

CABBAGE HERBICIDE EVALUATION - ARLINGTON, WI - 2012

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Location: Arlington Ag Research Station - Horticulture Farm Field 608

Plot Information:

Soil Type: Plano Silt Loam; pH 6.8; OM 3.6%.

Variety: 'Kaitlin'

Date Planted: 5/23/12

Row Spacing: 36 Inches, 4 rows/plot

Plant Spacing: 18 inches

Date Harvested: 8/21/12

Plot Size-Design: 12' x 20', 4 Reps

Rating Dates: 6/7, 6/13, 7/9

Application Equipment: Tractor mounted air pressure sprayer. GPA 20, PSI 27, MPH 3.3, Nozzle - XR8003VS, Nozzle spacing 18", Height 18".

Incorporation Equipment (if applicable): Incorporated 2-3" with a Kelley S-tine field cultivator with rolling baskets, two-pass incorporation.

Herbicide Application Data:

PRETRA = Pre Transplant

POSTRA = Post Transplant

Date	5/22/12	5/25/12
Time	3:30 pm	8:15 am
Treatment	PRETRA	POSTRA
Soil Moisture		
SF	dry	moist
1"	dry	moist
3"	moist	moist
Soil Temp (F°)		
SF	88.6	70.0
3"	76.4	64.9
Air Temp (F°)	74.0	66.5
Wind	2.8 S	1.4 W
%RH	27.0%	60.5%
Sky Condition	0% clouds	5% clouds
Crop Stage	-----	-----
Weed & Size	-----	-----
	-----	-----
	-----	-----
	-----	-----

Summary: This site received only 0.56" of rain during the 48 days beginning on June 1. The lack of moisture resulted in poor weed control over nearly all treatments. Quinstar and Prowl H2O applied post transplant resulted in excellent grass control and crop safety. Goal Tender applied post-transplant at the 8 oz/A rate resulted in crop injury ratings approaching 10%. Goal Tender applied pre-transplant continues to provide improved crop safety and weed control as compared to post-transplant applications.

Fertilization and other pesticides: Fall 2011 - dairy replacement pack manure, 160 lb N/A. Warrior 3.2 oz/a - 7/9/12 (cucumber beetle control)

Irrigation: 7/1 - 1.0", 7/17 - 0.8"

Weed Abbreviations:

COLQ = Common Lambsquarters

RRPW = Redroot Pigweed

Plot Weed Density:

high

high

Weed Abbreviations:

VELE = Velvetleaf

YEFT = Yellow Foxtail

Plot Weed Density:

moderate

high

Cabbage Herbicide Evaluation - Arlington, WI - 2012

Trt No.	Treatment Name	Rate	Unit	Grow Stg	% Injury 6/7/12	% Injury 6/13/12	% Weed Control 6/13/12			
							COLQ	RRPW	VELE	YEFT
1	HANDWEEDED CHECK				0 c	0 c	100 a	100 a	100 a	100 a
2	UNWEEDED CHECK				0 c	0 c	0 d	0 c	0 d	0 c
3	CHATEAU	2 OZ/A		PRETRA	1.3 c	1.3 bc	99 a	99.5 a	98.3 a	98.3 a
4	CHATEAU	1 OZ/A		POSTRA	0 c	0 c	99 a	99 a	97 ab	97 a
5	SPARTAN	6 OZ/A		PRETRA	1.3 c	0 c	97.5 a	99.5 a	99.5 a	99 a
	COMMAND	1 PT/A		PRETRA						
6	GOAL XL	1.5 PT/A		PRETRA	0 c	0 c	99 a	98.8 a	100 a	99.5 a
	COMMAND	1 PT/A		PRETRA						
7	GOAL TENDER	0.75 PT/A		PRETRA	0 c	0 c	100 a	100 a	99.5 a	100 a
	DUAL MAGNUM	1 PT/A		POSTRA						
8	DEFINE	1 PT/A		POSTRA	1.3 c	1.3 bc	99.5 a	94.5 a	84 bc	99 a
9	DEFINE	1 PT/A		POSTRA	8.8 a	7.5 a	99 a	99 a	99.5 a	100 a
	GOAL TENDER	8 OZ/A		POSTRA						
10	QUINSTAR	0.125 LB A/A		POSTRA	1.3 c	3.8 abc	40 c	45 b	82.5 c	97 a
11	QUINSTAR	0.25 LB A/A		POSTRA	0 c	0 c	67.5 b	40 b	88.8 abc	99.5 a
12	PROWL H2O	1 LB A/A		PRETRA	0 c	0 c	98.3 a	90 a	96.3 ab	98.8 a
13	PROWL H2O	1 LB A/A		POSTRA	2.5 bc	0 c	97 a	97 a	98.8 a	99 a
14	PROWL H2O	2 LB A/A		POSTRA	2.5 bc	5 ab	100 a	99 a	99 a	100 a
15	GOAL TENDER	4 OZ/A		POSTRA	2.5 bc	1.3 bc	97.8 a	96.3 a	97 ab	90 b
16	GOAL TENDER	4 OZ/A		POSTRA	1.3 c	0 c	99.5 a	99 a	100 a	100 a
	COMMAND	1 PT/A		PRETRA						
17	GOAL TENDER	6 OZ/A		POSTRA	0 c	1.3 bc	99 a	97.5 a	98.3 a	99 a
18	GOAL TENDER	6 OZ/A		POSTRA	2.5 bc	3.8 abc	100 a	100 a	100 a	99.5 a
	COMMAND	1 PT/A		PRETRA						
19	GOAL TENDER	8 OZ/A		POSTRA	7.5 ab	6.3 a	98.3 a	99 a	97.8 a	99 a
20	GOAL TENDER	8 OZ/A		POSTRA	10 a	1.3 bc	100 a	100 a	100 a	99.5 a
	COMMAND	1 PT/A		PRETRA						
LSD (P=.05)					6.17	4.92	12.40	10.05	13.55	3.48
Means followed by same letter do not significantly differ (P=.05, LSD)										

Note: Research results only. Some treatments in this trial are not currently registered on the crop

Cabbage Herbicide Evaluation - Arlington, WI - 2012

Trt No.	Treatment Name	Rate	Unit	Grow Stg	% Injury 7/9/12	% Weed Control 7/9/12				8/21/12
						COLQ	RRPW	VELE	YEFT	Yld (tons/A)
1	HANDWEEDED CHECK				0 a	100 a	100 a	100 a	100 a	20.183 a
2	UNWEEDED CHECK				0 a	0 h	0 h	0 g	0 d	0.871 k
3	CHATEAU	2 OZ/A		PRETRA	0 a	91.3 a-d	90 a-e	89.5 abc	90.8 b	8.615 c-f
4	CHATEAU	1 OZ/A		POSTRA	0 a	90 a-e	91.3 a-e	77.5 a-d	81.3 c	10.237 cd
5	SPARTAN	6 OZ/A		PRETRA	0 a	88.8 a-e	90.8 a-e	88.8 abc	90.8 b	11.846 bc
	COMMAND	1 PT/A		PRETRA						
6	GOAL XL	1.5 PT/A		PRETRA	0 a	92 abc	83.8 a-e	91.3 ab	94 ab	7.054 d-g
	COMMAND	1 PT/A		PRETRA						
7	GOAL TENDER	0.75 PT/A		PRETRA	0 a	97 a	97.5 ab	35 ef	98.25 ab	14.665 b
	DUAL MAGNUM	1 PT/A		POSTRA						
8	DEFINE	1 PT/A		POSTRA	0 a	79.5 cde	65 f	15 fg	94.5 ab	3.473 g-k
9	DEFINE	1 PT/A		POSTRA	0 a	82.5 b-e	83.8 a-e	90 abc	96.5 ab	5.929 e-i
	GOAL TENDER	8 OZ/A		POSTRA						
10	QUINSTAR	0.125 LB A/A		POSTRA	0 a	30 g	28.8 g	20 fg	97.5 ab	1.307 jk
11	QUINSTAR	0.25 LB A/A		POSTRA	0 a	63.8 f	27.5 g	62.5 cde	97.5 ab	2.698 ijk
12	PROWL H2O	1 LB A/A		PRETRA	0 a	81.3 cde	76.3 ef	77.5 a-d	98.3 ab	4.925 f-j
13	PROWL H2O	1 LB A/A		POSTRA	0 a	89.5 a-e	63.8 f	72.5 a-d	95.8 ab	3.158 h-k
14	PROWL H2O	2 LB A/A		POSTRA	0 a	94 ab	80 c-f	75 a-d	97.5 ab	5.687 e-i
15	GOAL TENDER	4 OZ/A		POSTRA	0 a	57.5 f	77.5 ef	55 de	73.8 c	2.844 ijk
16	GOAL TENDER	4 OZ/A		POSTRA	0 a	89.5 a-e	88.8 a-e	96.3 a	93.8 ab	6.413 d-i
	COMMAND	1 PT/A		PRETRA						
17	GOAL TENDER	6 OZ/A		POSTRA	0 a	77.5 e	78.8 def	65 bcd	93.3 ab	4.489 g-k
18	GOAL TENDER	6 OZ/A		POSTRA	0 a	91.3 a-d	94.5 a-d	97.5 a	97.3 ab	9.051 cde
	COMMAND	1 PT/A		PRETRA						
19	GOAL TENDER	8 OZ/A		POSTRA	0 a	78.8 de	82.5 b-e	62.5 cde	90 b	3.751 g-k
20	GOAL TENDER	8 OZ/A		POSTRA	0 a	89.5 a-e	95.8 abc	95 a	96.5 ab	6.994 d-h
	COMMAND	1 PT/A		PRETRA						
LSD (P=.05)					0.00	12.68	16.29	28.00	8.44	3.8699

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

Note: Research results only. Some treatments in this trial are not currently registered on the crop