

## VALOR AND PREPARE PREPLANT RATES AND TIMINGS IN WINTER WHEAT

Trial ID: 08F-SEP-NTW-01      Protocol ID: 08F-SEP-NTW-01  
 Location: SEPAC      Study Director: MELISSA KRUGER  
 Project ID:      Investigator: Dr. Bill Johnson  
                          Sponsor Contact: ERIC OTT

**General Trial Information**

**Study Director:** MELISSA KRUGER/PAUL MARQUARDT      **Title:** LAB TECH VIII/RESEARCH ASSOC.  
**Investigator:** DR. WILLIAM G. JOHNSON      **Title:** ASSOCIATE PROFESSOR

**Discipline:** H herbicide  
**Trial Status:** F one-year/final  
**Initiation Date:** 9/18/08      **Planned Completion Date:** 7/2/09

**Trial Location**

**City:** BUTLERVILLE  
**State/Prov.:** IN  
**Postal Code:** 47223-0216  
**Country:** USA

**Objectives:**

The objective of the trial is to compare Valor and Pre-Pare rates and timings in winter wheat and to evaluate Bayer and DuPont wheat applications.

**Personnel**

**Study Director:** MELISSA KRUGER/PAUL MARQUARDT      **Title:** LAB TECH VIII/RESEARCH ASSOC.

**Affiliation:** PURDUE UNIVERSITY

**Address:** 915 W. STATE ST.

**Location:** WEST LAFAYETTE, IN USA

**Postal Code:** 47907

**E-mail:** MMKRUGER@PURDUE.EDU/PMARQUAR@PURDUE.EDU

**Phone No.:** 765-494-4621

**Investigator:** DR. WILLIAM G. JOHNSON      **Title:** ASSOCIATE PROFESSOR

**Affiliation:** PURDUE UNIVERSITY

**Address:** 915 W. STATE ST.

**Location:** WEST LAFAYETTE, IN USA

**Postal Code:** 47907

**E-mail:** WGJ@PURDUE.EDU

**Phone No.:** 765-494-4656

**Cooperator/Landowner**

**Cooperator:** SOUTHEASTERN-PURDUE AG CENTER      **Role:** COOPERATOR

**Organization:** PURDUE UNIVERSITY

**Address 1:** 4425 E CO. RD. 350 N

**Phone No.:** 1-812-458-6977

**Fax No.:** 1-812-458-6979

**City:** BUTLERVILLE

**State/Prov:** IN

**Postal Code:** 477223-021

**E-mail:** BIEHLED@PURDUE.EDU

**Country:** USA      United States

**Crop Description**

**Crop 1:** TRZAW TRITICUM AESTIVUM (WINTER) Winter wheat

**Variety:** PIONEER 25R47

**Description:** SEPAC PLANTER

**BBCH Scale:** BCER

**Planting Date:** 10/14/08

**Planting Method:** DRILLE      drilled

**Rate, Unit:** 1.6      MILL S/A

**Depth, Unit:** 1      IN

**Soil Temperature, Unit:** 60      F

**Soil Moisture:** DRY      dry

**Emergence Date:** 10/17/08

**Harvest Date:** 7/2/09

**Harvested Width, Unit:** 5      FT

**Harvested Length, Unit:** 25      FT

**% Standard Moisture:** 13.5

**Pest Description**

**Pest 1 Type:** W      **Code:** ALLVI      ALLIUM VINEALE

**Common Name:** Wild garlic

**Pest 2 Type:** W      **Code:** TAROF      TARAXACUM OFFICINALE

**Common Name:** Common dandelion

**Pest 3 Type:** W      **Code:** PLALA      PLANTAGO LANCEOLATA

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**Common Name:** Buckhorn plantain

**Pest 4 Type:** W **Code:** IPOSS IPOMOEAE SP.

**Common Name:** Morning glory

**Pest 5 Type:** W **Code:** DIGSA DIGITARIA SANGUINALIS

**Common Name:** Large crabgrass

**Site and Design**

**Plot Width, Unit:** 10 FT **Site Type:** FIELD field  
**Plot Length, Unit:** 30 FT **Experimental Unit:** 1 PLOT plot  
**Plot Area, Unit:** 300 FT<sup>2</sup> **Tillage Type:** CONTIL conventional-till  
**Replications:** 3 **Study Design:** RACOB� Randomized Complete Block (RCB)  
**Untreated Arrangement:** INCLUDED single control randomized in each block

**Field Prep./Maintenance:**

Field was disked 3 times on 9/17/08

**Soil Description**

**Description Name:** SEPAC FIELD U41-6  
**% OM:** 1.3 **Texture:** SIL silt loam  
**pH:** 6.5 **Soil Name:** AVONBURG  
**CEC:** 5.7

**Moisture and Weather Conditions**

**Closest Weather Station:** ON RESEARCH FARM **Distance, Unit:** 0.5 MI

**Application Description**

	A	B	C	D	E	F
<b>Application Date:</b>	9/18/08	10/2/08	10/9/08	10/14/08	11/5/08	11/5/08
<b>Time of Day:</b>	1:00 PM	10:40 AM	9:25 AM	9:30 AM	10:00 AM	10:00 AM
<b>Application Method:</b>	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY	SPRAY
<b>Application Timing:</b>	PREPLA	PREPLA	PREPLA	PREPRE	EAPOWE	EAPOWE
<b>Application Placement:</b>	BROSOL	BROFOL	BROFOL	BROFOL	BROFOL	BROFOL
<b>Applied By:</b>	PM MK	GM MK	PM MK	PM	MK	MK
<b>Air Temperature, Unit:</b>	80 F	56 F	60 F	75 F	67 F	67 F
<b>% Relative Humidity:</b>	50	64	86	76	35	35
<b>Wind Velocity, Unit:</b>	3 MPH	3 MPH	0 MPH	3 MPH	2 MPH	2 MPH
<b>Wind Direction:</b>	N	W		NW	S	S
<b>Dew Presence (Y/N):</b>	N no	N no	Y yes	Y yes	N no	N no
<b>Soil Temperature, Unit:</b>	73 F	57 F	54 F	60 F	52 F	52 F
<b>Soil Moisture:</b>	DRY	DRY	WET	DRY	DRY	DRY
<b>% Cloud Cover:</b>	5	0	0	40	5	5

**Crop Stage At Each Application**

	A	B	C	D	E	F
<b>Crop 1 Code, BBCH Scale:</b>	TRZAW BCER					
<b>Stage Scale Used:</b>	BBCH	BBCH	BBCH	BBCH	BBCH	BBCH
<b>Stage Majority, Percent:</b>	N/A	N/A	N/A	N/A	2 LF	2 LF
<b>Height, Unit:</b>					3 IN	3 IN
<b>Height Minimum, Maximum:</b>					2 4	2 4

**Pest Stage At Each Application**



VALOR AND PREPARE PREPLANT RATES AND TIMINGS IN WINTER WHEAT

Trial ID: 08F-SEP-NTW-01 Protocol ID: 08F-SEP-NTW-01  
 Location: SEPAC Study Director: MELISSA KRUGER  
 Project ID: Investigator: Dr. Bill Johnson  
 Sponsor Contact: ERIC OTT

Pest Type	TRZAW		TRZAW		TRZAW		W Weed TAROF	W Weed AMBEL		
Pest Code							Taraxacum offi>	Ambrosia artem>		
Pest Scientific Name							Common dandel>	Common ragweed		
Pest Name										
Crop Code		TRZAW								
Crop Scientific Name		Triticum aesti>								
Crop Name		Winter wheat								
Part Rated		PLOT C	PLOT C	PLOT C	PLOT P	PLOT P	PLOT P	PLOT P	PLOT C	
Rating Date		11/5/08	3/2/09	6/24/09	11/11/08	6/24/09	7/2/09	7/2/09	7/2/09	
Rating Type		PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO	CONTRO	CONTRO	YIELD	
Rating Unit		%	%	%	%	%	%	%	lb/plot	
Sample Size, Unit									1 PLOT	
Number of Subsamples		1	1	1	1	1	1	1	1	
Crop Stage Majority		2 LF	3-5 LF	MATURE	2-3 LF	MATURE	MATURE	MATURE	MATURE	
Crop Stage Minimum/Maximum		2-4"	2-5"		3-4"					
Pest Stage Majority					VEG	2-4 NOD				
Pest Stage Minimum/Maximum					0-6"	2-6"				
Pest Density, Unit					3 YD2	6 YD2				
Footnote Number										
Assessed By		MK	MK	GK RH	MK	GK RH				
Rating Timing										
Days After First/Last Applic.		48 22	165 117	279 231	54 6	279 231	287 239	287 239	287 239	
Trt-Eval Interval										
Plant-Eval Interval		22 DP-1	139 DP-1	253 DP-1	28 DP-1	253 DP-1	261 DP-1	261 DP-1	261 DP-1	
Days After Emergence		19 DE-	136 DE	250 DE	25 DE-	250 DE	258 DE	258 DE	258 DE	
Number of Decimals										
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	3	4	2	5	6
1	UNTREATED				0.0 a	0.0 a	0.0 a	0.0 b	0.0 a	13.183 a
2	VALOR SX	1.02 oz ai/a	A		6.7 a	5.3 a	0.0 a		55.0 a	8.970 a
	Roundup PowerMAX	12.4 oz ae/a	A							
	Ammonium Sulfate	2 % w/w	A							
3	PRE-PARE	0.21 oz ai/a	A		2.7 a	1.3 a	0.0 a		23.3 a	11.090 a
	Roundup PowerMAX	12.4 oz ae/a	A							
	Ammonium Sulfate	2 % w/w	A							
	EVEREST	0.21 oz ai/a	F							
	QUAD 7	1 % v/v	F							
4	VALOR SX	0.765 oz ai/a	A		5.0 a	10.0 a	0.0 a		43.3 a	11.810 a
	PRE-PARE	0.154 oz ai/a	A							
	Roundup PowerMAX	12.4 oz ae/a	A							
	Ammonium Sulfate	2 % w/w	A							
5	VALOR SX	0.765 oz ai/a	A		5.0 a	2.0 a	0.0 a		56.7 a	10.803 a
	PRE-PARE	0.21 oz ai/a	A							
	Roundup PowerMAX	12.4 oz ae/a	A							
	Ammonium Sulfate	2 % w/w	A							
6	VALOR SX	1.02 oz ai/a	A		3.3 a	1.7 a	0.0 a		66.7 a	11.980 a
	PRE-PARE	0.21 oz ai/a	A							
	Roundup PowerMAX	12.4 oz ae/a	A							
	Ammonium Sulfate	2 % w/w	A							

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Pest Type				W Weed	W Weed	
Pest Code				TAROF	AMBEL	
Pest Scientific Name				Taraxacum offi>	Ambrosia artem>	
Pest Name				Common dandel>	Common ragweed	
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW
Crop Scientific Name	Triticum aesti>					
Crop Name	Winter wheat					
Part Rated	PLOT C	PLOT C	PLOT C	PLOT P	PLOT P	PLOT C
Rating Date	11/5/08	3/2/09	6/24/09	11/11/08	6/24/09	7/2/09
Rating Type	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO	YIELD
Rating Unit	%	%	%	%	%	lb/plot
Sample Size, Unit						1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority	2 LF	3-5 LF	MATURE	2-3 LF	MATURE	MATURE
Crop Stage Minimum/Maximum	2-4"	2-5"		3-4"		
Pest Stage Majority				VEG	2-4 NOD	
Pest Stage Minimum/Maximum				0-6"	2-6"	
Pest Density, Unit				3 YD2	6 YD2	
Footnote Number						
Assessed By	MK	MK	GK RH	MK	GK RH	
Rating Timing						
Days After First/Last Applic.	48 22	165 117	279 231	54 6	279 231	287 239
Trt-Eval Interval						
Plant-Eval Interval	22 DP-1	139 DP-1	253 DP-1	28 DP-1	253 DP-1	261 DP-1
Days After Emergence	19 DE-	136 DE	250 DE	25 DE-	250 DE	258 DE
Number of Decimals						
Trt No.						
Treatment Name						
Rate						
Rate Unit						
Appl Code						
	1	3	4	2	5	6
7 VALOR SX	1.28 oz ai/a	A	4.0 a			
PRE-PARE	0.21 oz ai/a	A				
Roundup PowerMAX	12.4 oz ae/a	A				
Ammonium Sulfate	2 % w/w	A				
8 VALOR SX	2.04 oz ai/a	A	6.7 a			
PRE-PARE	0.42 oz ai/a	A				
Roundup PowerMAX	12.4 oz ae/a	A				
Ammonium Sulfate	2 % w/w	A				
9 VALOR SX	1.02 oz ai/a	A	3.7 a			
PRE-PARE	0.21 oz ai/a	A				
Roundup PowerMAX	12.4 oz ae/a	A				
Ammonium Sulfate	2 % w/w	A				
EVEREST	0.21 oz ai/a	F				
QUAD 7	1 % v/v	F				
10 Roundup PowerMAX	12.4 oz ae/a	A	0.7 a			
Ammonium Sulfate	2 % w/w	A				
11 VALOR SX	1.02 oz ai/a	B	2.0 a			
Roundup PowerMAX	12.4 oz ae/a	B				
Ammonium Sulfate	2 % w/w	B				
12 PRE-PARE	0.21 oz ai/a	B	1.7 a			
Roundup PowerMAX	12.4 oz ae/a	B				
Ammonium Sulfate	2 % w/w	B				
EVEREST	0.21 oz ai/a	F				
QUAD 7	1 % v/v	F				

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Pest Type				W Weed	W Weed					
Pest Code				TAROF	AMBEL					
Pest Scientific Name				Taraxacum offi>	Ambrosia artem>					
Pest Name				Common dandel>	Common ragweed					
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW				
Crop Scientific Name	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>				
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat				
Part Rated	PLOT C	PLOT C	PLOT C	PLOT P	PLOT P	PLOT C				
Rating Date	11/5/08	3/2/09	6/24/09	11/11/08	6/24/09	7/2/09				
Rating Type	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO	YIELD				
Rating Unit	%	%	%	%	%	lb/plot				
Sample Size, Unit						1 PLOT				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority	2 LF	3-5 LF	MATURE	2-3 LF	MATURE	MATURE				
Crop Stage Minimum/Maximum	2-4"	2-5"		3-4"						
Pest Stage Majority				VEG	2-4 NOD					
Pest Stage Minimum/Maximum				0-6"	2-6"					
Pest Density, Unit				3 YD2	6 YD2					
Footnote Number										
Assessed By	MK	MK	GK RH	MK	GK RH					
Rating Timing										
Days After First/Last Applic.	48 22	165 117	279 231	54 6	279 231	287 239				
Trt-Eval Interval										
Plant-Eval Interval	22 DP-1	139 DP-1	253 DP-1	28 DP-1	253 DP-1	261 DP-1				
Days After Emergence	19 DE-	136 DE	250 DE	25 DE-	250 DE	258 DE				
Number of Decimals										
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	3	4	2	5	6
13	VALOR SX	0.765	oz ai/a	B	5.0 a	3.0 a	0.0 a		63.3 a	12.430 a
	PRE-PARE	0.154	oz ai/a	B						
	Roundup PowerMAX	12.4	oz ae/a	B						
	Ammonium Sulfate	2	% w/w	B						
14	VALOR SX	0.765	oz ai/a	B	5.3 a	4.0 a	0.0 a		91.7 a	11.453 a
	PRE-PARE	0.21	oz ai/a	B						
	Roundup PowerMAX	12.4	oz ae/a	B						
	Ammonium Sulfate	2	% w/w	B						
15	VALOR SX	1.02	oz ai/a	B	3.7 a	3.7 a	0.0 a		90.0 a	11.510 a
	PRE-PARE	0.21	oz ai/a	B						
	Roundup PowerMAX	12.4	oz ae/a	B						
	Ammonium Sulfate	2	% w/w	B						
16	VALOR SX	1.28	oz ai/a	B	4.0 a	3.7 a	0.0 a		100.0 a	11.730 a
	PRE-PARE	0.21	oz ai/a	B						
	Roundup PowerMAX	12.4	oz ae/a	B						
	Ammonium Sulfate	2	% w/w	B						
17	VALOR SX	2.04	oz ai/a	B	6.7 a	15.0 a	0.0 a		100.0 a	9.687 a
	PRE-PARE	0.42	oz ai/a	B						
	2,4-D Amine	12.4	oz ae/a	B						
	Ammonium Sulfate	2	% w/w	B						
18	VALOR SX	1.02	oz ai/a	B	5.7 a	3.0 a	0.0 a		78.3 a	10.340 a
	PRE-PARE	0.21	oz ai/a	B						
	Roundup PowerMAX	12.4	oz ae/a	B						
	Ammonium Sulfate	2	% w/w	B						
	EVEREST	0.21	oz ai/a	F						
	QUAD 7	1	% v/v	F						

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Pest Type				W Weed	W Weed					
Pest Code				TAROF	AMBEL					
Pest Scientific Name				Taraxacum offi>	Ambrosia artem>					
Pest Name				Common dandel>	Common ragweed					
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW				
Crop Scientific Name	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>				
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat				
Part Rated	PLOT C	PLOT C	PLOT C	PLOT P	PLOT P	PLOT C				
Rating Date	11/5/08	3/2/09	6/24/09	11/11/08	6/24/09	7/2/09				
Rating Type	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO	YIELD				
Rating Unit	%	%	%	%	%	lb/plot				
Sample Size, Unit						1 PLOT				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority	2 LF	3-5 LF	MATURE	2-3 LF	MATURE	MATURE				
Crop Stage Minimum/Maximum	2-4"	2-5"		3-4"						
Pest Stage Majority				VEG	2-4 NOD					
Pest Stage Minimum/Maximum				0-6"	2-6"					
Pest Density, Unit				3 YD2	6 YD2					
Footnote Number										
Assessed By	MK	MK	GK RH	MK	GK RH					
Rating Timing										
Days After First/Last Applic.	48 22	165 117	279 231	54 6	279 231	287 239				
Trt-Eval Interval										
Plant-Eval Interval	22 DP-1	139 DP-1	253 DP-1	28 DP-1	253 DP-1	261 DP-1				
Days After Emergence	19 DE-	136 DE	250 DE	25 DE-	250 DE	258 DE				
Number of Decimals										
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	1	3	4	2	5	6
19	Roundup PowerMAX Ammonium Sulfate	12.4 2	oz ae/a % w/w	B B	1.7 a	0.0 a	0.0 a		71.0 a	11.687 a
20	VALOR SX Roundup PowerMAX Ammonium Sulfate	1.02 12.4 2	oz ai/a oz ae/a % w/w	C C C	4.0 a	2.6 a	0.0 a		88.3 a	12.503 a
21	PRE-PARE Roundup PowerMAX Ammonium Sulfate EVEREST QUAD 7	0.21 12.4 2 0.21 1	oz ai/a oz ae/a % w/w oz ai/a % v/v	C C C F F	2.0 a	0.7 a	0.0 a		79.3 a	12.773 a
22	VALOR SX PRE-PARE Roundup PowerMAX Ammonium Sulfate	0.765 0.154 12.4 2	oz ai/a oz ai/a oz ae/a % w/w	C C C C	3.7 a	4.7 a	0.0 a		78.3 a	11.613 a
23	VALOR SX PRE-PARE Roundup PowerMAX Ammonium Sulfate	0.765 0.21 12.4 2	oz ai/a oz ai/a oz ae/a % w/w	C C C C	6.0 a	2.3 a	0.0 a		77.7 a	10.510 a
24	VALOR SX PRE-PARE Roundup PowerMAX Ammonium Sulfate	1.02 0.21 12.4 2	oz ai/a oz ai/a oz ae/a % w/w	C C C C	4.7 a	12.7 a	0.0 a		95.0 a	9.950 a
25	VALOR SX PRE-PARE Roundup PowerMAX Ammonium Sulfate	1.28 0.21 12.4 2	oz ai/a oz ai/a oz ae/a % w/w	C C C C	3.3 a	5.0 a	0.0 a		98.3 a	11.053 a

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Pest Type				W Weed	W Weed					
Pest Code				TAROF	AMBEL					
Pest Scientific Name				Taraxacum offi>	Ambrosia artem>					
Pest Name				Common dandel>	Common ragweed					
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW				
Crop Scientific Name	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>	Triticum aesti>				
Crop Name	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat	Winter wheat				
Part Rated	PLOT C	PLOT C	PLOT C	PLOT P	PLOT P	PLOT C				
Rating Date	11/5/08	3/2/09	6/24/09	11/11/08	6/24/09	7/2/09				
Rating Type	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO	YIELD				
Rating Unit	%	%	%	%	%	lb/plot				
Sample Size, Unit						1 PLOT				
Number of Subsamples	1	1	1	1	1	1				
Crop Stage Majority	2 LF	3-5 LF	MATURE	2-3 LF	MATURE	MATURE				
Crop Stage Minimum/Maximum	2-4"	2-5"		3-4"						
Pest Stage Majority				VEG	2-4 NOD					
Pest Stage Minimum/Maximum				0-6"	2-6"					
Pest Density, Unit				3 YD2	6 YD2					
Footnote Number										
Assessed By	MK	MK	GK RH	MK	GK RH					
Rating Timing										
Days After First/Last Applic.	48 22	165 117	279 231	54 6	279 231	287 239				
Trt-Eval Interval										
Plant-Eval Interval	22 DP-1	139 DP-1	253 DP-1	28 DP-1	253 DP-1	261 DP-1				
Days After Emergence	19 DE-	136 DE	250 DE	25 DE-	250 DE	258 DE				
Number of Decimals										
Trt No.	Treatment Name	Rate	Unit	Appl Code	1	3	4	2	5	6
26	VALOR SX	2.04	oz ai/a	C	6.0 a	12.3 a	0.0 a		90.0 a	9.933 a
	PRE-PARE	0.42	oz ai/a	C						
	Roundup PowerMAX	12.4	oz ae/a	C						
	Ammonium Sulfate	2	% w/w	C						
27	VALOR SX	1.02	oz ai/a	C	5.7 a	6.3 a	0.0 a		75.0 a	10.420 a
	PRE-PARE	0.21	oz ai/a	C						
	Roundup PowerMAX	12.4	oz ae/a	C						
	Ammonium Sulfate	2	% w/w	C						
	Everest	0.21	oz ai/a	F						
	Quad 7	1	% v/v	F						
28	Roundup PowerMAX	12.4	oz ae/a	C	3.3 a	0.0 a	0.0 a		58.3 a	10.667 a
	Ammonium Sulfate	2	% w/w	C						
29	Roundup PowerMAX	0.77	lb ae/a	D			0.0 a	97.0 a	75.0 a	11.620 a
	Ammonium Sulfate	2	% w/w	D						
	Huskie	0.226	lb ai/a	E						
	UAN 28%	1.9	l/a	E						
	NIS	0.25	% v/v	E						
30	Roundup PowerMAX	0.77	lb ae/a	D			0.0 a	98.0 a	71.7 a	12.507 a
	Ammonium Sulfate	2	% w/w	D						
	Atlantis	0.0473	lb ai/a	E						
	UAN 28%	1.9	l/a	E						
	NIS	0.5	% v/v	E						
31	Roundup PowerMAX	0.77	lb ae/a	D			0.0 a	90.0 a	93.3 a	11.950 a
	Ammonium Sulfate	2	% w/w	D						
	Olympus Flex	0.0443	lb ai/a	E						
	UAN 28%	1.9	l/a	E						
	NIS	0.5	% v/v	E						

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Pest Type				W Weed	W Weed	
Pest Code				TAROF	AMBEL	
Pest Scientific Name				Taraxacum offi>	Ambrosia artem>	
Pest Name				Common dandel>	Common ragweed	
Crop Code	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW	TRZAW
Crop Scientific Name	Triticum aesti>					
Crop Name	Winter wheat					
Part Rated	PLOT C	PLOT C	PLOT C	PLOT P	PLOT P	PLOT C
Rating Date	11/5/08	3/2/09	6/24/09	11/11/08	6/24/09	7/2/09
Rating Type	PHYGEN	PHYGEN	PHYGEN	CONTRO	CONTRO	YIELD
Rating Unit	%	%	%	%	%	lb/plot
Sample Size, Unit						1 PLOT
Number of Subsamples	1	1	1	1	1	1
Crop Stage Majority	2 LF	3-5 LF	MATURE	2-3 LF	MATURE	MATURE
Crop Stage Minimum/Maximum	2-4"	2-5"		3-4"		
Pest Stage Majority				VEG	2-4 NOD	
Pest Stage Minimum/Maximum				0-6"	2-6"	
Pest Density, Unit				3 YD2	6 YD2	
Footnote Number						
Assessed By	MK	MK	GK RH	MK	GK RH	
Rating Timing						
Days After First/Last Applic.	48 22	165 117	279 231	54 6	279 231	287 239
Trt-Eval Interval						
Plant-Eval Interval	22 DP-1	139 DP-1	253 DP-1	28 DP-1	253 DP-1	261 DP-1
Days After Emergence	19 DE-	136 DE	250 DE	25 DE-	250 DE	258 DE
Number of Decimals						
Trt No.						
Treatment Name						
Rate						
Rate Unit						
Appl Code						
	1	3	4	2	5	6
32 Roundup PowerMAX	0.77 lb ae/a		0.0 a	86.7 a	71.7 a	12.530 a
Ammonium Sulfate	2 % w/w					
Olympus	0.0394 lb ai/a					
UAN 28%	1.9 l/a					
NIS	0.5 % v/v					
33 Finesse	0.0234 lb ai/a		0.0 a	96.7 a	93.3 a	11.150 a
COC	1 % v/v					
LSD (P=.05)	4.39	9.67	0.00	10.91	49.83	2.9449
Standard Deviation	2.69	5.92	0.00	6.00	30.52	1.8034
CV	67.21	133.03	0.0	7.68	42.29	15.94
Bartlett's X2	31.793	73.923	0.0	9.099	44.295	41.973
P(Bartlett's X2)	0.164	0.001*	.	0.059	0.034*	0.09
Replicate F	0.904	0.379	0.000	2.250	4.381	4.007
Replicate Prob(F)	0.4109	0.6867	1.0000	0.1560	0.0165	0.0236
Treatment F	1.377	1.534	0.000	123.695	1.578	1.025
Treatment Prob(F)	0.1573	0.0911	1.0000	0.0001	0.0608	0.4571

Means followed by same letter do not significantly differ (P=.05, Student-Newman-Keuls)  
 Mean comparisons performed only when AOV Treatment P(F) is significant at mean comparison OSL.

Pest Type						
Pest Code						
Pest Scientific Name						
Pest Name						
Crop Code		TRZAW		TRZAW		
Crop Scientific Name		Triticum aesti>		Triticum aesti>		
Crop Name		Winter wheat		Winter wheat		
Part Rated		PLOT C		PLOT C		
Rating Date		7/2/09		7/2/09		
Rating Type		MOICON		YIELD		
Rating Unit		%		BU		
Sample Size, Unit		1 PLOT		1 PLOT		
Number of Subsamples		1		1		
Crop Stage Majority		MATURE		MATURE		
Crop Stage Minimum/Maximum						
Pest Stage Majority						
Pest Stage Minimum/Maximum						
Pest Density, Unit						
Footnote Number						
Assessed By						
Rating Timing						
Days After First/Last Applic.		287 239		287 239		
Trt-Eval Interval						
Plant-Eval Interval		261 DP-1		261 DP-1		
Days After Emergence		258 DE		258 DE		
Number of Decimals				1		
Trt No.	Treatment Name	Rate	Unit	Appl Code		
					7	8
1	UNTREATED				12.480 a	79.0 a
2	VALOR SX	1.02 oz ai/a	A		12.400 a	53.8 a
	Roundup PowerMAX	12.4 oz ae/a	A			
	Ammonium Sulfate	2 % w/w	A			
3	PRE-PARE	0.21 oz ai/a	A		12.935 a	66.0 a
	Roundup PowerMAX	12.4 oz ae/a	A			
	Ammonium Sulfate	2 % w/w	A			
	EVEREST	0.21 oz ai/a	F			
	QUAD 7	1 % v/v	F			
4	VALOR SX	0.765 oz ai/a	A		12.385 a	70.8 a
	PRE-PARE	0.154 oz ai/a	A			
	Roundup PowerMAX	12.4 oz ae/a	A			
	Ammonium Sulfate	2 % w/w	A			
5	VALOR SX	0.765 oz ai/a	A		12.533 a	64.7 a
	PRE-PARE	0.21 oz ai/a	A			
	Roundup PowerMAX	12.4 oz ae/a	A			
	Ammonium Sulfate	2 % w/w	A			
6	VALOR SX	1.02 oz ai/a	A		12.613 a	71.7 a
	PRE-PARE	0.21 oz ai/a	A			
	Roundup PowerMAX	12.4 oz ae/a	A			
	Ammonium Sulfate	2 % w/w	A			

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Pest Type					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop Code		TRZAW		TRZAW	
Crop Scientific Name		Triticum aesti>		Triticum aesti>	
Crop Name		Winter wheat		Winter wheat	
Part Rated		PLOT C		PLOT C	
Rating Date		7/2/09		7/2/09	
Rating Type		MOICON		YIELD	
Rating Unit		%		BU	
Sample Size, Unit		1 PLOT		1 PLOT	
Number of Subsamples		1		1	
Crop Stage Majority		MATURE		MATURE	
Crop Stage Minimum/Maximum					
Pest Stage Majority					
Pest Stage Minimum/Maximum					
Pest Density, Unit					
Footnote Number					
Assessed By					
Rating Timing					
Days After First/Last Applic.		287 239		287 239	
Trt-Eval Interval					
Plant-Eval Interval		261 DP-1		261 DP-1	
Days After Emergence		258 DE		258 DE	
Number of Decimals					1
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	
					7 8
7	VALOR SX	1.28	oz ai/a	A	12.647 a
	PRE-PARE	0.21	oz ai/a	A	
	Roundup PowerMAX	12.4	oz ae/a	A	
	Ammonium Sulfate	2	% w/w	A	
8	VALOR SX	2.04	oz ai/a	A	12.120 a
	PRE-PARE	0.42	oz ai/a	A	
	Roundup PowerMAX	12.4	oz ae/a	A	
	Ammonium Sulfate	2	% w/w	A	
9	VALOR SX	1.02	oz ai/a	A	12.313 a
	PRE-PARE	0.21	oz ai/a	A	
	Roundup PowerMAX	12.4	oz ae/a	A	
	Ammonium Sulfate	2	% w/w	A	
	EVEREST	0.21	oz ai/a	F	
	QUAD 7	1	% v/v	F	
10	Roundup PowerMAX	12.4	oz ae/a	A	12.180 a
	Ammonium Sulfate	2	% w/w	A	
11	VALOR SX	1.02	oz ai/a	B	12.297 a
	Roundup PowerMAX	12.4	oz ae/a	B	
	Ammonium Sulfate	2	% w/w	B	
12	PRE-PARE	0.21	oz ai/a	B	12.480 a
	Roundup PowerMAX	12.4	oz ae/a	B	
	Ammonium Sulfate	2	% w/w	B	
	EVEREST	0.21	oz ai/a	F	
	QUAD 7	1	% v/v	F	

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Pest Type					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop Code		TRZAW		TRZAW	
Crop Scientific Name		Triticum aesti>		Triticum aesti>	
Crop Name		Winter wheat		Winter wheat	
Part Rated		PLOT C		PLOT C	
Rating Date		7/2/09		7/2/09	
Rating Type		MOICON		YIELD	
Rating Unit		%		BU	
Sample Size, Unit		1 PLOT		1 PLOT	
Number of Subsamples		1		1	
Crop Stage Majority		MATURE		MATURE	
Crop Stage Minimum/Maximum					
Pest Stage Majority					
Pest Stage Minimum/Maximum					
Pest Density, Unit					
Footnote Number					
Assessed By					
Rating Timing					
Days After First/Last Applic.		287 239		287 239	
Trt-Eval Interval					
Plant-Eval Interval		261 DP-1		261 DP-1	
Days After Emergence		258 DE		258 DE	
Number of Decimals					1
Trt No.	Treatment Name	Rate	Rate Unit	Appl Code	
					7 8
13	VALOR SX	0.765	oz ai/a B		12.470 a 74.5 a
	PRE-PARE	0.154	oz ai/a B		
	Roundup PowerMAX	12.4	oz ae/a B		
	Ammonium Sulfate	2	% w/w B		
14	VALOR SX	0.765	oz ai/a B		12.293 a 68.8 a
	PRE-PARE	0.21	oz ai/a B		
	Roundup PowerMAX	12.4	oz ae/a B		
	Ammonium Sulfate	2	% w/w B		
15	VALOR SX	1.02	oz ai/a B		12.370 a 69.0 a
	PRE-PARE	0.21	oz ai/a B		
	Roundup PowerMAX	12.4	oz ae/a B		
	Ammonium Sulfate	2	% w/w B		
16	VALOR SX	1.28	oz ai/a B		12.253 a 70.5 a
	PRE-PARE	0.21	oz ai/a B		
	Roundup PowerMAX	12.4	oz ae/a B		
	Ammonium Sulfate	2	% w/w B		
17	VALOR SX	2.04	oz ai/a B		12.067 a 58.3 a
	PRE-PARE	0.42	oz ai/a B		
	2,4-D Amine	12.4	oz ae/a B		
	Ammonium Sulfate	2	% w/w B		
18	VALOR SX	1.02	oz ai/a B		12.203 a 62.1 a
	PRE-PARE	0.21	oz ai/a B		
	Roundup PowerMAX	12.4	oz ae/a B		
	Ammonium Sulfate	2	% w/w B		
	EVEREST	0.21	oz ai/a F		
	QUAD 7	1	% v/v F		

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Pest Type					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop Code		TRZAW		TRZAW	
Crop Scientific Name		Triticum aesti>		Triticum aesti>	
Crop Name		Winter wheat		Winter wheat	
Part Rated		PLOT C		PLOT C	
Rating Date		7/2/09		7/2/09	
Rating Type		MOICON		YIELD	
Rating Unit		%		BU	
Sample Size, Unit		1 PLOT		1 PLOT	
Number of Subsamples		1		1	
Crop Stage Majority		MATURE		MATURE	
Crop Stage Minimum/Maximum					
Pest Stage Majority					
Pest Stage Minimum/Maximum					
Pest Density, Unit					
Footnote Number					
Assessed By					
Rating Timing					
Days After First/Last Applic.		287 239		287 239	
Trt-Eval Interval					
Plant-Eval Interval		261 DP-1		261 DP-1	
Days After Emergence		258 DE		258 DE	
Number of Decimals					1
Trt No.	Treatment Name	Rate	Unit	Appl Code	
					7 8
19	Roundup PowerMAX Ammonium Sulfate	12.4 2	oz ae/a % w/w	B B	12.437 a 70.1 a
20	VALOR SX Roundup PowerMAX Ammonium Sulfate	1.02 12.4 2	oz ai/a oz ae/a % w/w	C C C	12.250 a 75.1 a
21	PRE-PARE Roundup PowerMAX Ammonium Sulfate EVEREST QUAD 7	0.21 12.4 2 0.21 1	oz ai/a oz ae/a % w/w oz ai/a % v/v	C C C F F	12.317 a 76.7 a
22	VALOR SX PRE-PARE Roundup PowerMAX Ammonium Sulfate	0.765 0.154 12.4 2	oz ai/a oz ai/a oz ae/a % w/w	C C C C	12.523 a 69.6 a
23	VALOR SX PRE-PARE Roundup PowerMAX Ammonium Sulfate	0.765 0.21 12.4 2	oz ai/a oz ai/a oz ae/a % w/w	C C C C	12.540 a 62.9 a
24	VALOR SX PRE-PARE Roundup PowerMAX Ammonium Sulfate	1.02 0.21 12.4 2	oz ai/a oz ai/a oz ae/a % w/w	C C C C	12.300 a 59.7 a
25	VALOR SX PRE-PARE Roundup PowerMAX Ammonium Sulfate	1.28 0.21 12.4 2	oz ai/a oz ai/a oz ae/a % w/w	C C C C	12.610 a 66.1 a

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Pest Type					
Pest Code					
Pest Scientific Name					
Pest Name					
Crop Code		TRZAW		TRZAW	
Crop Scientific Name		Triticum aesti>		Triticum aesti>	
Crop Name		Winter wheat		Winter wheat	
Part Rated		PLOT C		PLOT C	
Rating Date		7/2/09		7/2/09	
Rating Type		MOICON		YIELD	
Rating Unit		%		BU	
Sample Size, Unit		1 PLOT		1 PLOT	
Number of Subsamples		1		1	
Crop Stage Majority		MATURE		MATURE	
Crop Stage Minimum/Maximum					
Pest Stage Majority					
Pest Stage Minimum/Maximum					
Pest Density, Unit					
Footnote Number					
Assessed By					
Rating Timing					
Days After First/Last Applic.		287 239		287 239	
Trt-Eval Interval					
Plant-Eval Interval		261 DP-1		261 DP-1	
Days After Emergence		258 DE		258 DE	
Number of Decimals					1
Trt No.	Treatment Name	Rate	Unit	Appl Code	
					7 8
26	VALOR SX	2.04	oz ai/a	C	12.097 a
	PRE-PARE	0.42	oz ai/a	C	
	Roundup PowerMAX	12.4	oz ae/a	C	
	Ammonium Sulfate	2	% w/w	C	59.8 a
27	VALOR SX	1.02	oz ai/a	C	12.337 a
	PRE-PARE	0.21	oz ai/a	C	
	Roundup PowerMAX	12.4	oz ae/a	C	
	Ammonium Sulfate	2	% w/w	C	62.5 a
	Everest	0.21	oz ai/a	F	
	Quad 7	1	% v/v	F	
28	Roundup PowerMAX	12.4	oz ae/a	C	12.323 a
	Ammonium Sulfate	2	% w/w	C	64.0 a
29	Roundup PowerMAX	0.77	lb ae/a	D	12.130 a
	Ammonium Sulfate	2	% w/w	D	69.9 a
	Huskie	0.226	lb ai/a	E	
	UAN 28%	1.9	l/a	E	
	NIS	0.25	% v/v	E	
30	Roundup PowerMAX	0.77	lb ae/a	D	12.347 a
	Ammonium Sulfate	2	% w/w	D	75.0 a
	Atlantis	0.0473	lb ai/a	E	
	UAN 28%	1.9	l/a	E	
	NIS	0.5	% v/v	E	
31	Roundup PowerMAX	0.77	lb ae/a	D	12.645 a
	Ammonium Sulfate	2	% w/w	D	71.5 a
	Olympus Flex	0.0443	lb ai/a	E	
	UAN 28%	1.9	l/a	E	
	NIS	0.5	% v/v	E	

