

# Low Acreage & Special Crops Sub-Committee

**November 21, 2007**

**J. O'Sullivan, R. Grohs and R. Riddle  
Dept. of Plant Agriculture  
University of Guelph Simcoe**

# Table of Contents

	<u>PAGE</u>
<b><u>PEPPERS</u></b>	
Hot Banana Pepper Cultivar Trial _____	1, 2
Sweet Banana Pepper Cultivar Trial _____	3, 4
Hot Cherry and Jalapeno Banana Pepper Cultivar Trial _____	5, 6
Herbicide Evaluations for Peppers	
Bell Peppers _____	7
Banana Peppers _____	8
<b><u>CUCUMBERS</u></b>	
Multipick Trial _____	9
Herbicide Evaluations for Cucumbers _____	10
<b><u>SQUASH and PUMPKINS</u></b>	
Herbicide Evaluations for Squash _____	11
Herbicide Evaluations for Pumpkins _____	12
<b><u>BEETS</u></b>	
Beet Cultivar Observation Trial _____	13
Herbicide Evaluations for Beets _____	14

## Hot Banana Pepper Cultivar Trial, Simcoe, 2007

Cultivar	Source	Marketable Yield (T/Ac)*						Total
		> 12.5 cm			< 12.5 cm			
		Red	Breaker	Yellow	Red	Breaker	Yellow	
Giant Hungarian Hot	Stokes	2.9	1.0	0.7	0.9	0.6	0.9	6.9
Stoked	Abott & Cobb	2.3	0.9	0.7	0.3	0.6	1.7	6.6
Inferno	Serninis	2.6	1.2	1.6	0.0	0.4	0.6	6.5
Hot Horn	Stokes	1.9	2.8	0.8	0.1	0.3	0.3	6.2
Px 1141-2119	Seminis	2.0	1.0	2.0	0.0	0.2	0.8	6.0
Super Hungarian Hot	Stokes	2.1	1.6	0.6	0.1	0.3	0.4	5.1
3277	Seedway	1.9	0.5	1.5	0.1	0.2	0.5	4.7
Hot Spot	Seminis	1.2	0.4	1.3	0.1	0.2	1.2	4.3
Budapet	Seedway	1.0	1.0	1.0	0.0	0.1	1.2	4.3
SVR 1144-7407	Seminis	0.7	0.9	1.1	0.3	0.5	0.7	4.2
SVR 1144-7328	Seminis	1.3	1.1	1.3	0.0	0.0	0.2	4.0
Soil Type	: Loam	Fertilizer		: 325 Kg/Ha of 34-0-0				
pH	: 7.3	Herbicides		: Treflan @ 1.5 L/ha				
Seeded	: April 24	Harvested		: September 11				
Transplanted	: June 5							
Plant Population	: 8,990/Ac							

\*Yields are for comparative purposes only. Small plot yields may not accurately reflect commercial yields.

## Hot Banana Pepper Cultivar Trial, Simcoe, 2007 (Continued)

Cultivar	Source	Marketable		Yield (T/Ac)*		
		Fruit # Plant	Fruit Wt. (g)	Immature	Crooked	Culls
Grant Hungarian Hot	Stokes	12	57.2	0.5	1.7	0.7
Sloked	Abott & Cobb	18	36.5	0.3	0.8	0.3
Inferno	Seminis	11	56.5	0.7	0.9	0.6
Hot Horn	Stokes	8	81.1	0.1	1.7	0.9
Px 1141-2119	Seminis	14	41.0	1.0	1.3	0.2
Super Hungarian Hot	Stokes	9	59.2	0.4	1.2	0.3
3277	Seedway	12	40.6	0.5	2.2	0.6
Hot Spot	Seminis	12	35.9	0.8	0.3	0.5
Budapet	Seedway	7	65.6	0.8	0.8	1.7
SVR 1144-7407	Seminis	11	37.3	0.6	0.7	1.0
SVR 1144-7328	Seminis	8	48.4	0.0	1.0	0.7

Soil Type	: Loam	Fertilizer	: 325 Kg/Ha 34-0-0
pt i	: 7.3	Herbicides	: Treflan @ 1.5 L/Ha
Seeded	: April 24	Harvested	: September 11
Transplanted	: June 5		
Plant Population	: 8,990/Ac		

\*Yields are for comparative purposes only. Small plot yields may not accurately reflect commercial yields

## Sweet Banana Pepper Cultivar Trial, Simcoe, 2007

Cultivar	Source	Marketable Yield (T/Ac)*							Total
		> 12.5 cm			< 12.5 cm				
		Red	Breaker	Yellow	Red	Breaker	Yellow		
Etherm	Seminis	3.0	1.5	2.4	0.1	0.1	0.8	7.8	
Ihlara	Seminis	2.0	1.5	2.9	0.1	0.0	0.5	7.1	
Pageant	Seedway	0.7	1.5	1.9	0.0	0.4	2.6	7.0	
Sweet Banana Superette	Stokes	3.0	2.1	1.0	0.3	0.2	0.4	6.9	
Bounty	Seminis	2.4	1.2	2.5	0.0	0.0	0.3	6.5	
Seet Savannah	Stokes	2.2	1.5	1.0	0.0	0.1	0.3	5.1	
Sweet Spot	Seminis	0.9	0.5	2.4	0.0	0.0	0.3	4.1	
Soil Type	: Loam	Fertilizer		: 325 Kg/Ha of 34-0-0					
pH	: 7.3	Herbicides		: Treflan @ 1.5L/ha					
Seeded	: April 24	Harvested		: September 11					
Transplanted	: June 5								
Plant Population	: 8,990/Ac								

\*Yields are for coniparative purposes only. Small plot yields may not accurately reflect commercial yields.

## Sweet Banana Pepper Cultivar Trial, Simcoe, 2007 (Continued)

Cultivar	Source	Marketable		Yield (T/Ac)*		
		Fruit # ■ Plant	Fruit Wt. (g)	Immature	Crooked	Culls
Ethern	Seminis	14	55.9	0.6	0.9	0.3
Ihlara	Seminis	13	52.2	1.0	0.7	0.5
Pageant	Seedway	13	56.0	1.1	1.8	0.5
Sweet Banana Superette	Stokes	12	57.5	0.4	1.4	0.7
Bounty	Seminis	9	78.7	0.4	0.6	0.9
Seet Savannah	Stokes	9	57.8	0.2	2.1	0.3
Sweet Spot	Seminis	8	52.7	0.9	1.4	2.0
Soil Type	Loam			Fertilizer	: 325 Kg/Ha of 34-0-0	
pH	: 7.3			Herbicides	: Treflan @ 1.5L/ha	
Seeded	: April 24			Harvested	: September ■■	
Transplanted	: June 5					
Plant Population	: 8,990/Ac					

\*Yields are for comparative purposes only. Small plot yields may not accurately reflect commercial yields

## Hot Cherry and Jalapeno Pepper Cultivar Trial, Simcoe, 2007

Cultivar	Source	Marketable Yield (T/Ac)*			
		< 12.5 cm			Total
		Red	Breaker	Green	
SVR 1144-7353	Seminis	0.2	0.6	7.3	8.1
Telica	Abott & Cobb	0.7	0.2	6.0	7.0
Ballpark	Seminis	0.3	0.6	5.4	6.2
Maylon	Abott & Cobb	1.2	0.6	3.9	5.7
Cherry Bomb	Seminis	4.1	0.6	1.1	5.7

Soil Type	: Loam	Fertilizer	: 325 Kg/Ha of 34-0-0
pH	: 7.3	Herbicides	: Treflan @ 1.5 L/ha
Seeded	: April 24	Harvested	: September 11
Transplanted	: June 5		
Plant Population	: 8,990/Ac		

\*Yields are for comparative purposes only. Small plot yields may not accurately reflect commercial yields.

## Hot Cherry and Jalapeno Pepper Cultivar Trial, Simcoe, 2007 (Continued)

Cultivar	Source	Marketable		Yield (T/Ac)*		
		Fruit # Plant	Fruit Wt. (g)	Immature	Crooked	Culls
SVR 1144-7353	Seminis	41	19.8	0.5	0.1	0.1
Telica	Abott & Cobb	27	26.4	0.8	0.0	0.1
Ballpark	Seminis	29	20.9	0.7	0.2	0.2
Maylon	Abott & Cobb	24	25.2	0.4	0.0	0.1
Cherry Bomb	Seminis	33	18.0	0.3	0.0	0.0
Soil Type	Loam			Fertilizer	325 Kg/Ha of 34-0-0	
pH	7.3			Herbicides	Treflan @ 1.5L/ha	
Seeded	April 24			Harvested	September 11	
Transplanted	June 5					
Plant Population	8,990/Ac					

\*Yields are for comparative purposes only. Small plot yields may not accurately reflect commercial yields.



## Herbicide Evaluations for Bell Peppers

Product	Rate L/Acre or Kg	Application Timing	Injury %	% Control		Yield T/acre
				BLW	Grass	
Command	0.94	PRE	0	48	75	0.3
Dual II Magnum	0.504	PRE	0	9	74	1.4
Outlook	0.56	PRE	0	37	82	3.3
Outlook	1.12	PRE	0	67	96	8.5
Command	0.94	PRE	0	75	96	7.4
Dual II Magnum	0.504	PRE	0			
Command	0.94	PRE	0	78	94	7.9
Outlook	0.56	PRE				
Spartan	0.21	PREPLANT	0	74	0	2.3
Dual II Magnum	0.504	PREPLANT	0	79	61	6.1
Spartan	0.21	PREPLANT				
Outlook	0.56	PREPLANT	0	83	60	6.9
Spartan	0.21	PREPLANT				
Spartan	0.21	PREPLANT	0	70	80	6.0
Post Ultra	0.45	POST				
Merge	0.405	POST				
Valor	0.042	PREPLANT	0	59	20	2.4
Dual II Magnum	0.504	PREPLANT	0	70	77	6.5
Valor	0.042	PREPLANT				
Valor	0.042	PREPLANT	0	47	87	2.5
Post Ultra	0.45	POST				
Merge	0.405	POST				
Outlook	0.56	PREPLANT	0	75	72	8.0
Valor	0.042	PREPLANT				
Sandea	0.014	POST	25	30	0	0.4
NIS	0.5% v/v	POST				
Dual II Magnum	0.504	PRE	16	53	92	3.2
Sandea	0.014	POST				
NIS	0.5% v/v	POST				
V-10142	0.027	POST	0	13	0	0.9
COC	1% v/v	POST				
V-10142	0.054	POST	0	7	9	1.7
COC	1% v/v	POST				
V-10142	0.108	POST	3	17	0	0.9
COC	1% v/v	POST				
Untreated (non weeded)			0	0	0	0.9
Weeded Control			0	100	100	9.3

All peppers (Bell and Banana types) were very tolerant to high-rate applications of Command (clomazone) (0.94 L/A). There was no crop injury at this application rate. Peppers were also tolerant to preemergence applications of Dual Magnum (s-metolachlor) and Outlook (dimethenamid). A number of treatments gave excellent broad spectrum weed control with no injury and no yield reduction in bell and banana peppers. These include Dual Magnum or Outlook in combination with Command. Combination of Command plus Dual Magnum or Command plus Outlook gave excellent broad spectrum weed control with no crop injury or yield reduction. Outlook gave better results than Dual Magnum. Sandea (halosulfuron-methyl) [post] caused injury and gave poor weed control and reduced yields. V-10142 resulted in no injury but very poor weed control. Spartan (sulfentrazone) or Valor (flumioxazin) (preplant) at low rates caused no injury and gave excellent broadleaf weed control but poor grass control. The addition of a grass herbicide increased yields and improved broadleaf and grass weed control. Spartan and Valor (preplant) at low rates, combined with a grass herbicide look most promising for improved pepper weed control.

## Herbicide Evaluations for Sweet Banana Peppers

Product	Rate L/Acre or Kg	Application Timing	Injury %	% Control		Yield T/acre
				BLW	Grass	
Command	0.94	PRE	0	48	75	3.1
Dual II Magnum	0.504	PRE	0	9	74	2.0
Outlook	0.56	PRE	0	37	82	7.1
Outlook	1.12	PRE	0	67	96	9.4
Command	0.94	PRE	0	75	96	9.6
Dual II Magnum	0.504	PRE				
Command	0.94	PRE	0	78	94	10.7
Outlook	0.56	PRE				
Spartan	0.21	PREPLANT	5	74	0	3.2
Dual II Magnum	0.504	PREPLANT	0	79	61	8.3
Spartan	0.21	PREPLANT				
Outlook	0.56	PREPLANT	0	83	60	7.6
Spartan	0.21	PREPLANT				
Spartan	0.21	PREPLANT	0	70	80	10.9
Poast Ultra	0.45	POST				
Merge	0.405	POST				
Valor	0.042	PREPLANT	0	59	20	2.5
Dual II Magnum	0.504	PREPLANT	0	70	77	6.0
Valor	0.042	PREPLANT				
Valor	0.042	PREPLANT	0	47	87	4.5
Poast Ultra	0.45	POST				
Merge	0.405	POST				
Outlook	0.56	PREPLANT	0	75	72	9.5
Valor	0.042	?REPLANT				
Sandea	0.014	POST	25	30	0	0.7
NIS	0.5 % w/v	POST				
Dual II Magnum	0.504	PRE	16	53	92	5.1
Sandea	0.014	POST				
NIS	0.5% w/v	POST				
V-10142	0.027	POST	0	13	0	1.5
COC	1% w/v	POST				
V-10142	0.054	POST	0	7	9	2.0
COC	1% w/v	POST				
V-10142	0.108	POST	3	17	0	2.2
COC	1% w/v	POST				
Untreated (non weeded)			0	0	0	0.7
Weeded Control			0	130	100	9.6

Ail peppers (Bell and Banana types) were very tolerant to high-rate applications of Command (clomazone) (0.94 L/A). There was no crop injury at this application rate. Peppers were also tolerant to preemergence applications of Dual Magnum (s-metolachlor) and Outlook (dimethenamid). A number of treatments gave excellent broad spectrum weed control with no injury and no yield reduction in bell and banana peppers. These include Dual Magnum or Outlook in combination with Command. Combination of Command plus Dual Magnum or Command plus Outlook gave excellent broad spectrum weed control with no crop injury or yield reduction. Outlook gave better results than Dual Magnum. Sandea (halosulfuron-methyl) (post) caused injury and gave poor weed control and reduced yields. V-10142 resulted in no injury but very poor weed control. Spartan (sulfentrazone) or Valor (flumioxazin) (preplant) at low rates caused no injury and gave excellent broadleaf weed control but poor grass control. The addition of a grass herbicide increased yields and improved broadleaf and grass weed control. Spartan and Valor (preplant) at low rates combined with a grass herbicide look most promising for improved pepper weed control.

## Yield of Cucumbers From Multipick Trial, Simcoe, 2007

Cultivar	Source	Yield	
		T Ac Total	\$/Ac Total
Sassy (9465)	Harris Moran	16.5	5,354
Feisty (9464)	Harris Moran	17.1	5,318
Moxie (8460)	Harris Moran	17.8	4,891
Vlasset T	Seminis	15.9	4,838
HMX 6415	Harris bloran	16.3	4,799
MacArthur C	Nunhems	15.5	4,454
Wainwright (NUN 5512)	Nunhems	15.6	4,389
Jackson C	Nunhems	15.2	4,316
HMX 5406	Harris bloran	15.6	4,275
Pershing (1864)	Nunhems	14.4	4,242
EX 04506143	Seminis	14.8	4,240
BCP-015	Harris Moran	14.8	4,199
Pony O	Seminis	14.5	4,142
Classy	Harris Moran	14.0	3,958
Eclipse	Harris Moran	14.1	3,912
Cates (5513)	Nunhems	13.7	3,837
Ballerina (2686)	Nunhems	13.0	3,829
Spunky (0469)	Harris Moran	12.9	3,700
PX 0496429	Seminis	13.8	3,639
Fancipak T	Seminis	12.7	3,617
Powerpack	Seminis	11.2	3,164
PX 04964769	Seminis	12.0	3,108
Soil Type	: Fine Sandy Loam	Plant population	: 18,000 plants/Ac
Soil pH	: 6.4	Fertilizer	: 500 kg/ha of 27 5-0-0
Planting Date	: hlay 30	Herbicide	: Roundup Transorb 0.6 L/Ac
Plot Size	: 5' x 30'		: Command 0.4 L/Ac
Rows	: 5'	Harvest Dates	: July 16 - Aug 27, 2007 (8 Total)
Plants	: 6"		

\* Yields are for comparative purposes only. Small plot yields may not accurately reflect commercial yields.

Note: Oversize are not included in yield data.

## Herbicide Evaluations for Cucumbers

Product	Rate L/Acre or Kg	Application Timing	Injury %	% Control BLW	Yield T/acre
Command	0.47	PRE	0	53	12.0
Sandea	0.0142	PRE	0	47	8.2
Sandea	0.0284	PRE	0	0	6.2
Command	0.47	PRE	0	64	8.1
Sandea	0.0142	PRE			
Command	0.47	PRE	0	73	10.9
Sandea	0.0284	PRE			
Sandea	0.0142	POST	5	46	3.6
NIS	0.5% v/v	POST			
Sandea	0.0284	POST	10	50	3.7
NIS	0.5% v/v	POST			
Command	0.47	PRE	5	61	11.3
Sandea	0.0142	POST			
NIS	0.5% vlv	POST			
Command	0.47	PRE	10	58	7.9
Sandea	0.0284	POST			
NIS	0.5% vlv	POST			
Alanap	6.1	PRE	0	28	5.4
Command	0.47	PRE	0	52	12.2
Alanap	6.1	PRE			
Alanap	1.52	POST	4	40	6.0
Command	0.47	PRE	6	20	5.1
Alanap	1.52	POST			
Untreated (non weeded)			0	0	3.9
Weeded Control			0	100	11.0

Sandea postemergence caused slight injury while preemergence of Sandea applications did not. Command (clomazone) caused no injury and had good control of all weeds except pigweed and some grasses. The addition of Sandea or Alanap (preemergence) improved pigweed control and produced yields comparable to the weeded check. Sandea post also improved weed control when combined with Command and gave excellent broadleaf weed control and high yields. Alanap alone (preemergence) gave poor weed control while Alanap postemergence gave better weed control, controlled pigweed and yields were comparable to Sandea applied alone. Sandea or Alanap preemergence rather than postemergence, combined with Command were the best treatments in this trial. These combinations improved weed control, including pigweed control, and produced yields comparable to the weeded check.

## Herbicide Evaluations for Squash

Product	Rate L/Acre or Kg	Application Timing	Injury %	% Control		Yield T/acre
				BLW	Grass	
Dual II Magnum	0.71	PRE	0	30	76	6.7
Command	0.53	PRE	0	38	34	6.3
Dual II Magnum	0.71	PRE	0	75	76	11.6
Command	3.53	PRE				
Sandea	0.0142	PRE	0	13	0	4.3
Sandea	0.0284	PRE	0	47	0	5.9
Command	0.63	PRE	0	65	58	11.7
Sandea	0.3142	PRE				
Command	0.63	PRE	0	46	72	7.0
Sandea	0.0284	PRE				
Dual II Magnum	0.71	PRE	0	59	60	11.4
Sandea	0.0142	PRE				
Dual II Magnum	0.71	PRE	0	77	72	12.0
Sandea	0.0284	PRE				
Sandea	0.0142	POST	35	59	0	2.1
NIS	0.5% v/v	POST				
Sandea	0.0284	POST	45	68	0	1.1
NIS	0.5% v/v	POST				
Command	0.63	PRE	33	30	47	8.9
Sandea	0.0142	POST				
NIS	0.5% v/v	POST				
Command	0.63	PRE	31	44	47	8.9
Sandea	0.0254	POST				
NIS	0.5% v/v	POST				
V-10142	0.354	POST	30	44	14	2.1
COC	1% v/v	POST				
Untreated (non weeded)			0	0	0	2.1
Weeded Control			0	100	100	12.8

Sandea (halosulfuron-methyl) postemergence caused severe Injury while V-10142 also caused Injury. Squash was tolerant to applications of Command (clomazone). Squash was also tolerant to preemergence applications of Sandea. There was also no Injury to squash from Dual Magnum (s-metolachlor). Several treatment combinations with Command gave yields comparable to the weeded check. Combinations of Command plus Dual Magnum, Command plus Sandea preemergence and Dual Magnum plus Sandea preemergence gave the best broad spectrum weed control and highest yields. Command has been submitted for a minor use registration for pumpkin, squash, cucumber, and pepper. Only Sandea postemergence, alone or in combination, gave any significant Injury and this did reduce yields.

## Herbicide Evaluations for Pumpkins

Product	Rate L/Acre or Kg	Application Timing	Injury %	% Control		Yield T/acre
				BLW	Grass	
Dual II Magnum	0.71	PRE	0	45	63	19.1
Command	0.63	PRE	0	26	42	19.1
Dual II Magnum	0.71	PRE	0	75	67	24.1
Command	0.63	PRE				
Sandea	0.0142	PRE	0	39	25	20.1
Sandea	0.0284	PRE	0	51	20	25.1
Command	0.63	PRE	0	61	56	24.9
Sandea	0.0142	PRE				
Command	0.63	PRE	0	55	49	27.0
Sandea	0.0284	PRE				
Dual II Magnum	0.71	PRE	0	52	68	22.7
Sandea	0.0142	PRE				
Dual II Magnum	0.71	PRE	0	65	48	23.7
Sandea	0.0284	PRE				
Sandea	0.0142	POST	40	53	0	18.6
NIS	0.5% v/v	POST				
Sandea	0.0284	POST	50	80	0	14.5
NIS	0.5% v/v	POST				
Command	0.63	PRE	29	64	7	23.0
Sandea	0.0142	POST				
NIS	0.5% v/v	POST				
Command	0.63	PRE	48	71	25	13.8
Sandea	0.0284	POST				
NIS	0.5% v/v	POST				
V-10142	0.054	POST	26	46	0	15.3
COC	1% v/v	POST				
Untreated (non weeded)			0	0	0	17.6
Weeded Control			0	100	100	23.8

Sandea (halosulfuron-methyl) postemergence caused severe injury while V-10142 also caused injury. Pumpkins were tolerant to applications of Command (clomazone) and to preemergence applications of Sandea and Dual Magnum (s-metolachlor). Several treatment combinations with Command gave yields comparable to the weeded check. Combinations of Command plus Dual Magnum, Command plus Sandea preemergence and Dual Magnum plus Sandea preemergence gave the best broad spectrum weed control and highest yields. Command has been submitted for a minor use registration for pumpkin, squash, cucumber, and pepper. Sandea postemergence alone or in combination gave significant injury and this resulted in reduced yields.

## Beet Cultivar Observation Trial, Simcoe, 2007 Harvest # 1

Cultivar	Source	Yield (T/Ac)							Total*	Defect/ Decay**
		Grades (cm)								
		Under < 2.5	1 2.5-4.1	2 4.1-6.3	3 6.3-7.6	3 7.6-9.5	OS 9.5 >			
Taurus	Bejo	0.1	2.1	12.8	2.0	0.0	0.0	16.9	0.0	
Ruby Queen	Harris Moran	0.0	0.3	2.2	3.2	10.0	0.6	16.3	0.0	
Kestrel	Chriseed	0.1	1.1	2.4	3.3	4.8	2.1	13.7	0.0	
Larka	RZ	0.0	0.4	2.7	2.8	6.1	1.4	13.4	0.9	
Detroit Supreme	Stokes	0.3	0.3	3.3	2.6	6.8	0.0	13.3	0.0	
Merlin	Chriseed	0.0	0.4	2.6	4.7	5.7	0.0	13.3	0.1	
Libero	RZ	0.1	0.4	3.7	3.6	4.0	0.7	12.5	0.0	
Zeppo	RZ	0.1	0.5	2.1	4.1	5.1	0.4	12.3	0.8	
Nero	Seminis	0.0	0.9	4.1	2.3	4.7	0.0	12.0	0.3	
Carillon	RZ	0.1	1	5.7	3.1	1.2	0.6	11.7	0.0	
Red Cloud	Bejo	0.1	0.2	3.3	3.7	4.4	0.0	11.6	0.0	
Chariot	Seminis	0.0	0.4	3.1	3.3	4.7	0.0	11.6	0.4	
Akela	RZ	0.0	0.1	2.8	4.0	4.2	0.0	11.1	0.0	
Lorna	RZ	0.2	2.3	6.7	0.4	0.0	0.0	9.7	0.0	
Mona lisa	RZ	0.1	1.3	3.9	2.3	0.4	0.0	8.1	0.0	
Babybeat	RZ	0.1	0.4	3.8	2.7	0.3	0.0	7.2	0.0	
Soil Type	Silt Loam			Fertilizer	325 Kg/Ha of 34-0-0					
Soil pH	: 6.8			Herbicide	Pyramin 3.5L/Ac					
Seeding Date	: June 13			Harvested	: October 10					
Rows	: 0.45 m									
In-row Spacing	: 5 cm									
Plant Population	: 161,900/Ac									

\*Yields are for comparative purposes only Small plot yields may not accurately reflect commercial yields.

\*\*A percentage of beets in the Defect/Decay category can be used for processing.

## Herbicide Evaluations for Red Beets

Product	Rate L/Acre or Kg	Application Timing	Injury %	PW	% Control'			Yield T/acre
					LQ	EBNS	PURS	
Nortron	0.65	PRE	0	54	61	14	61	12.9
Nortron	1.3	PRE	0	75	75	84	81	10.2
Dual II Magnum	0.252	PRE	0	86	80	75	28	10.3
Dual II Magnum	0.504	PRE	0	93	89	100	76	13.5
Lonrel	0.225	POST	0	13	13	13	13	5.0
Outlook	0.56	PRE	20	98	99	99	93	16.5
Betamix	1.43	POST	38	91	99	99	90	8.4
Valor	0.021	PRE	76	33	55	93	71	4.8
Grasp	0.03	POST	90	64	18	24	50	0.8
COC	0.232	POST						
Sandea	0.014	POST	75	88	85	96	0	2.4
NIS	0.5% v/v	POST						
Milestone	0.143	POST	40	96	99	95	98	2.9
Impact	0.015	POST	94	58	51	24	20	1.7
NIS	1% v/v	POST						
Untreated (non weeded)			0	0	0	0	0	1.8
\Needed Control			0	100	100	100	100	13.8

\*PW = pigweed; LQ = lambsquarters EBNS = eastern black nightshade PURS = purslane

Nortron and Dual Magnum gave excellent weed control in beets with no crop injury and yields comparable to the weeded control. Outlook gave excellent broadleaf weed control. There was some early season injury but this did not reduce yields. Dual Magnum and Outlook gave the best broadleaf weed control and look most promising for improved weed control in beets.