

PUMPKIN HERBICIDE EVALUATION - ARLINGTON - 2012
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Location: Arlington Ag Research Station - Horticulture Farm Field 617

Plot Information:

Soil Type: Plano Silt Loam; pH 6.8; OM 3.6%.
 Variety: 'HOWDEN' / 'DICKENSON'
 Date Planted: 6/4/12
 Row Spacing: 90 Inches, 2 rows/plot (1 row of each pumpkin variety)
 Plant Spacing: 12 inches
 Date Harvested: 9/28/12
 Plot Size-Design: 24' x 20', 3 Reps
 Rating Dates:

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

Incorporation Equipment: N/A

Herbicide Application Data:

Date	6/4/12		
Time	8:00 pm		
Treatment	PRE		
Soil Moisture			
	SF	dry	
	1"	dry	
	3"	moist	
Soil Temp (F°)			
	SF	74.1	
	3"	71.2	
Air Temp (F°)		73.5	
Wind		1-2.3 N	
%RH		54.0%	
Sky Condition		0% clouds	
Crop Stage		PRE	
Weed & Size		PRE	

Summary: Extreme drought in 2012 resulted in poor emergence, lack of pre-emergence herbicide activation and ultimately very poor weed control. Pumpkin stands were highly variable due to reduced germination and less than adequate irrigation capacity. Injury ratings are based solely on foliar injury. Although some treatments performed better, none provide an acceptable level of weed control in 2012.

Fertilization and other pesticides: Fall 2011 - dairy replacement pack manure, 160 lb N/A.

Irrigation: 7 none

<u>Weed Abbreviations:</u>	<u>Plot Weed Density:</u>	<u>Weed Abbreviations:</u>	<u>Plot Weed Density:</u>
COLQ = Common Lambsquarters	high	VELE = Velvetleaf	Moderate
RRPW = Redroot Pigweed	High	YEFT = Yellow Foxtail	Moderate
		LACG - Large Crabgrass	Moderate

Pumpkin Herbicide Efficacy - Arlington, WI - 2012

Trt No.	Treatment Name	Rate	Unit	Grow Stg	7/2/12			
					Howden	Dickenson	Howden	Dickenson
					Stand Count (plants/plot)		% Injury	
1	Untreated Check				12.7 a	14.7 a	0 a	0 c
2	Strategy	4	PT/A	PRE	13.3 a	14 ab	8.3 a	3.3 bc
3	Prowl H2O	2	PT/A	PRE	9.7 a	13.3 abc	26.7 a	41.7 a
	Sandea	0.75	OZ/A	PRE				
4	Reflex	0.75	PT/A	PRE	12.3 a	13.3 abc	5 a	5 bc
	Command	1.33	PT/A	PRE				
5	Sharpen	2	OZ/A	PRE	12 a	12 a-d	6.7 a	3.3 bc
6	Firstrate	0.6	OZ/A	PRE	9.7 a	7.7 d	41.7 a	40 a
7	NAI 1333	2.5	OZ/A	PRE	10.7 a	14 ab	5 a	5 bc
8	V-10142	0.4	LB A/A	PRE	12.7 a	11.7 a-d	6.7 a	6.7 bc
9	Callisto	3	OZ/A	PRE	9 a	9 cd	13.3 a	63.3 a
10	Matrix	1.5	OZ/A	PRE	8.3 a	10 bcd	31.7 a	33.3 ab

LSD (P=.05)

4.42

4.47

29.50

32.38

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

Trt No.	Treatment Name	Rate	Unit	Grow Stg	% Weed Control 7/2/12				
					COLQ	RRPW	VELE	YEFT	LACG
1	Untreated Check				0 b	0 c	0 d	0 c	0 c
2	Strategy	4	PT/A	PRE	86.7 a	86.7 ab	98.3 a	96 a	100 a
3	Prowl H2O	2	PT/A	PRE	86.7 a	89.3 ab	96.7 a	90 a	92.7 a
	Sandea	0.75	OZ/A	PRE					
4	Reflex	0.75	PT/A	PRE	81.7 a	71.7 ab	98.3 a	96 a	95 a
	Command	1.33	PT/A	PRE					
5	Sharpen	2	OZ/A	PRE	88.3 a	61.7 ab	90 ab	88.3 a	91 a
6	Firstrate	0.6	OZ/A	PRE	87.7 a	70 ab	88.3 ab	76.7 a	92.7 a
7	NAI 1333	2.5	OZ/A	PRE	81.7 a	45 bc	71.7 c	46.7 b	68.3 b
8	V-10142	0.4	LB A/A	PRE	78.3 a	81.7 ab	100 a	92.7 a	95 a
9	Callisto	3	OZ/A	PRE	95.3 a	90 ab	100 a	94.3 a	94.3 a
10	Matrix	1.5	OZ/A	PRE	91.7 a	95 a	78.3 bc	98.7 a	100 a

LSD (P=.05)

17.97

45.51

15.01

27.07

15.24

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

Pumpkin Herbicide Efficacy - Arlington, WI - 2012

Trt No.	Treatment Name	Rate Unit	Grow Stg	7/16/12		% Weed Control 7/16/12				
				Howden	Dickenson	COLQ	RRPW	VELE	YEFT	LACG
				% Injury						
1	Untreated Check			0 a	0 b	0 b	0 a	0 d	0 c	0 d
2	Strategy	4 PT/A	PRE	2.3 a	1.7 b	60 a	46.7 a	83.3 ab	80 a	95 a
3	Prowl H2O	2 PT/A	PRE	11 a	16.7 ab	63.3 a	41.7 a	90 ab	76.7 a	86.7 ab
	Sandea	0.75 OZ/A	PRE							
4	Reflex	0.75 PT/A	PRE	1.7 a	0 b	45 a	26.7 a	83.3 ab	76.7 a	78.3 ab
	Command	1.33 PT/A	PRE							
5	Sharpen	2 OZ/A	PRE	1.7 a	0 b	53.3 a	30 a	78.3 b	85 a	70 bc
6	Firstrate	0.6 OZ/A	PRE	19 a	18.3 ab	61.7 a	50 a	88.3 ab	55 ab	78.3 ab
7	NAI 1333	2.5 OZ/A	PRE	0 a	1.7 b	53.3 a	26.7 a	60 c	36.7 b	56.7 c
8	V-10142	0.4 LB A/A	PRE	0 a	1.7 b	63.3 a	50 a	86.7 ab	80 a	85 ab
9	Callisto	3 OZ/A	PRE	1.7 a	30 a	70 a	53.3 a	91.7 a	83.3 a	80 ab
10	Matrix	1.5 OZ/A	PRE	10 a	11.7 ab	66.7 a	56.7 a	80 ab	78.3 a	86.7 ab
LSD (P=.05)				17.02	19.49	25.41	33.68	12.97	32.19	18.97

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

Trt No.	Treatment Name	Rate Unit	Grow Stg	9/28/12			
				Howden	Howden	Dickenson	Dickenson
				#fruit/plot	lbs fruit/plot	#fruit/plot	lbs fruit/plot
1	Untreated Check			4 a	74.62 a	7 a	115.14 a
2	Strategy	4 PT/A	PRE	8 a	102.77 a	15.3 a	270.22 a
3	Prowl H2O	2 PT/A	PRE	6.3 a	113.47 a	9.3 a	160.53 a
	Sandea	0.75 OZ/A	PRE				
4	Reflex	0.75 PT/A	PRE	7.3 a	105.77 a	9.7 a	140.68 a
	Command	1.33 PT/A	PRE				
5	Sharpen	2 OZ/A	PRE	4.7 a	73.65 a	15 a	212.81 a
6	Firstrate	0.6 OZ/A	PRE	3.3 a	53.27 a	6 a	86.91 a
7	NAI 1333	2.5 OZ/A	PRE	5.7 a	68.98 a	11.3 a	186.93 a
8	V-10142	0.4 LB A/A	PRE	5 a	77.74 a	14.3 a	298.19 a
9	Callisto	3 OZ/A	PRE	2.7 a	53.95 a	1.7 a	26.26 a
10	Matrix	1.5 OZ/A	PRE	5.7 a	84.61 a	10.7 a	190.97 a
LSD (P=.05)				7.30	114.605	11.57	216.784

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