 DA Cut1		24 DA Cut1		14 DA Cut2		21 DA Cut2			
Rating Timing				14 DA-A		21 DA-A		1 DA-C		8 DA-C			
Trt-Eval Interval													
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
16	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
16	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
LSD (P=.05)										0.0	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000

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

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

Pest Code								MEDSA	MEDSA	MEDSA	MEDSA	MEDSA	MEDSA		
Crop Code								6-2-11	6-9-11	6-30-11	7-7-11	6-10-11	7-11-11		
Rating Date								Necrosis	Necrosis	Necrosis	Necrosis	% Bloom	% Bloom		
Rating Data Type								Percent	Percent	Percent	Percent				
Rating Unit								17 DA Cut1	24 DA Cut1	14 DA Cut2	21 DA Cut2				
Rating Timing								14 DA-A	21 DA-A	1 DA-C	8 DA-C				
Trt-Eval Interval															
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	4.0 cde	2.8 c
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	2.0 ef	2.8 c
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	2.5 de	2.8 c
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A						
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	4.8 cd	4.8 bc
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	3.0 de	2.0 c
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	2.5 de	4.0 bc
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A						
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	7.5 b	6.0 b
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	0.0 f	2.8 c
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
9	NONTREATED									0 a	0 a	0 a	0 a	10.0 a	10.0 a
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	4.0 cde	2.8 c
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B						
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C						
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	2.5 de	3.0 bc
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B						
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C						
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	3.5 de	2.8 c
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B						
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C						
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	2.5 de	2.8 c
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B						
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C						
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	2.0 ef	2.8 c
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A						
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B						
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C						
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	0 a	0 a	0 a	0 a	6.3 bc	4.8 bc
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A						
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B						
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C						

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

								POAAN	POAAN	POAAN	POAAN		
Pest Code	Crop Code							6-2-11	6-9-11	6-30-11	7-7-11		
Rating Date	Rating Data Type							Control	Control	Control	Control		
Rating Unit	Rating Timing							Percent	Percent	Percent	Percent		
Trt-Eval Interval								17 DA Cut1	24 DA Cut1	14 DA Cut2	21 DA Cut2		
								14 DA-A	21 DA-A	1 DA-C	8 DA-C		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
9	NONTREATED									0 c	0 c	0 b	0 b
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	74 b	74 b	99 a	99 a
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

								POAAN	POAAN	POAAN	POAAN		
Pest Code	Crop Code							6-2-11	6-9-11	6-30-11	7-7-11		
Rating Date	Rating Data Type							Control	Control	Control	Control		
Rating Unit	Rating Timing							Percent	Percent	Percent	Percent		
Trt-Eval Interval								17 DA Cut1	24 DA Cut1	14 DA Cut2	21 DA Cut2		
								14 DA-A	21 DA-A	1 DA-C	8 DA-C		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
16	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	99 a	99 a		
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
16	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
LSD (P=.05)										17.7	17.7	0.0	0.0
Replicate F										1.000	1.000	0.000	0.000
Replicate Prob(F)										0.4016	0.4016	1.0000	1.0000
Treatment F										16.467	16.467	0.000	0.000
Treatment Prob(F)										0.0001	0.0001	1.0000	1.0000

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

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

										DIGSA	DIGSA	AMATA	AMATA
Pest Code	Crop Code	Rating Date	Rating Data Type	Rating Unit	Rating Timing	Trt-Eval Interval				6-30-11 Control Percent	7-7-11 Control Percent	6-30-11 Control Percent	7-7-11 Control Percent
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code	14 DA Cut2 1 DA-C	21 DA Cut2 8 DA-C	14 DA Cut2 1 DA-C	21 DA Cut2 8 DA-C
1	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
1	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
1	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
2	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
2	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
2	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
3	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
3	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
3	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
3	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
4	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
4	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
4	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
5	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
5	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
5	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
6	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
6	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
6	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
6	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
7	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
7	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
8	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
8	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
8	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
9	NONTREATED									0 b	0 b	0 b	0 b
10	F9021-2	2	SE	0.125	lb ai/a	8	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
10	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
10	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
11	F9021-2	2	SE	0.25	lb ai/a	16	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
11	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
11	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
12	SPARTAN 4F	4	SC	0.125	lb ai/a	4	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
12	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
12	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
13	SPARTAN CHARGE	3.5	SE	0.137	lb ai/a	5	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
13	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
13	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
14	AUTHORITY ASSIST	4	SC	0.156	lb ai/a	5	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
14	COC (PRIME OIL)	100	SL	1	% v/v	1	% v/v	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
14	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
14	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A	99 a	99 a	99 a	99 a
15	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
15	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center

								DIGSA	DIGSA	AMATA	AMATA		
Pest Code	Crop Code							6-30-11	7-7-11	6-30-11	7-7-11		
Rating Date	Rating Data Type							Control	Control	Control	Control		
Rating Unit	Rating Timing							Percent	Percent	Percent	Percent		
Trt-Eval Interval								14 DA Cut2	21 DA Cut2	14 DA Cut2	21 DA Cut2		
								1 DA-C	8 DA-C	1 DA-C	8 DA-C		
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
16	CHATEAU	51	WG	0.128	lb ai/a	4	oz/a	2-4DA-1ST	A	99 a	99 a		
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	2-4DA-1ST	A				
16	AMS	100	SG	2	% w/w	17	lb/100 gal	2-4DA-1ST	A				
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	21DA-A	B				
16	ROUNDUP POWERMAX	4.5	SL	0.77	lb ae/a	22	fl oz/a	AS-NEEDED	C				
LSD (P=.05)										0.0	0.0	0.0	0.0
Replicate F										0.000	0.000	0.000	0.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000
Treatment F										0.000	0.000	0.000	0.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000

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

Trial Comments

- Protocol: FMC (RFK).
- Ratings: WC 15-21 days after the first and second cutting.
CI as leaf discoloration, necrosis and stunting at 15-21 after the first and second cutting.
Percent blooming in each plot when nontreated attains 50% blooming prior to the second and third cutting.
Alfalfa forage yields for the second and third cuttings, with samples taken and analyzed for ADF percentage or other quality parameters at each cutting.
Target weeds: waterhemp and nightshade.
- Yield (see above).
- Application codes:
2-4DA-1ST = 2 to 4 days after the first cutting.
21DA-A = 21 days after application A. Application B was not needed, not applied.
AS-NEEDED = After second cutting keep these treatments weedfree until third cutting.
- Blanket application of Select Max (8 floz/A) + COC (1%) was applied to all plots except the nontreated on 6-30-11.
Blanket application of Mustang Max (5 floz/A) to all plots on 6-30-11.
- MEDSA = Alfalfa. Harvest 1, dw t/A = Ton per acre dry weight basis.
- Calculations:
(g wet harvest per 78 sqft) * (alfalfa dry / alfalfa wet) * (43560 / 78 / 453.6 / 2000) = Alfalfa, ton/A dry weight basis.
- Feed analysis (<http://beef.unl.edu/learning/feedAnalysis.shtml>):
CP = Crude Protein
ICP = Heat Damaged Protein or Insoluble Crude Protein
ACP = Adjusted Crude Protein
DP = Digestible Protein
ADF = Acid Detergent Fiber
NDF = Neutral Detergent Fiber
TDN = Total Digestible Nutrients
EE = Ether Extract
NEI = Net Energy lactation
NEm = Net Energy maintenance
NEg = Net Energy gain
RFV = Relative Feed Value
P = Phosphorus
CA = Calcium
K = Potassium
MG = Magnesium

Evaluation of Crop Safety and Weed Efficacy in Roundup Ready Alfalfa.

Trial ID: 11-7-W190

Location: Belleville Res. Center