



# Ohio State University Horticulture and Crop Science

## WEED STAGE AT EACH APPLICATION

	A	B
Weed 1 Code, Stage:	SETFA .	SETFA 3-5"
Stage Scale:	. .	2-3 LVS
Density, Unit:	. .	8.25 M2
Weed 2 Code, Stage:	CHEAL .	CHEAL 2-3"
Stage Scale:	. .	6-8 LVS
Density, Unit:	. .	33 M2
Weed 3 Code, Stage:	AMBTR .	AMBTR 10"
Stage Scale:	. .	6-12 LVS
Density, Unit:	. .	5.25 M2
Weed 4 Code, Stage:	POLPY .	POLPY 2"
Stage Scale:	. .	5 LVS
Density, Unit:	. .	10.5 M2
Weed 5 Code, Stage:	AMARE .	AMARE 2-4"
Stage Scale:	. .	6-10 LVS
Density, Unit:	. .	0.33 M2
Weed 6 Code, Stage:	ABUTH .	ABUTH 3"
Stage Scale:	. .	5 LVS
Density, Unit:	. .	0.75 M2

## APPLICATION EQUIPMENT

	A	B
Appl. Equipment:	BACKPACK	BACKPACK
Operating Pressure:	50	50
Nozzle Type:	DG	DG
Nozzle Size:	11002	11002
Nozzle Spacing, Unit:	18 IN	18 IN
Ground Speed, Unit:	3 MPH	3 MPH
Carrier:	WATER	WATER
Spray Volume, Unit:	20 GPA	20 GPA
Propellant:	CO2	CO2

# Ohio State University Horticulture and Crop Science

POSTEMERGENCE WEED CONTROL IN ROUNDUP READY CORN WITH PERMIT AND YUKON

Trial ID: 07POCBLF2  
Location: WESTERN BRANCH BIG E

Study Dir.: Anthony F. Dobbels  
Investigator: Dr. Mark M. Loux

Weed Code				SETFA	CHEAL	ABUTH	AMBTR
Crop Code				ZEAMX	ZEAMX		
Rating Data Type				PHYTO	PHYTO	CONTROL	CONTROL
Rating Unit				PERCENT	PERCENT	PERCENT	PERCENT
Rating Date				Jun/08/2007	Jun/14/2007	Jun/14/2007	Jun/14/2007
Trt-Eval Interval				7 DA-B	13 DA-B	13 DA-B	13 DA-B
# Subsamples, Dec.				0	0	0	0

Trt No.	Treatment Name	Rate	Product	Product	Appl Code	1	2	3	4	5	6
		Rate Unit	Rate Unit	Rate Unit							
1	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	0 a	0 a	100 a	99 a	98 a	95 a
1	YUKON	0.127 lb ai/a	3 oz/a		B						
1	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
1	NIS	0.125 % v/v	3.2 oz/a								
2	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	0 a	0 a	99 a	99 a	100 a	96 a
2	YUKON	0.169 lb ai/a	4 oz/a		B						
2	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
2	NIS	0.125 % v/v	3.2 oz/a								
3	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	0 a	0 a	100 a	96 a	95 a	98 a
3	PERMIT	0.0234 lb ai/a	0.5 oz/a		B						
3	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
3	NIS	0.125 % v/v	3.2 oz/a								
4	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	0 a	0 a	99 a	95 a	99 a	94 a
4	PERMIT	0.031 lb ai/a	0.66 oz/a		B						
4	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
4	NIS	0.125 % v/v	3.2 oz/a								
5	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	0 a	1 a	98 a	99 a	100 a	95 a
5	CALLISTO	0.094 lb ai/a	3 oz/a		B						
5	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
5	NIS	0.125 % v/v	3.2 oz/a								
6	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	0 a	1 a	100 a	99 a	96 a	95 a
6	LAUDIS	0.082 lb ai/a	3 oz/a		B						
6	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
6	NIS	0.125 % v/v	3.2 oz/a								
7	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	0 a	0 a	100 a	96 a	100 a	98 a
7	IMPACT	0.0164 lb ai/a	0.75 oz/a		B						
7	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
7	NIS	0.125 % v/v	3.2 oz/a								
8	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	0 a	1 a	100 a	99 a	100 a	90 a
8	STATUS	0.115 lb ai/a	3 oz/a		B						
8	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
8	NIS	0.125 % v/v	3.2 oz/a								
9	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	0 a	0 a	99 a	99 a	96 a	91 a
9	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a		B						
9	NIS	0.125 % v/v	3.2 oz/a								
10	UTC					0 a	0 a	0 b	0 b	0 b	0 b
LSD (P=.05)						0.0	1.0	2.0	5.4	6.5	7.4
Standard Deviation						0.0	0.7	1.4	3.7	4.5	5.1
CV						0.0	385.29	1.54	4.25	5.05	5.99
Bartlett's X2						0.0	0.682	9.542	7.696	21.134	9.934
P(Bartlett's X2)						.	0.711	0.089	0.464	0.002*	0.27

# Ohio State University Horticulture and Crop Science

Weed Code				SETFA	CHEAL	ABUTH	AMBTR
Crop Code	ZEAMX	ZEAMX					
Rating Data Type	PHYTO	PHYTO	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
Rating Unit	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT
Rating Date	Jun/08/2007	Jun/14/2007	Jun/14/2007	Jun/14/2007	Jun/14/2007	Jun/14/2007	Jun/14/2007
Trt-Eval Interval	7 DA-B	13 DA-B	13 DA-B	13 DA-B	13 DA-B	13 DA-B	13 DA-B
# Subsamples, Dec.	0	0	0	0	0	0	0

  

Trt No.	Treatment Name	Rate	Product	Product Rate	Appl Unit	Code	1	2	3	4	5	6
Replicate F							0.000	0.348	1.663	0.126	0.619	3.887
Replicate Prob(F)							1.0000	0.7907	0.1984	0.9437	0.6085	0.0197
Treatment F							0.000	0.739	2080.255	273.732	194.396	138.663
Treatment Prob(F)							1.0000	0.6703	0.0001	0.0001	0.0001	0.0001

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.

# Ohio State University Horticulture and Crop Science

Weed Code		POLPY		SETFA		CHEAL		ABUTH		AMBTR	
Crop Code		ZEAMX		CONTROL		CONTROL		CONTROL		CONTROL	
Rating Data Type		PHYTO		PERCENT		PERCENT		PERCENT		PERCENT	
Rating Unit		PERCENT		PERCENT		PERCENT		PERCENT		PERCENT	
Rating Date		Jun/14/2007		Jun/29/2007		Jun/29/2007		Jun/29/2007		Jun/29/2007	
Trt-Eval Interval		13 DA-B		28 DA-B		28 DA-B		28 DA-B		28 DA-B	
# Subsamples, Dec.		0		0		0		0		0	
Trt No.	Treatment Name	Rate	Product Rate	Product Unit	Appl Code	7	8	9	10	11	12
1	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	80 b	0 a	86 a	99 a	99 a	92 a
1	YUKON	0.127 lb ai/a	3 oz/a		B						
1	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
1	NIS	0.125 % v/v	3.2 oz/a								
2	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	77 b	0 a	82 a	98 a	97 a	90 a
2	YUKON	0.169 lb ai/a	4 oz/a		B						
2	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
2	NIS	0.125 % v/v	3.2 oz/a								
3	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	78 b	0 a	79 a	86 bc	98 a	85 a
3	PERMIT	0.0234 lb ai/a	0.5 oz/a		B						
3	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
3	NIS	0.125 % v/v	3.2 oz/a								
4	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	75 b	0 a	83 a	83 c	99 a	89 a
4	PERMIT	0.031 lb ai/a	0.66 oz/a		B						
4	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
4	NIS	0.125 % v/v	3.2 oz/a								
5	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	95 a	0 a	83 a	96 ab	96 a	90 a
5	CALLISTO	0.094 lb ai/a	3 oz/a		B						
5	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
5	NIS	0.125 % v/v	3.2 oz/a								
6	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	77 b	0 a	89 a	90 abc	94 a	80 a
6	LAUDIS	0.082 lb ai/a	3 oz/a		B						
6	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
6	NIS	0.125 % v/v	3.2 oz/a								
7	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	80 b	0 a	86 a	86 bc	99 a	86 a
7	IMPACT	0.0164 lb ai/a	0.75 oz/a		B						
7	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
7	NIS	0.125 % v/v	3.2 oz/a								
8	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	78 b	0 a	90 a	92 abc	99 a	85 a
8	STATUS	0.115 lb ai/a	3 oz/a		B						
8	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a								
8	NIS	0.125 % v/v	3.2 oz/a								
9	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a		A	75 b	0 a	82 a	85 bc	86 b	81 a
9	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a		B						
9	NIS	0.125 % v/v	3.2 oz/a								
10	UTC					0 c	0 a	0 b	0 d	0 c	0 b
LSD (P=.05)						11.1	0.0	10.1	7.9	6.2	13.5
Standard Deviation						7.4	0.0	6.9	5.5	4.3	9.3
CV						10.43	0.0	9.15	6.71	4.95	11.93
Bartlett's X2						4.052	0.0	9.275	12.835	21.062	2.133
P(Bartlett's X2)						0.852	.	0.32	0.118	0.007*	0.952
Replicate F						1.584	0.000	2.347	0.322	1.920	1.458
Replicate Prob(F)						0.2280	1.0000	0.0950	0.8095	0.1502	0.2481
Treatment F						47.815	0.000	59.946	114.117	204.545	35.363
Treatment Prob(F)						0.0001	1.0000	0.0001	0.0001	0.0001	0.0001

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# Ohio State University Horticulture and Crop Science

Weed Code				POLPY	SETFA	CHEAL	ABUTH	AMBTR	POLPY			
Crop Code				CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL			
Rating Data Type				PERCENT	PERCENT	PERCENT	PERCENT	PERCENT	PERCENT			
Rating Unit				Jun/29/2007	Jul/27/2007	Jul/27/2007	Jul/23/2007	Jul/23/2007	Jul/23/2007			
Rating Date				28 DA-B	56 DA-B	56 DA-B	56 DA-B	56 DA-B	56 DA-B			
Trt-Eval Interval				0	0	0	0	0	0			
# Subsamples, Dec.				0	0	0	0	0	0			
Trt No.	Treatment Name	Rate	Product Unit	Product Rate	Product Unit	Appl Code	13	14	15	16	17	18
1	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a	A			97 a	84 a	99 a	99 a	93 a	100 a
1	YUKON	0.127 lb ai/a	3 oz/a	B								
1	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a									
1	NIS	0.125 % v/v	3.2 oz/a									
2	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a	A			96 a	81 a	98 a	99 a	93 a	92 a
2	YUKON	0.169 lb ai/a	4 oz/a	B								
2	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a									
2	NIS	0.125 % v/v	3.2 oz/a									
3	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a	A			89 a	80 a	90 ab	95 a	88 a	92 a
3	PERMIT	0.0234 lb ai/a	0.5 oz/a	B								
3	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a									
3	NIS	0.125 % v/v	3.2 oz/a									
4	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a	A			96 a	79 a	85 ab	96 a	94 a	95 a
4	PERMIT	0.031 lb ai/a	0.66 oz/a	B								
4	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a									
4	NIS	0.125 % v/v	3.2 oz/a									
5	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a	A			95 a	81 a	98 a	99 a	93 a	94 a
5	CALLISTO	0.094 lb ai/a	3 oz/a	B								
5	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a									
5	NIS	0.125 % v/v	3.2 oz/a									
6	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a	A			77 b	83 a	90 ab	99 a	89 a	97 a
6	LAUDIS	0.082 lb ai/a	3 oz/a	B								
6	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a									
6	NIS	0.125 % v/v	3.2 oz/a									
7	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a	A			90 a	84 a	86 ab	98 a	90 a	95 a
7	IMPACT	0.0164 lb ai/a	0.75 oz/a	B								
7	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a									
7	NIS	0.125 % v/v	3.2 oz/a									
8	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a	A			94 a	85 a	88 ab	94 a	85 a	100 a
8	STATUS	0.115 lb ai/a	3 oz/a	B								
8	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a									
8	NIS	0.125 % v/v	3.2 oz/a									
9	DUAL II MAGNUM	0.64 lb ai/a	0.67 pt/a	A			92 a	81 a	81 b	83 b	88 a	100 a
9	ROUNDUP WEATHERMAX	0.77 lb ae/a	22 oz/a	B								
9	NIS	0.125 % v/v	3.2 oz/a									
10	UTC						0 c	0 b	0 c	0 c	0 b	0 b
LSD (P=.05)							10.0	7.1	9.3	6.2	12.1	12.6
Standard Deviation							6.7	4.9	6.4	4.2	8.4	8.5
CV							8.14	6.68	7.86	4.93	10.3	9.83
Bartlett's X2							5.044	10.906	16.823	14.954	3.353	2.554
P(Bartlett's X2)							0.655	0.207	0.032*	0.06	0.91	0.768
Replicate F							0.498	2.365	0.109	2.081	2.398	0.558
Replicate Prob(F)							0.6882	0.0932	0.9543	0.1262	0.0900	0.6495
Treatment F							77.528	111.386	83.277	208.702	47.040	51.664
Treatment Prob(F)							0.0001	0.0001	0.0001	0.0001	0.0001	0.0001

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