

Fall and Spring Applications of PowerFlex for Weed Control in Winter Wheat.

Trial ID: 10-ARC-N9-Dow

Location: Agronomy Res. Center

Investigator: Bryan Young, Professor, Southern Illinois University, bgyoung@siu.edu
 City State Zip Country: Carbondale IL 62901 USA
 Trial Status: FINAL Initiation Date: 11-10-09

Objectives: Determine the efficacy of PowerFlex and commercial standards applied in the fall or spring on winter annual weeds in winter wheat.

Crop 1: TRZAW Winter wheat Variety: P25R78
 Planting Method: SEEDS Planting Date: 11-10-09
 Rate, Unit: 1.3 mil. S/A Depth, Unit: 1 IN
 Row Spacing, Unit: 7.5 IN

Pest 1 Type: W Code: BROTE Bromus tectorum L. brome, downy
 Pest 2 Type: W Code: LAMAM Lamium amplexicaule L. henbit
 Pest 3 Type: W Code: BRSNN Brassica napus L. ssp. napus rape, volunteer
 Pest 4 Type: W Code: HORPU Hordeum pusillum Nutt. barley, little

Plot Width, Unit: 15 FT Site Type: FIELD
 Plot Length, Unit: 30 FT Tillage Type: NO-TILL
 Replications: 4 Study Design: Randomized Complete Block

Prior Crops, Year
 1. GLXMA 2009

Field Prep./Maintenance: Fall: N 30 LB/A, P205 0 LB/A, K20 0 LB/A as 32% UAN
 Spring: N 95 LB/A, P205 0 LB/A, K20 0 LB/A as 32% UAN

% OM: 1.6 Texture: SILT LOAM
 pH: 6.6 Soil Name: WEIR
 CEC: 7.5 Fert. Level: P1: 95 LB/A, K: 244 LB/A

Application Description

	A	B	C
Application Date:	11-13-09	12-17-09	03-30-10
Time of Day:	16:30	15:30	16:30
Application Method:	Spray	Spray	Spray
Application Timing:	BURNDN	FALL	SPRING
Application Placement:	BROFOL	BROFOL	BROFOL
Applied By:	DKT	DKP	DKP
Air Temperature, Unit:	60 F	51 F	66 F
% Relative Humidity:	41	37	41
Wind Velocity, Unit:	3 MPH	3 MPH	6 MPH
Wind Direction:	SW	SE	S
Dew Presence (Y/N):	N	N	N
Soil Temperature, Unit:	56 F	38 F	50 F
Soil Moisture:	NORMAL	ABONOR	ABONOR
% Cloud Cover:	30	60	30

	11-13-09	12-17-09	03-30-10
Crop stage at application:	NA	3 LVS	4 FK
Height Min, Max (inch):		2 3	3 8

Pest Stage At Each Application

	11-13-09	12-17-09	03-30-10
Application Date:	11-13-09	12-17-09	03-30-10
Weed Code:	BROTE	BROTE	BROTE
Stage Majority (leaves):	NA	NA	2 TILLERS
Stage Min, Max:			3 6
Height Majority:			3 IN
Height Min, Max:			1 4
Density, Unit:			10 FT2
Weed Code:	LAMAM	LAMAM	LAMAM
Stage Majority (leaves):	NA	COTY	6
Stage Min, Max:		COTY 1	2 8
Height Majority:		0.25 IN	1 IN
Height Min, Max:		0.25 0.5	0.5 1.5
Density, Unit:		0.01 FT2	0.01 FT2
Weed Code:	BRSNN	BRSNN	BRSNN
Stage Majority (leaves):	NA	NA	1
Stage Min, Max:			COTY 1
Height Majority:			1 IN
Height Min, Max:			0.5 1
Density, Unit:			0.1 FT2
Weed Code:	HORPU	HORPU	HORPU
Stage Majority (leaves):	NA	NA	1 TILLERS
Stage Min, Max:			2 3
Height Majority:			4 IN
Height Min, Max:			3 6
Density, Unit:			2 FT2

Application Equipment

	CO2 sprayer	CO2 sprayer	CO2 sprayer
Appl. 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:	10 FT	10 FT	10 FT
Spray Volume, Unit:	15 GPA	15 GPA	15 GPA

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Rating Date
Rating Data Type
Rating Unit
Rating Timing
Trt-Eval Interval

TRZAW TRZAW TRZAW
06-22-10 06-22-10 06-22-10
Moisture Test wt. Yield
Percent lb/bu bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	10.6	ab	49.6
1	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A	ab		72
1	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	FALL	B			
1	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B			
1	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B			
2	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	FALL	B	10.8	ab	50.3
2	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B	ab		58
2	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B	ab		bc
3	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	10.3	bc	48.0
3	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A	bc	abc	62
3	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	FALL	B			
3	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B			
3	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B			
4	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	FALL	B	10.2	bc	45.7
4	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B	bc	bc	35
4	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B			f
5	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	10.6	ab	51.2
5	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A	ab	a	68
5	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	FALL	B			
5	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B			
5	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B			
6	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	FALL	B	10.6	ab	50.1
6	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B	ab	ab	57
6	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B			bcd
7	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	11.7	a	49.6
7	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A	a	abc	65
7	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	FALL	B			
7	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B			
8	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	FALL	B	9.9	bc	47.4
8	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B	bc	abc	41
9	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	10.6	ab	50.6
9	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A	ab	a	67
9	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	SPRING	C			
9	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C			
9	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C			
10	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	SPRING	C	10.7	ab	50.1
10	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C	ab	ab	52
10	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C			cde
11	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	11.0	ab	50.6
11	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A	ab	a	64
11	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	C			
11	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C			
11	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C			
12	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	C	9.4	c	44.9
12	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C	c	c	43
12	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C			def
13	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	10.6	b	50.7
13	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A	b	a	66
13	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	SPRING	C			
13	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C			
13	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C			
14	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	SPRING	C	10.7	ab	51.7
14	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C	ab	a	65
14	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C			abc

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

TRZAW TRZAW TRZAW
06-22-10 06-22-10 06-22-10
Moisture Test wt. Yield
Percent lb/bu bu/A

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
15	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN A		10.4 bc	49.9 ab	57 bc
15	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN A				
15	FINESSE	75	WG	0.0188 lb ai/a	0.4 oz/a		SPRING C				
15	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING C				
16	FINESSE	75	WG	0.0188 lb ai/a	0.4 oz/a		SPRING C		10.0 bc	48.7 abc	36 f
16	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING C				
17	NONTREATED								10.4 bc	49.7 ab	42 ef
18	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN A		10.6 ab	50.9 a	67 ab
18	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN A				
LSD (P=.05)									1.09	4.77	13.7
Replicate F									1.126	0.685	14.783
Replicate Prob(F)									0.3476	0.5655	0.0001
Treatment F									1.569	1.233	6.053
Treatment Prob(F)									0.1102	0.2757	0.0001

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

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Location: Agronomy Res. Center

Pest Code								TRZAW				
Crop Code								12-20-09	12-24-09	12-31-09	01-14-10	03-24-10
Rating Date								Injury	Injury	Injury	Injury	Injury
Rating Data Type								Percent	Percent	Percent	Percent	Percent
Rating Unit												
Rating Timing												
Trt-Eval Interval								3 DA-B	7 DA-B	14 DA-B	28 DA-B	14 DA-SGU
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	ROUNDUP POWERMAX	4.5 SL		0.56 lb ae/a		16 fl oz/a		BURNDN A		0 a	0 a	0 a
1	AMS	100 SG		1.52 lb/a		1.52 lb/a		BURNDN A				0 b
1	POWERFLEX	7.5 WG		0.0164 lb ai/a		3.5 oz/a		FALL B				
1	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		FALL B				
1	AMS	100 SG		1.52 lb/a		1.52 lb/a		FALL B				
2	POWERFLEX	7.5 WG		0.0164 lb ai/a		3.5 oz/a		FALL B		0 a	0 a	0 b
2	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		FALL B				
2	AMS	100 SG		1.52 lb/a		1.52 lb/a		FALL B				
3	ROUNDUP POWERMAX	4.5 SL		0.56 lb ae/a		16 fl oz/a		BURNDN A		0 a	0 a	1 a
3	AMS	100 SG		1.52 lb/a		1.52 lb/a		BURNDN A				
3	HARMONY EXTRA SG	50 SG		0.0234 lb ai/a		0.75 oz/a		FALL B				
3	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		FALL B				
3	AMS	100 SG		1.52 lb/a		1.52 lb/a		FALL B				
4	HARMONY EXTRA SG	50 SG		0.0234 lb ai/a		0.75 oz/a		FALL B		0 a	0 a	0 b
4	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		FALL B				
4	AMS	100 SG		1.52 lb/a		1.52 lb/a		FALL B				
5	ROUNDUP POWERMAX	4.5 SL		0.56 lb ae/a		16 fl oz/a		BURNDN A		0 a	0 a	0 b
5	AMS	100 SG		1.52 lb/a		1.52 lb/a		BURNDN A				
5	OLYMPUS FLEX	11.25 SG		0.0223 lb ai/a		3.17 oz/a		FALL B				
5	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		FALL B				
5	AMS	100 SG		1.52 lb/a		1.52 lb/a		FALL B				
6	OLYMPUS FLEX	11.25 SG		0.0223 lb ai/a		3.17 oz/a		FALL B		0 a	0 a	0 b
6	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		FALL B				
6	AMS	100 SG		1.52 lb/a		1.52 lb/a		FALL B				
7	ROUNDUP POWERMAX	4.5 SL		0.56 lb ae/a		16 fl oz/a		BURNDN A		0 a	0 a	0 b
7	AMS	100 SG		1.52 lb/a		1.52 lb/a		BURNDN A				
7	FINESSE	75 WG		0.0188 lb ai/a		0.4 oz/a		FALL B				
7	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		FALL B				
8	FINESSE	75 WG		0.0188 lb ai/a		0.4 oz/a		FALL B		0 a	0 a	0 b
8	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		FALL B				
9	ROUNDUP POWERMAX	4.5 SL		0.56 lb ae/a		16 fl oz/a		BURNDN A		0 a	0 a	0 b
9	AMS	100 SG		1.52 lb/a		1.52 lb/a		BURNDN A				
9	POWERFLEX	7.5 WG		0.0164 lb ai/a		3.5 oz/a		SPRING C				
9	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		SPRING C				
9	AMS	100 SG		1.52 lb/a		1.52 lb/a		SPRING C				
10	POWERFLEX	7.5 WG		0.0164 lb ai/a		3.5 oz/a		SPRING C				
10	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		SPRING C				
10	AMS	100 SG		1.52 lb/a		1.52 lb/a		SPRING C				
11	ROUNDUP POWERMAX	4.5 SL		0.56 lb ae/a		16 fl oz/a		BURNDN A		0 a	0 a	0 b
11	AMS	100 SG		1.52 lb/a		1.52 lb/a		BURNDN A				
11	HARMONY EXTRA SG	50 SG		0.0234 lb ai/a		0.75 oz/a		SPRING C				
11	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		SPRING C				
11	AMS	100 SG		1.52 lb/a		1.52 lb/a		SPRING C				
12	HARMONY EXTRA SG	50 SG		0.0234 lb ai/a		0.75 oz/a		SPRING C				
12	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		SPRING C				
12	AMS	100 SG		1.52 lb/a		1.52 lb/a		SPRING C				
13	ROUNDUP POWERMAX	4.5 SL		0.56 lb ae/a		16 fl oz/a		BURNDN A		0 a	0 a	0 b
13	AMS	100 SG		1.52 lb/a		1.52 lb/a		BURNDN A				
13	OLYMPUS FLEX	11.25 SG		0.0223 lb ai/a		3.17 oz/a		SPRING C				
13	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		SPRING C				
13	AMS	100 SG		1.52 lb/a		1.52 lb/a		SPRING C				
14	OLYMPUS FLEX	11.25 SG		0.0223 lb ai/a		3.17 oz/a		SPRING C				
14	NIS (ACTIVATOR 90)	100 SL		0.5 % v/v		0.5 % v/v		SPRING C				
14	AMS	100 SG		1.52 lb/a		1.52 lb/a		SPRING C				

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Crop Code									12-20-09	12-24-09	12-31-09	01-14-10	03-24-10	
Rating Date									Injury	Injury	Injury	Injury	Injury	
Rating Data Type									Percent	Percent	Percent	Percent	Percent	
Rating Unit														
Rating Timing														
Trt-Eval Interval									3 DA-B	7 DA-B	14 DA-B	28 DA-B	14 DA-SGU	
Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
15	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	0 a	0 a	0 a	0 b
15	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
15	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	SPRING	C					
15	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					
16	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	SPRING	C	0 a				
16	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					
17	NONTREATED									0 a	0 a	0 a	0 a	0 b
18	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	0 a	0 a	0 a	0 b
18	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
LSD (P=.05)										0.0	0.0	0.0	0.0	1.0
Replicate F										0.000	0.000	0.000	0.000	1.000
Replicate Prob(F)										1.0000	1.0000	1.0000	1.0000	0.4031
Treatment F										0.000	0.000	0.000	0.000	1.000
Treatment Prob(F)										1.0000	1.0000	1.0000	1.0000	0.4697

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

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

TRZAW TRZAW TRZAW TRZAW TRZAW
04-02-10 04-06-10 04-13-10 04-27-10 05-25-10
Injury Injury Injury Injury Injury
Percent Percent Percent Percent Percent
3 DA-C 7 DA-C 14 DA-C 28 DA-C 56 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
1	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	0 c	0 b	0 b	0 a
1	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
1	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	FALL	B					
1	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B					
1	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B					
2	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	FALL	B	0 a	0 c	0 b	0 b	0 a
2	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B					
2	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B					
3	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	0 c	0 b	0 b	0 a
3	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
3	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	FALL	B					
3	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B					
3	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B					
4	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	FALL	B	0 a	0 c	0 b	0 b	0 a
4	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B					
4	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B					
5	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	0 c	0 b	0 b	0 a
5	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
5	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	FALL	B					
5	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B					
5	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B					
6	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	FALL	B	0 a	0 c	0 b	0 b	0 a
6	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B					
6	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B					
7	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	0 c	0 b	0 b	0 a
7	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
7	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	FALL	B					
7	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B					
8	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	FALL	B	0 a	0 c	0 b	0 b	0 a
8	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B					
9	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	4 ab	0 b	0 b	0 a
9	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
9	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	SPRING	C					
9	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					
9	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C					
10	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	SPRING	C	0 a	5 a	1 b	1 a	0 a
10	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					
10	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C					
11	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	3 abc	0 b	0 b	0 a
11	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
11	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	C					
11	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					
11	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C					
12	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	C	0 a	1 bc	0 b	0 b	0 a
12	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					
12	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C					
13	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	1 bc	0 b	0 b	0 a
13	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
13	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	SPRING	C					
13	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					
13	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C					
14	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	SPRING	C	0 a	3 abc	0 b	0 b	0 a
14	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					
14	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C					

Fall and Spring Applications of PowerFlex for Weed Control in Winter Wheat.

Trial ID: 10-ARC-N9-Dow

Location: Agronomy Res. Center

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

TRZAW 04-02-10 Injury Percent	TRZAW 04-06-10 Injury Percent	TRZAW 04-13-10 Injury Percent	TRZAW 04-27-10 Injury Percent	TRZAW 05-25-10 Injury Percent
3 DA-C	7 DA-C	14 DA-C	28 DA-C	56 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code					
15	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	4 ab	4 a	0 b	0 a
15	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
15	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	SPRING	C					
15	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					
16	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	SPRING	C	0 a	1 bc	0 b	0 b	0 a
16	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					
17	NONTREATED									0 a	0 c	0 b	0 b	0 a
18	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	0 a	0 c	0 b	0 b	0 a
18	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					
LSD (P=.05)										0.0	3.1	1.8	0.3	0.0
Replicate F										0.000	0.332	0.557	1.000	0.000
Replicate Prob(F)										1.0000	0.8024	0.6456	0.4005	1.0000
Treatment F										0.000	2.334	2.016	1.000	0.000
Treatment Prob(F)										1.0000	0.0102	0.0278	0.4736	1.0000

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

Fall and Spring Applications of PowerFlex for Weed Control in Winter Wheat.

Trial ID: 10-ARC-N9-Dow

Location: Agronomy Res. Center

Pest Code		BROTE	BROTE	BROTE	BROTE
Crop Code					
Rating Date		03-24-10	04-13-10	04-27-10	05-25-10
Rating Data Type		Control	Control	Control	Control
Rating Unit		Percent	Percent	Percent	Percent
Rating Timing					
Trt-Eval Interval		14 DA-SGU	14 DA-C	28 DA-C	56 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	99 a	99 a	99 a
1	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
1	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		FALL	B				
1	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
1	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
2	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		FALL	B	99 a	99 a	99 a	99 a
2	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
2	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
3	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	93 a	89 ab	89 ab	82 ab
3	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
3	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		FALL	B				
3	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
3	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
4	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		FALL	B	13 b	0 c	0 c	0 c
4	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
4	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
5	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	99 a	99 a	99 a
5	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
5	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		FALL	B				
5	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
5	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
6	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		FALL	B	99 a	99 a	99 a	99 a
6	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
6	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
7	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	99 a	99 a	96 a
7	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
7	FINESSE	75	WG	0.0188 lb ai/a	0.4 oz/a		FALL	B				
7	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
8	FINESSE	75	WG	0.0188 lb ai/a	0.4 oz/a		FALL	B	5 bc	0 c	0 c	0 c
8	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
9	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	99 a	99 a	99 a
9	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
9	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		SPRING	C				
9	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
9	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				
10	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		SPRING	C		98 a	73 b	74 b
10	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
10	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				
11	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	89 ab	92 ab	82 ab
11	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
11	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		SPRING	C				
11	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
11	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				
12	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		SPRING	C		0 c	0 c	0 c
12	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
12	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				
13	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	99 a	99 a	99 a
13	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
13	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		SPRING	C				
13	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
13	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				
14	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		SPRING	C		97 a	97 a	98 a
14	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
14	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				

Fall and Spring Applications of PowerFlex for Weed Control in Winter Wheat.

Trial ID: 10-ARC-N9-Dow

Location: Agronomy Res. Center

Pest Code		BROTE	BROTE	BROTE	BROTE
Crop Code					
Rating Date		03-24-10	04-13-10	04-27-10	05-25-10
Rating Data Type		Control	Control	Control	Control
Rating Unit		Percent	Percent	Percent	Percent
Rating Timing					
Trt-Eval Interval		14 DA-SGU	14 DA-C	28 DA-C	56 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
15	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	93 a	92 ab	91 ab
15	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
15	FINESSE	75	WG	0.0188 lb ai/a	0.4 oz/a		SPRING	C				
15	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
16	FINESSE	75	WG	0.0188 lb ai/a	0.4 oz/a		SPRING	C		0 c	0 c	0 c
16	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
17	NONTREATED								0 c	0 c	0 c	0 c
18	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	89 a	83 b	83 ab	74 b
18	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
LSD (P=.05)									11.0	9.8	19.0	21.2
Replicate F									0.526	2.880	0.938	0.754
Replicate Prob(F)									0.6668	0.0448	0.4292	0.5251
Treatment F									104.655	163.290	42.399	33.008
Treatment Prob(F)									0.0001	0.0001	0.0001	0.0001

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

Fall and Spring Applications of PowerFlex for Weed Control in Winter Wheat.

Trial ID: 10-ARC-N9-Dow

Location: Agronomy Res. Center

Pest Code	LAMAM	LAMAM	LAMAM
Crop Code			
Rating Date	03-24-10	04-13-10	04-27-10
Rating Data Type	Control	Control	Control
Rating Unit	Percent	Percent	Percent
Rating Timing			
Trt-Eval Interval	14 DA-SGU	14 DA-C	28 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
1	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	99 a	99 a
1	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A			
1	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		FALL	B			
1	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B			
1	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B			
2	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		FALL	B	97 a	99 a	99 a
2	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B			
2	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B			
3	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	99 a	99 a
3	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A			
3	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		FALL	B			
3	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B			
3	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B			
4	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		FALL	B	67 b	99 a	99 a
4	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B			
4	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B			
5	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	98 a	99 a	99 a
5	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A			
5	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		FALL	B			
5	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B			
5	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B			
6	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		FALL	B	99 a	99 a	99 a
6	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B			
6	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B			
7	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	99 a	99 a
7	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A			
7	FINESSE	75	WG	0.0188 lb ai/a	0.4 oz/a		FALL	B			
7	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B			
8	FINESSE	75	WG	0.0188 lb ai/a	0.4 oz/a		FALL	B	99 a	99 a	99 a
8	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B			
9	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	85 ab	99 a	99 a
9	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A			
9	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		SPRING	C			
9	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C			
9	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C			
10	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		SPRING	C		99 a	74 b
10	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C			
10	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C			
11	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	86 ab	99 a	99 a
11	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A			
11	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		SPRING	C			
11	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C			
11	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C			
12	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		SPRING	C		99 a	99 a
12	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C			
12	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C			
13	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	79 ab	99 a	99 a
13	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A			
13	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		SPRING	C			
13	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C			
13	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C			
14	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		SPRING	C		99 a	99 a
14	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C			
14	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C			

Fall and Spring Applications of PowerFlex for Weed Control in Winter Wheat.

Trial ID: 10-ARC-N9-Dow

Location: Agronomy Res. Center

Pest Code	LAMAM	LAMAM	LAMAM
Crop Code			
Rating Date	03-24-10	04-13-10	04-27-10
Rating Data Type	Control	Control	Control
Rating Unit	Percent	Percent	Percent
Rating Timing			
Trt-Eval Interval	14 DA-SGU	14 DA-C	28 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code			
15	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	96	a	99
15	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A			
15	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	SPRING	C			
15	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C			
16	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	SPRING	C		99	a
16	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C			99
17	NONTREATED									0	d	0
18	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	35	c	64
18	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A		b	57
LSD (P=.05)										25.4		22.3
Replicate F										2.106		1.504
Replicate Prob(F)										0.1151		0.2246
Treatment F										10.969		10.072
Treatment Prob(F)										0.0001		0.0001

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

Fall and Spring Applications of PowerFlex for Weed Control in Winter Wheat.

Trial ID: 10-ARC-N9-Dow

Location: Agronomy Res. Center

Pest Code	BRSNN	BRSNN	BRSNN	BRSNN
Crop Code				
Rating Date	03-24-10	04-13-10	04-27-10	05-25-10
Rating Data Type	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval	14 DA-SGU	14 DA-C	28 DA-C	56 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
1	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	48 bc	38 b	40 d	43 cd
1	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
1	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		FALL	B				
1	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
1	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
2	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		FALL	B	60 abc	60 b	47 cd	47 cd
2	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
2	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
3	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	72 ab	61 b	59 cd	58 cd
3	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
3	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		FALL	B				
3	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
3	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
4	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		FALL	B	30 cd	52 b	52 cd	52 cd
4	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
4	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
5	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	79 ab	58 b	60 bcd	63 bcd
5	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
5	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		FALL	B				
5	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
5	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
6	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		FALL	B	85 ab	45 b	48 cd	51 cd
6	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
6	AMS	100	SG	1.52 lb/a	1.52 lb/a		FALL	B				
7	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	84 ab	55 b	55 cd	55 cd
7	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
7	FINESSE	75	WG	0.0188 lb ai/a	0.4 oz/a		FALL	B				
7	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
8	FINESSE	75	WG	0.0188 lb ai/a	0.4 oz/a		FALL	B	99 a	99 a	99 a	99 a
8	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		FALL	B				
9	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	99 a	99 a	99 a	99 a
9	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
9	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		SPRING	C				
9	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
9	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				
10	POWERFLEX	7.5	WG	0.0164 lb ai/a	3.5 oz/a		SPRING	C		99 a	74 abc	74 abc
10	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
10	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				
11	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	50 bc	92 a	92 ab	92 ab
11	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
11	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		SPRING	C				
11	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
11	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				
12	HARMONY EXTRA SG	50	SG	0.0234 lb ai/a	0.75 oz/a		SPRING	C		99 a	99 a	99 a
12	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
12	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				
13	ROUNDUP POWERMAX	4.5	SL	0.56 lb ae/a	16 fl oz/a		BURNDN	A	52 bc	99 a	99 a	99 a
13	AMS	100	SG	1.52 lb/a	1.52 lb/a		BURNDN	A				
13	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		SPRING	C				
13	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
13	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				
14	OLYMPUS FLEX	11.25	SG	0.0223 lb ai/a	3.17 oz/a		SPRING	C		99 a	99 a	99 a
14	NIS (ACTIVATOR 90)	100	SL	0.5 % v/v	0.5 % v/v		SPRING	C				
14	AMS	100	SG	1.52 lb/a	1.52 lb/a		SPRING	C				

Fall and Spring Applications of PowerFlex for Weed Control in Winter Wheat.

Trial ID: 10-ARC-N9-Dow

Location: Agronomy Res. Center

Pest Code	BRSNN	BRSNN	BRSNN	BRSNN
Crop Code				
Rating Date	03-24-10	04-13-10	04-27-10	05-25-10
Rating Data Type	Control	Control	Control	Control
Rating Unit	Percent	Percent	Percent	Percent
Rating Timing				
Trt-Eval Interval	14 DA-SGU	14 DA-C	28 DA-C	56 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code				
15	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	99 a	99 a	99 a	99 a
15	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A				
15	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	SPRING	C				
15	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C				
16	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	SPRING	C		99 a	99 a	99 a
16	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C				
17	NONTREATED									0 d	0 c	0 e	0 e
18	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	47 bc	47 b	47 cd	40 d
18	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A				
LSD (P=.05)										39.9	28.4	33.0	33.5
Replicate F										5.641	2.555	2.095	2.365
Replicate Prob(F)										0.0026	0.0655	0.1124	0.0818
Treatment F										4.326	8.839	6.280	6.120
Treatment Prob(F)										0.0002	0.0001	0.0001	0.0001

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

Fall and Spring Applications of PowerFlex for Weed Control in Winter Wheat.

Trial ID: 10-ARC-N9-Dow

Location: Agronomy Res. Center

Pest Code		HORPU	HORPU	HORPU	HORPU
Crop Code					
Rating Date		03-24-10	04-13-10	04-27-10	05-25-10
Rating Data Type		Control	Control	Control	Control
Rating Unit		Percent	Percent	Percent	Percent
Rating Timing					
Trt-Eval Interval		14 DA-SGU	14 DA-C	28 DA-C	56 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Rate Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code								
1	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	61	bcd	74	b-e	76	abc	78	a-d
1	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A								
1	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	FALL	B								
1	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B								
1	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B								
2	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	FALL	B	13	e	55	ef	48	d	48	ef
2	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B								
2	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B								
3	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	15	e	84	a-d	87	ab	81	abc
3	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A								
3	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	FALL	B								
3	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B								
3	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B								
4	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	FALL	B	0	e	0	g	0	e	0	g
4	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B								
4	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B								
5	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	98	a	99	a	99	a	96	ab
5	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A								
5	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	FALL	B								
5	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B								
5	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B								
6	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	FALL	B	13	e	43	f	40	d	38	f
6	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B								
6	AMS	100	SG	1.52	lb/a	1.52	lb/a	FALL	B								
7	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	90	ab	97	ab	92	a	91	ab
7	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A								
7	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	FALL	B								
7	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B								
8	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	FALL	B								
8	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	FALL	B	5	e	3	g	3	e	3	g
9	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A								
9	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A								
9	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	SPRING	C	33	de	99	a	99	a	99	a
9	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C								
9	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C								
10	POWERFLEX	7.5	WG	0.0164	lb ai/a	3.5	oz/a	SPRING	C								
10	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C								
10	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C	51	cd	69	cde	75	abc	73	b-e
11	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A								
11	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A								
11	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	C								
11	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C								
11	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C	0	g	0	e	0	g		
12	HARMONY EXTRA SG	50	SG	0.0234	lb ai/a	0.75	oz/a	SPRING	C								
12	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C								
12	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C	76	abc	98	a	88	ab	90	abc
13	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A								
13	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A								
13	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	SPRING	C								
13	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C								
13	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C	66	de	63	bcd	65	cde		
14	OLYMPUS FLEX	11.25	SG	0.0223	lb ai/a	3.17	oz/a	SPRING	C								
14	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C								
14	AMS	100	SG	1.52	lb/a	1.52	lb/a	SPRING	C								

Fall and Spring Applications of PowerFlex for Weed Control in Winter Wheat.

Trial ID: 10-ARC-N9-Dow

Location: Agronomy Res. Center

Pest Code		HORPU	HORPU	HORPU	HORPU
Crop Code					
Rating Date		03-24-10	04-13-10	04-27-10	05-25-10
Rating Data Type		Control	Control	Control	Control
Rating Unit		Percent	Percent	Percent	Percent
Rating Timing					
Trt-Eval Interval		14 DA-SGU	14 DA-C	28 DA-C	56 DA-C

Trt No.	Treatment Name	Form Conc	Form Type	Rate Rate	Unit	Other Rate	Other Rate Unit	Growth Stage	Appl Code						
15	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	63	bcd	92	abc	85	abc
15	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A						a-d
15	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	SPRING	C						
15	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C						
16	FINESSE	75	WG	0.0188	lb ai/a	0.4	oz/a	SPRING	C			0	g	0	e
16	NIS (ACTIVATOR 90)	100	SL	0.5	% v/v	0.5	% v/v	SPRING	C					0	g
17	NONTREATED									0	e	0	g	0	e
18	ROUNDUP POWERMAX	4.5	SL	0.56	lb ae/a	16	fl oz/a	BURNDN	A	5	e	61	def	60	cd
18	AMS	100	SG	1.52	lb/a	1.52	lb/a	BURNDN	A					55	def
LSD (P=.05)										34.5		23.0		25.0	
Replicate F										0.436		0.491		0.635	
Replicate Prob(F)										0.7285		0.6899		0.5962	
Treatment F										8.435		22.549		18.305	
Treatment Prob(F)										0.0001		0.0001		0.0001	

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

Trial Comments

1. Protocol: Dow AgroSciences (NA09C2B045).
2. Ratings: CI 3, 7, 14 + 28 DAT and 14 days after spring greenup.
Specify type of injury (growth reduction, chlorosis, malformation) and rate separately if needed.
Evaluate wheat head size and fill and check for delayed maturity.
WC at 14 days after spring greenup and at 2, 4, and 8 WA spring application.
3. Yield not required.
4. Application timings:
BURNDN = Burndown in the fall.
FALL = Grass weed stage BBCH 14-15 (4-5 leaves unfolded) and or broadleaves < 2 inch tall or < 2 inch rosette.
SPRING = Grass weed stage BBCH 14-22 (4 leaves unfolded to 2 tillers emerged)
and or broadleaves < 2 inch tall or < 2 inch rosette.
5. Crop injury following application C was growth reduction.
14 DA-SGU = 14 days after spring greenup. BRNSS = Volunteer canola.
By 56 DA-C LAMAM was senescing naturally in the nontreated plots and could not be evaluated.
6. Harvested 6-22-10, (8) 7.5 inch rows by 27 ft.