

Tuesday, June 02, 2020

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Ministry of Agriculture, Food and Rural Affairs

VCR - Vegetable Crop Report - May 28, 2020

The VCR (vegetable crop report) is a weekly update which includes crop updates, weather and growing degree summaries for various vegetable growing regions across Ontario.



Temperature – High temperatures this past week have helped Growing Degree Day values catch up to around the 10-year average in most regions. Peterborough and Kemptville remain marginally behind. Temperatures are expected to cool over the next week across Ontario. Carrot Rust fly thresholds have been triggered in Chatham-Kent and Norfolk counties, while Essex County is past the first threshold range. Many regions have reached the first carrot weevil threshold with some having already surpassed the first generation values. Onion and seedcorn maggot thresholds have been triggered in all regions except Sudbury. Aster Leafhooper thresholds have been reached in Essex, Chatham-Kent and, Norfolk counties. Degree day data for each region is shown below.

Rainfall – All regions continue to lag behind 10-year average values. There is a chance of some rain across Ontario in the next week but Sudbury could see showers throughout. Precipitation data for each region is shown below.

Crop Updates

Asparagus – Harvest is underway, these are peak weeks for spear production. Scout for *Phytophthora* symptoms which may be confused with frost damage from last week, and be on the lookout for Asparagus Beetle and Cutworms.



Beans & Peas – Peas have reached the 2-3 node stage, some peas saw minor frost damage last week. Some peas have begun flowering in some areas.

Brassica Crops – Most transplants are bouncing back from the frost and are putting up new leaves. Flea beetles are active and being observed in high numbers in Southwestern Ontario. Seedcorn maggot has reached the threshold for first generation emergence.

Celery – Celery transplants are establishing well. The threshold for aster leafhopper has been reached in Essex county while nearly every county has had enough growing degree days for tarnished plant bug.



Celery transplants are establishing well - May 26, 2020

Cucurbits – cucumber beetle came out of dormancy in large numbers this week and has been found on squash and watermelon: prioritize scouting of summer squash and any propagated or planted pumpkin as these are highly attractive to these beetles.

Garlic – Leek moth is active in all growing regions that it has observed in moderate levels in the past. If counts are lower next week compared to this week, the bulk of the emerged larvae will be targeted if an insecticide is applied 7 - 10 days after peak trap capture. Garlic is showing tipburn across all regions of the province.

Onions – Earliest direct seeded onions are at the third leaf stage while the majority of fields are in the 1st leaf stage. Transplant fields are overcoming frost damage from the middle of May. Onion and seedcorn maggot flies have reached their threshold for the first generation emergence in all counties except for Sudbury.



Transplant onion with tip dieback from frost - May 26th, 2020

Sweet Corn – Early planted sweet corn saw some frost damage last week.

NOTE: Data as of May 27th, 2020 Pest Degree Day Forecasting

Pest	Carrot Rust Fly	Onion Maggot	Carrot Weevil	Aster Leafhopper	Tarnished Plant Bug	Cabbage Maggot	Seedcorn Maggot	European Corn Borer
THRESHOLD	329-395, 1399-1711	210-700, 1025-1515	138-156, 455+	128+	40+	314-398, 847-960, 1446-1604	200-350, 600-750, 1000-1150	See legend below
Essex*	438	371	216	150	81	260	371	125
Chatham-Kent*	384	323	194	138	69	229	323	115
Norfolk**	388	328	186	131	65	225	328	108
Huron***	307	263	165	117	56	192	263	95
Wellington**	296	246	144	101	50	172	246	82
Simcoe County***	294	247	149	106	57	177	247	88
Durham***	322	270	156	110	55	185	270	91
Peterborough	304	252	146	100	49	174	252	81
Kemptville***	312	263	152	107	56	179	263	89
Sudbury***	222	192	127	98	58	144	192	85

*- Bivoltine region for ECB. First Peak Catch: 300-350 DD, Second Peak Catch 1050-1100 DD

**- Overlap region for ECB. First Peak Catch : 300-350 DD Second Peak Catch 650-700 DD, Third Peak Catch 1050-1100 DD

***-Univoltine region for ECB. Peak Catch 650-700 DD

Use these thresholds as a guide, always confirm insect activity with actual field scouting and trap counts. Select a region below for the latest weather, crop and pest degree day information:

Essex County(<u>https://onvegetables.com/2020/05/28/2020vcr-5/#essex</u>) Chatham-Kent County(<u>https://onvegetables.com/2020/05/28/2020vcr-5/#chatham-kent</u>) Norfolk County(<u>https://onvegetables.com/2020/05/28/2020vcr-5/#huron</u>) Huron County(<u>https://onvegetables.com/2020/05/28/2020vcr-5/#wellington</u>) Wellington County(<u>https://onvegetables.com/2020/05/28/2020vcr-5/#wellington</u>) Simcoe County(<u>https://onvegetables.com/2020/05/28/2020vcr-5/#simcoe</u>) Durham County(<u>https://onvegetables.com/2020/05/28/2020vcr-5/#durham</u>) Peterborough(<u>https://onvegetables.com/2020/05/28/2020vcr-5/#durham</u>) Kemptville(<u>https://onvegetables.com/2020/05/28/2020vcr-5/#kemptville</u>) Sudbury(<u>https://onvegetables.com/2020/05/28/2020vcr-5/#sudbury</u>)

Essex County





Chatham-Kent County



Chatham-Kent Total Precipitation per Month



Norfolk County



Huron County





Norfolk Total Precipitation per Month



Huron County Total Precipitation per Month



Wellington County





April

May





Simcoe County Total Precipitation per Month

2020 10 year average

0

March



Durham County



Peterborough





Durham Total Precipitation per Month



Peterborough Total Precipitation per Month



Kemptville



Kemptville Total Precipitation per Month

Sudbury



Maintaining Pumpkin and Squash Pollinators through 2020

Pumpkin planting is scheduled to move forward as usual for much of Ontario. If you are considering reducing pumpkin acreage this year, please see the information below from squash bee expert Susan Chan: your squash bees are entirely reliant on your crop. Following her advice will help ensure healthy pollinator populations for future crops of pumpkins and squash on your farm.

Maintaining Important Pollinators on your Pumpkin & Squash Crops By: Susan Willis Chan

The hoary squash bee is the most abundant flower visitor to pumpkin and squash crops in Ontario and most pumpkin and squash crops in the province depend upon it for pollination. This important pollinator only gathers pollen from pumpkin and squash to raise its young and has no wild host plants. It mates on pumpkin or squash flowers, and it rests there too during the afternoon and evening. If you wish to maintain strong populations of hoary squash bees on your farm next year and the following years, please plant at least an acre of pumpkin or squash on your farm. This will provide the nectar, pollen, mating sites, and resting sites that are critical to the survival of this important wild pollinator on your farm. For more information please contact Susan Chan, <u>dchan05@uoguelph.ca</u>.

GLVPN today – Pumpkin planting secrets revealed!



GREAT LAKES VEGETABLE PRODUCER'S NETWORK

When: every Wednesday @ 12:30

By phone: (647) 374-4685 or https://www.glveg.net/listen

Fungicide Efficacy Summary Tables for Management of Diseases in Field Tomatoes

Dr. Cheryl Trueman, Ridgetown Campus – University of Guelph



About these tables:

- These tables were created using results from replicated processing tomato field trials at the Ridgetown Campus, University of Guelph. Please contact the author(ctrueman@uoguelph.ca) for more information on research methods and copies of full reports. The tables are for information only and do not guarantee successful results with the use of any product.
- Always check the most recent version of the product label before applying any product.

Late blight:

An Ontario-specific version of fungicide ratings for late blight(<u>http://www.omafra.gov.on.ca/IPM/english/tomatoes/diseases-and-disorders/late-blight.html</u>) by Janice LeBoeuf (formerly OMAFRA) was updated in 2017 and is posted here(<u>https://onvegetables.com/2017/07/26/late-blight-alert-july-28th-2017/</u>)

Anthracnose (fruit rot):

Fungicide trials for anthracnose(<u>http://www.omafra.gov.on.ca/IPM/english/tomatoes/diseases-and-disorders/</u> <u>anthracnose.html</u>) management are completed on a regular basis at the Ridgetown Campus, University of Guelph. Only data from trials with high disease pressure were considered in developing these ratings.

Trade Name*	Active Ingredient(s)	FRAC Group(s)	# of Trials	Rating**
Various	Mancozeb	M3	1	+++
Various	Chlorothalonil	М5	5	+++
Inspire	Difenoconazole	3	3	+
Bravo Top	Difenoconazole + chlorothalonil	3 + M5	3	+++
Lance / Cantus WDG	Boscalid	7	3	0
Aprovia	Benzovindiflupyr	7	2	+++
Sercadis	Fluxapyroxad	7	2	++
Fontelis	Penthiopyrad	7	3	+++
Reason	Fenamidone	11	1	0
Cabrio	Pyraclostrobin	11	3	+++
Quadris	Azoxystrobin	11	4	+++
Quadris Top	Azoxystrobin + difenoconazole	11 + 3	3	+++

* Not all products may be registered for this crop-disease combination. Always check product labels before use. **0 (no effect) no difference from control plots that receive no fungicide; + (poor) inconsistent control and/or some effect at reducing; ++ (OK to good) consistent control, does not perform as well as +++ products in all years; +++ (very good) consistent control, consistently one of the best fungicides in the trial.

Early blight:

Early blight(<u>http://www.omafra.gov.on.ca/IPM/english/tomatoes/diseases-and-disorders/early-blight.html</u>) ratings represent results of three efficacy trials when disease pressure was high and significant levels of late blight were absent. A mixed infection of Septoria leaf spot and early blight occurred in some years.

Trade Name*	Active Ingredient(s)	FRAC Group(s)	# of Trials	Rating**
Cueva	Copper octonoate	M1	2	0
Various	Mancozeb	M3	2	+
Various	Chlorothalonil (3.2 L/Ha)	M5	2	++ to +++
	Chlorothalonil (2.4 L/Ha)	M5	1	+++
Inspire	Difenoconazole	3	1	++
Lance / Cantus WDG	Boscalid	7	1	+++
Sercadis	Fluxapyroxad	7	2	+ to +++
Fontelis	Penthiopyrad	7	3	++ to +++
Luna Privilege	Fluopyram	7	1	+++
Aprovia Top	Benzovindiflupyr + difenoconazole	7 + 3	2	+++
Miravis Duo	Pydiflumetofen ('Adepidyn') + difenoconazole	7 + 3	1	+++
Scala SC	Pyrimethanil	9	1	++
Reason 500 SC	Fenamidone	11	1	++
Cabrio EG	Pyraclostrobin	11	1	++
Quadris	Azoxystrobin	11	3	+++
Quadris Top	Azoxystrobin + difenoconazole	11 + 3	1	+++
Tanos 50 DF	Famoxadone + cymoxanil	11 + 27	2	++ to +++
Phostrol	Mono- and di-potassium salts of phosphorous acid	33	2	0
Phostrol + Cueva	Mono- and di-potassium salts of phosphorous acid + cop- per octonoate	33 + M1	1	0
Phostrol + Bravo ZN	Mono- and di-potassium salts of phosphorous acid + chlorothalonil (2.4 L/Ha)	33 + M5	2	+++

Septoria leaf spot:

Septoria leaf spot(<u>http://www.omafra.gov.on.ca/IPM/english/tomatoes/diseases-and-disorders/septoria-leaf-spot.html</u>) ratings represent results of three efficacy trials when disease pressure was high and significant levels of late blight were absent. A mixed infection of Septoria leaf spot and early blight occurred in some years.

Trade Name*	Active Ingredient(s)	FRAC Group(s)	# of Trials	Rating**
Cueva	Copper octonoate	M1	2	0
Various	Mancozeb	М3	2	+
Various	Chlorothalonil (3.2 L/Ha)	M5	3	++ to +++
	Chlorothalonil (2.4 L/Ha)	M5	1	+++
Bravo Top	Chlorothalonil + difenoconazole	M5 + 3	1	+++
Aprovia	Benzovindiflupyr	7	1	+++
Sercadis	Fluxapyroxad	7	3	++ to +++
Fontelis	Penthiopyrad	7	3	+++
Luna Privilege	Fluopyram	7	1	+++
Aprovia TOP	Benzovindiflupyr + difenoconazole	7 + 3	2	+++
Miravis Duo	Pydiflumetofen ('Adepidyn') + difenoconazole	7 + 3	1	+++
Quadris	Azoxystrobin	11	3	+++
Quadris Top	Azoxystrobin + difenoconazole	11 + 3	1	+++
Tanos	Famoxadone + cymoxanil	11 + 27	2	++ to +++
Phostrol	Mono- and di-potassium salts of phosphorous acid	33	2	0
Phostrol + Cueva	Mono- and di-potassium salts of phosphorous acid + copper octonoate	33 + M1	1	0
Phostrol + Bravo ZN	Mono- and di-potassium salts of phosphorous acid + chlorothalonil (2.4 L/Ha)	33 + M5	2	+++

** Not all products may be registered for this crop-disease combination. Always check product labels before use. **0 (no effect) no difference from control plots that receive no fungicide; + (poor) inconsistent control and/or some effect at reducing; ++ (OK to good) consistent control, does not perform as well as +++ products in all years; +++ (very good) consistent control, consistently one of the best fungicides in the trial.

Interested in a product not on the list?

If you didn't find the product information you were looking for, check out the fungicide efficacy ratings from other locations:, New York (late blight)(<u>http://vegetablemdonline.ppath.cornell.edu/NewsArticles/2014%</u> 20PotatoFungicide emphasis on late%20blight.pdf), New York (late blight, early blight)(<u>http://vegetablemdonline.ppath.cornell.edu/NewsArticles/2014-Potato-Efficacy-Rating-NY.pdf</u>).

Keep in mind that the efficacy ratings linked above are US sources and not all of the products are registered in Canada, or registered on late blight of field tomato. For information on registered tomato fungicides for Ontario, see OMAFRA's Vegetable Crop Protection Guide(<u>http://www.omafra.gov.on.ca/english/crops/vegpubs/vegpubs.htm</u>). Always read and understand the label before using any crop protection product.