



Tuesday, September 03, 2019

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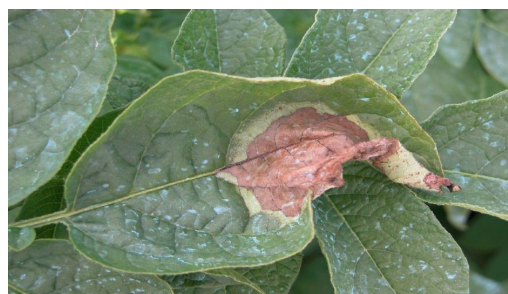
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## Current late blight risk in Ontario field tomatoes: August 28, 2019

**Amanda Tracey, Vegetable Crops Specialist, OMAFRA, Ridgetown and Cheryl Trueman, Department of Plant Agriculture, Ridgetown Campus – University of Guelph**



As mentioned in a previous post (<https://onvegetables.com/2019/06/20/current-late-blight-risk-in-ontario-field-tomatoes-june-20-2019/>), this is Year 1 of a three-year research project to assess the value of different spore traps and forecasting models to predict late blight risk for field tomatoes. We are

comparing the Spornado and rotorod spore traps at eight sites in Kent County (Fig. 1), along with the BliteCast forecasting model.

DNA of *Phytophthora infestans*, the organism that causes late blight, was detected by **Spornado** traps at 1 of 8 sites for the August 22-26 sampling period (Table 1). **Rotorod** traps detected spores of *P. infestans* at 7 of 8 sites for the August 19-22 sampling period and 0 of 8 sites for the August 22-26 sampling period (Table 1).

Table 1. Number of sites out of eight (8) in Kent County, with a positive detection for *Phytophthora infestans*, the organism that causes late blight.

Sampling Period	Spornado	Rotorod
July 15-18 *	1	0
July 18-22	4	0
July 22-25	0	1
July 25-29	7	0
July 29-August 1	2	2
August 1-5	2	1
August 5-8	0	5
August 8-12	3	1
August 12-15	0	3
August 15-19	4	3
August 19-22	-	7
August 22-26	1	0

\* first sampling period with a positive detection for late blight. – data currently unavailable

Late blight symptoms have been confirmed on a few potato plants in Norfolk County.

## “In This Issue”

- ♦ Current late blight risk in Ontario field tomatoes: August 28, 2019
- ♦ VCR – Vegetable Crop Report – August 29, 2019
- ♦ Tilt Foliar Fungicide label expanded via Minor Use Program for Control of Cercospora Leaf Spot on Garden Beets in Canada

## Current late blight risk in Ontario field tomatoes: August 28, 2019...con't

Late blight caused by the US-23 genotype has been observed in Wisconsin on potato and in New York and Pennsylvania on tomato and potato, but there are no reports of symptoms on any crops in Michigan.

A summary of fungicides for late blight management is available [here](https://onvegetables.com/2017/07/26/late-blight-alert-july-28th-2017/) (<https://onvegetables.com/2017/07/26/late-blight-alert-july-28th-2017/>).

If you suspect late blight in your tomato crop, please reach out to Amanda Tracey ([Amanda.tracey@ontario.ca](mailto:Amanda.tracey@ontario.ca), 519-350-7134) to confirm the diagnosis. Cheryl is away on parental leave and will not be available for the remainder of the growing season.

**Project collaborators:** Tomecek Agronomic Services, Sporometrics, Phytodata, and Genevieve Marchand (AAFC).

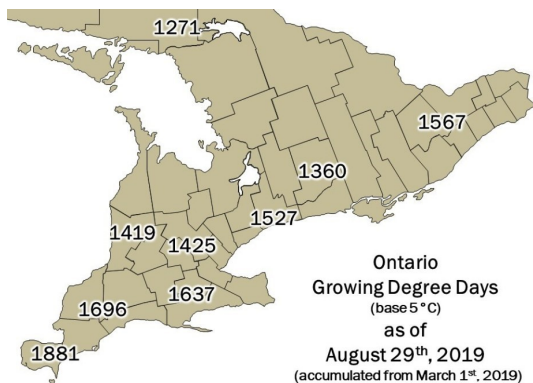
**Funding acknowledgement:** Ontario Tomato Research Institute, Fresh Vegetable Growers of Ontario, and the Ontario Agri-Food Innovation Alliance.

Links to previous late blight posts from the 2019 season:

- June 20 (<https://onvegetables.com/2019/06/20/current-late-blight-risk-in-ontario-field-tomatoes-june-20-2019/>)
- July 10 (<https://onvegetables.com/2019/07/11/current-late-blight-risk-in-ontario-field-tomatoes-july-10-2019/>)
- July 20 (<https://onvegetables.com/2019/07/20/current-late-blight-risk-in-ontario-field-tomatoes-july-20-2019/>)
- August 7 (<https://onvegetables.com/2019/08/07/current-late-blight-risk-in-ontario-field-tomatoes-august-7-2019/>)
- August 14 (<https://onvegetables.com/2019/08/14/current-late-blight-risk-in-ontario-field-tomatoes-august-14-2019/>)
- August 21 (<https://onvegetables.com/2019/08/14/current-late-blight-risk-in-ontario-field-tomatoes-august-21-2019/>)

## VCR – Vegetable Crop Report – August 29, 2019

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** – Cooler weather combined with morning dew and some precipitation has been conducive to the development of plant pathogens in many of the vegetable growing regions in the past week. Harvest of early planted crops is well underway or finished in many growing regions as remaining fields continue to track toward harvest. The Durham, Huron, Peterborough, Simcoe, and Sudbury growing regions are still tracking marginally to significantly behind their average degree day accumulation; while the Chatham, Essex, Kemptville, Norfolk and Wellington growing regions have all caught up to their average degree day accumulations.

**Rainfall** – Precipitation was once again sporadic across most regions with some receiving about 5mm to others with 30+mm in the past week. Norfolk and Durham counties have well exceeded their average August rainfall totals, while remaining regions continue to progress toward their respective averages.

### Crop Updates

**Brassica Crops** – *Alternaria* is present in most regions across the province. Conditions have been favourable for black rot and fusarium wilt. Flea beetles and diamondback moths continue to be high this year.

## VCR – Vegetable Crop Report – August 29, 2019...con't

**Carrot** – As the weather cools, risk of disease becomes higher. Leaf blights are starting to show up in carrot fields. Check for white mold development between rows as canopies have closed. Consider trimming back canopies which has been shown to reduce white mold while not affecting yield.

**Celery** – Celery harvest is underway. Bacterial blight and celery leaf curl has been common. Scout for aphids, bacterial blights and leaf diseases

**Garlic** – Planting season is quickly approaching. If you are buying planting stock, ensure that you test cloves for bulb and stem nematode. Even cloves with an intact basal plate and no observable damage may have nematodes. There will be another full day workshop in Guelph on December 4th that will cover every part of garlic production including clean seed, cultivar selection, seeding density, nutrient testing, scape removal, weed control, crop insurance, harvesting, grading, storing as well as scouting/pest management. To register, call the Agriculture Information Contact Centre at 1 877-424-1300.



**Onions** – Downy mildew has been confirmed in Ontario transplant onions (picture to the left); but away from major onion growing regions. Most areas have not had favourable conditions for sporulation and infection. Harvest is underway in transplants and some early direct seeded onions. The level of thrips has reached the spray threshold in most areas.

**Potatoes** – A few plants with late blight symptoms have been confirmed and subsequently destroyed in Norfolk County. No other late blight symptoms have been reported in the province, but risk increases as weather becomes more conducive. Continue to be diligent with fungicide sprays and include late blight specific products in your spray rotation. If you suspect late blight in your field, please contact Dennis at [dennis.vandyk@ontario.ca](mailto:dennis.vandyk@ontario.ca), (519) 766-5337.

**Sweet Corn** – Over the second half of August, there were several key weather patterns that brought with them a higher chance of corn earworm migration (picture below) into the Great Lakes basin. The event occurred fairly regularly (August 12, 16, 19, 26 and 28<sup>th</sup>) suggesting that Southern Ontario is likely at a higher risk of corn earworm infestation as the final planting reach the silking stage.

Information posted on the Pennsylvania State University Pest Watch website (<http://www.pestwatch.psu.edu/sweetcorn/tool/index.html>) shows consistent traps counts in the North Eastern United States over the same period of time.

When corn earworm are present in an area, protect corn silks as soon as they emerge until they dry down. Any green silk is an attractive egg laying site for the female moths.

Keep in mind that there is wide-spread resistance to pyrethroid insecticides in the corn earworm population. Once the plants are silking, replace pyrethroid insecticide with products from either the group 28 mode of action (Coragen).



# VCR – Vegetable Crop Report – August 29, 2019...con't

## Pest Degree Day Forecasting

Pest	Carrot Rust Fly	Onion Maggot	Carrot Weevil	Aster Leafhopper	Tarnished Plant Bug	Cabbage Maggot	Seedcorn Maggot	European Corn Borer
<b>THRESHOLD</b>	<b>329-395, 1399-1711</b>	<b>210-700, 1025-1515</b>	<b>138-156, 455+</b>	<b>128+</b>	<b>40+</b>	<b>314-398, 847-960, 1446-1604</b>	<b>200-350, 600-750, 1000-1150</b>	<b>See legend below</b>
Essex*	2192	2034	1590	1320	955	1734	2034	1190
Chatham-Kent*	2000	1845	1413	1149	759	1552	1845	1026
Norfolk**	1931	1781	1361	1104	718	1497	1781	984
Huron***	1700	1558	1161	920	567	1287	1558	809
Wellington**	1701	1562	1167	931	582	1293	1562	823
Simcoe County***	1714	1573	1179	943	595	1304	1573	835
Durham***	1806	1665	1270	1036	679	1396	1665	925
Peterborough	1640	1497	1099	857	513	1226	1497	749
Kemptville***	1848	1705	1306	1059	685	1435	1705	940
Sudbury***	1522	1394	1040	828	504	1152	1394	728

\*- 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(<https://onvegetables.com/2019/08/29/vcr-16/#essex>)

Chatham-Kent County(<https://onvegetables.com/2019/08/29/vcr-16/#chatham-kent>)

Norfolk County(<https://onvegetables.com/2019/08/29/vcr-16/#norfolk>)

Huron County(<https://onvegetables.com/2019/08/29/vcr-16/#huron>)

Wellington County(<https://onvegetables.com/2019/08/29/vcr-16/#wellington>)

Simcoe County(<https://onvegetables.com/2019/08/29/vcr-16/#simcoe>)

Durham County(<https://onvegetables.com/2019/08/29/vcr-16/#durham>)

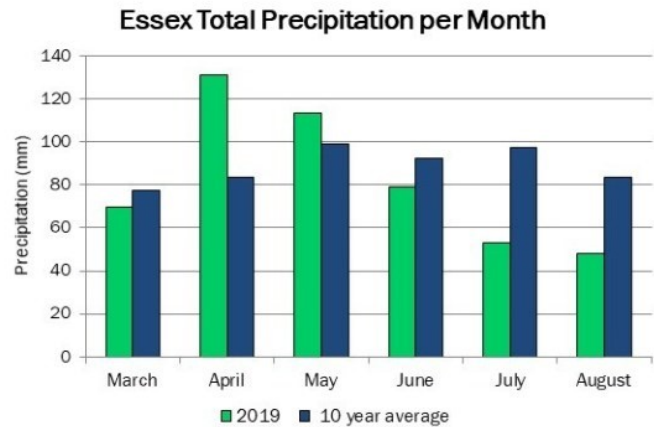
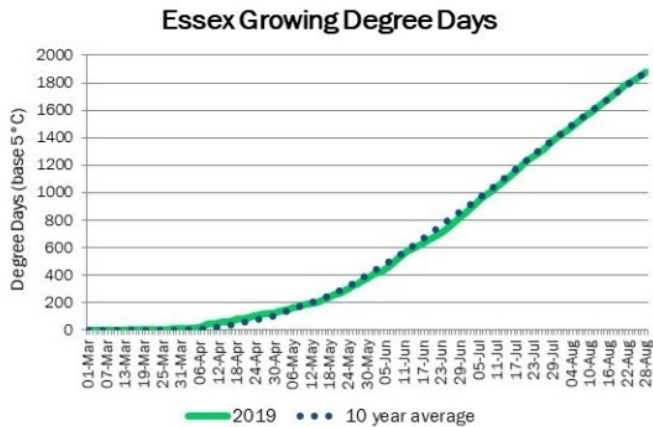
Peterborough(<https://onvegetables.com/2019/08/29/vcr-16/#peterborough>)

Kemptville(<https://onvegetables.com/2019/08/29/vcr-16/#kemptville>)

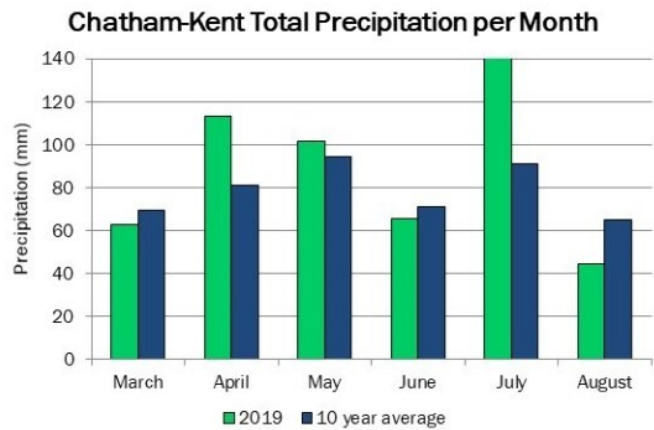
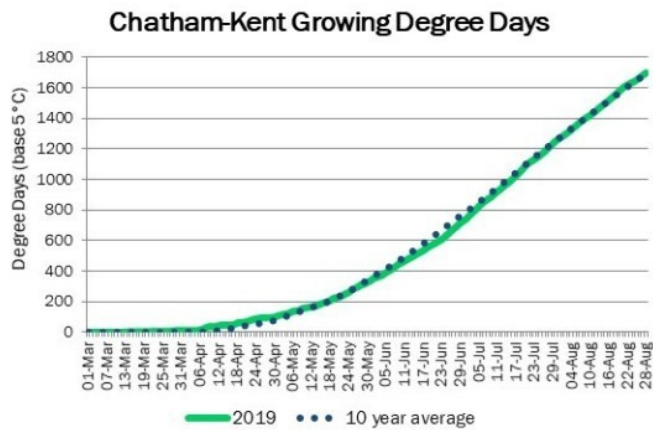
Sudbury(<https://onvegetables.com/2019/08/29/vcr-16/#sudbury>)

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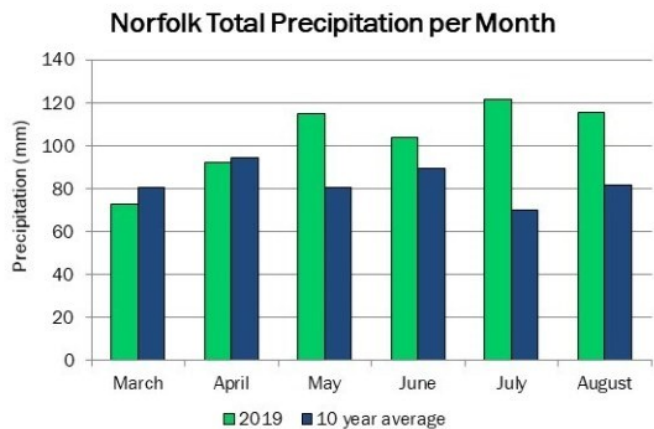
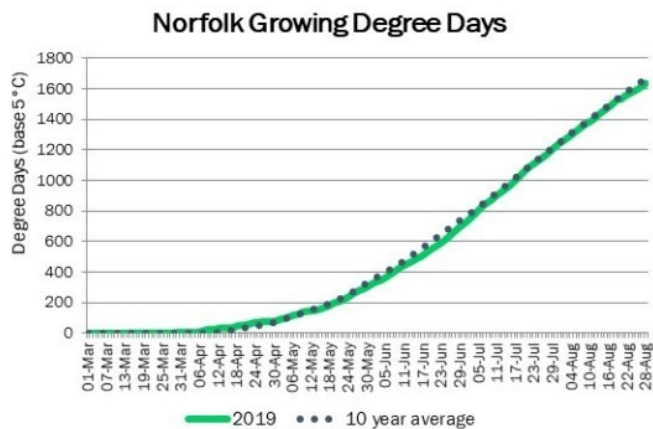
## Essex County



## Chatham-Kent County



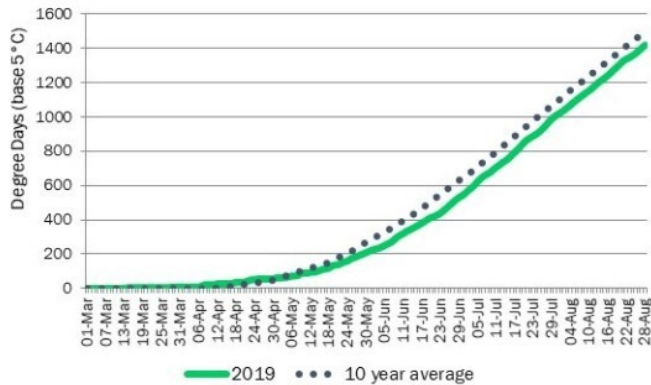
## Norfolk County



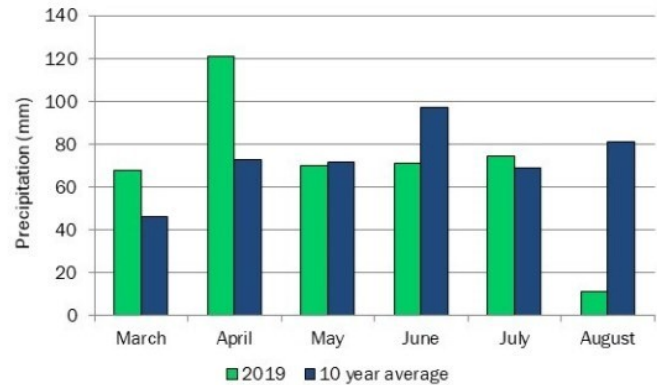
# VCR – Vegetable Crop Report – August 29, 2019...con't

## Huron County

Huron County Growing Degree Days

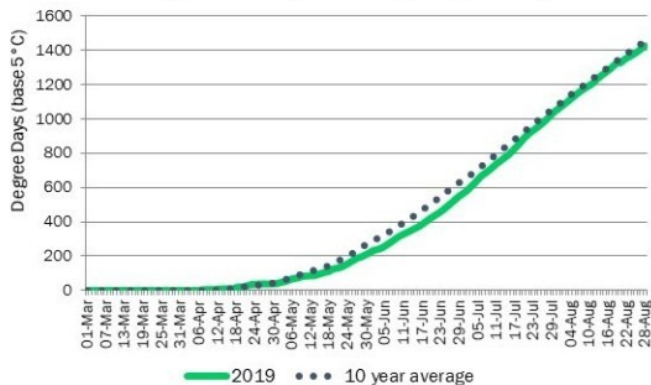


Huron County Total Precipitation per Month

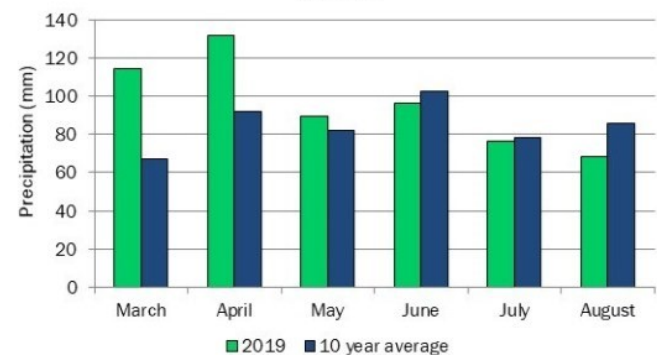


## Wellington County

Wellington County Growing Degree Days

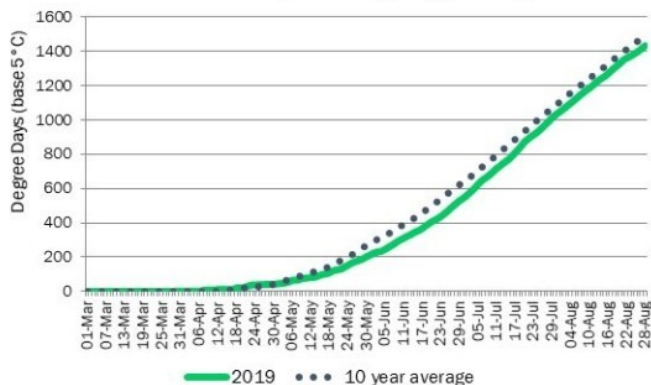


Wellington County Total Precipitation per Month

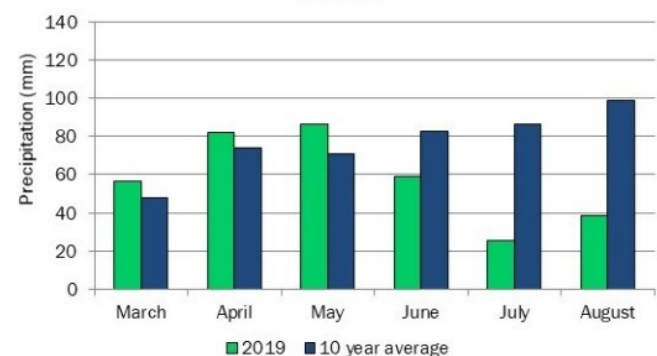


## Simcoe County

Simcoe County Growing Degree days



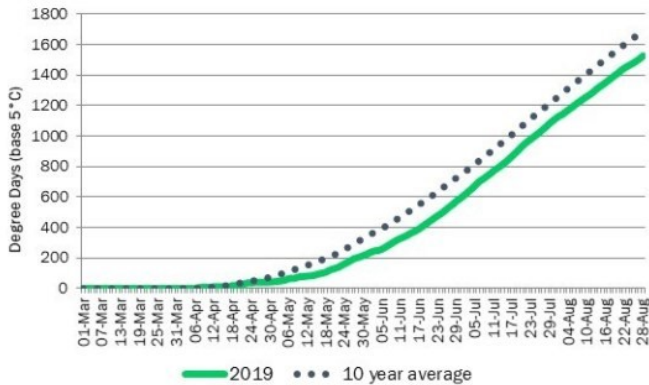
Simcoe County Total Precipitation per Month



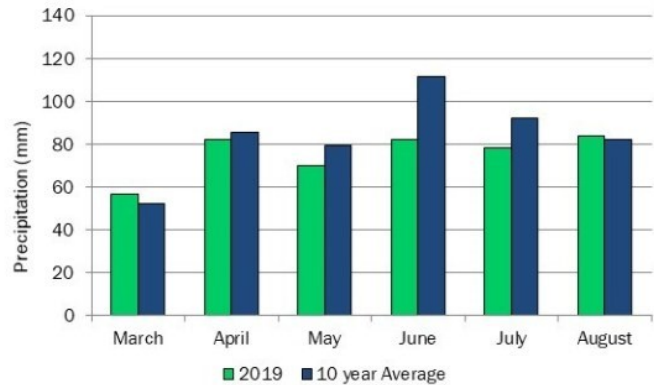
# VCR – Vegetable Crop Report – August 29, 2019...con't

## Durham County

**Durham Growing Degree Days**

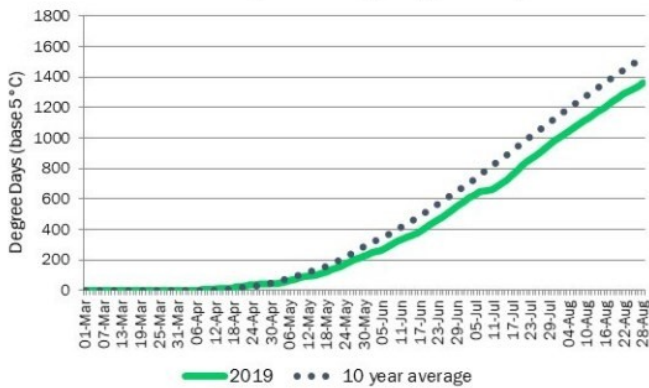


**Durham Total Precipitation per Month**

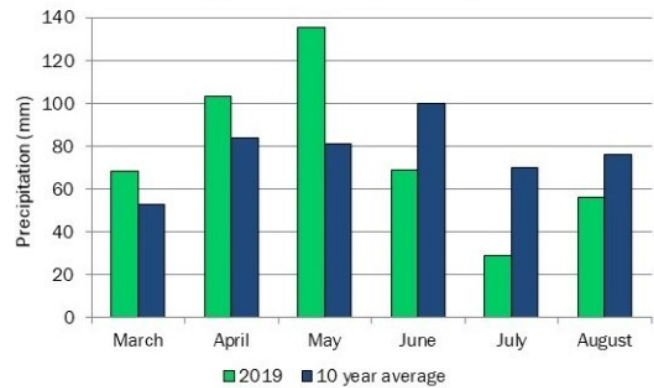


## Peterborough

**Peterborough Growing Degree Days**

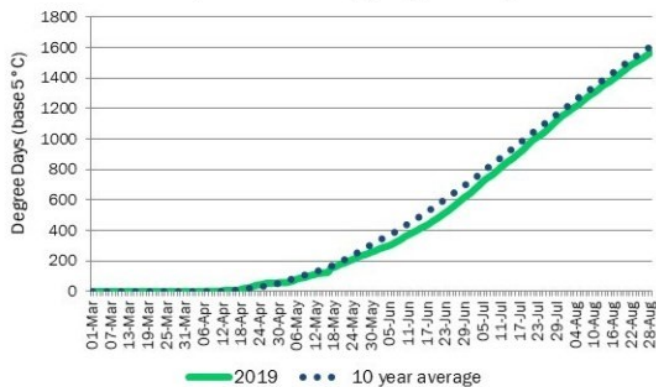


**Peterborough Total Precipitation per Month**

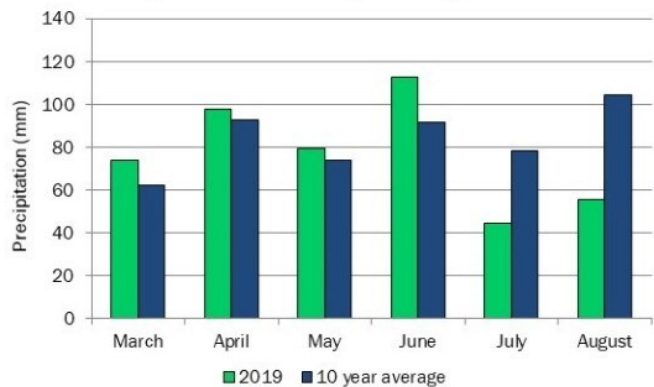


## Kemptville

**Kemptville Growing Degree Days**

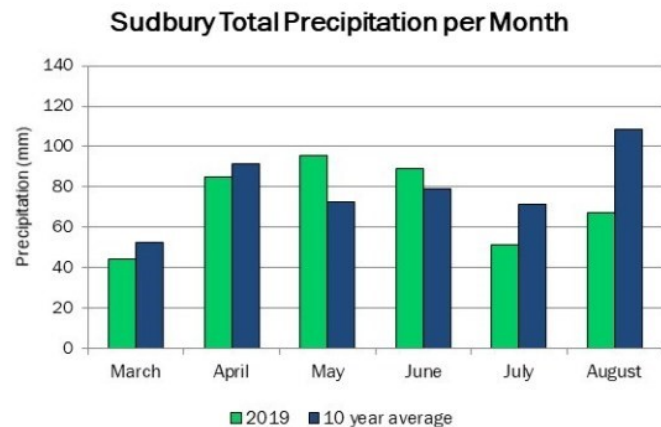
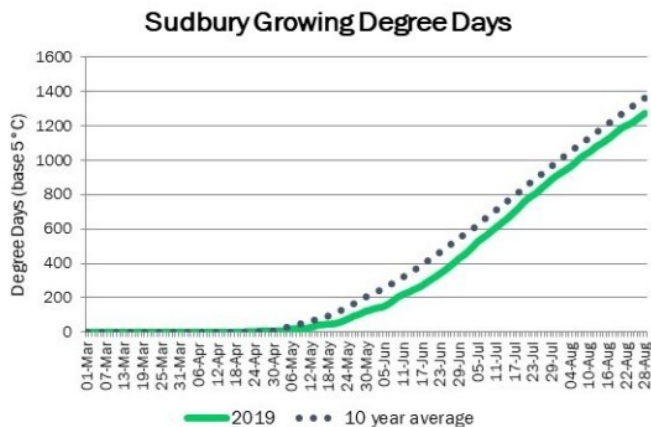


**Kemptville Total Precipitation per Month**



# VCR – Vegetable Crop Report – August 29, 2019...con't

## Sudbury



## Tilt Foliar Fungicide label expanded via Minor Use Program for Control of Cercospora Leaf Spot on Garden Beets in Canada

J. Chaput, Minor Use Coordinator, OMAFRA

Tilt 250E® Foliar Fungicide labelled for control of Cercospora Leaf Spot on garden beets

The Pest Management Regulatory Agency (PMRA) recently announced the approval of an URMULE registration for **Tilt 250E® Foliar Fungicide** for control of Cercospora Leaf Spot on garden beets in Canada. **Tilt 250E® Foliar Fungicide** was already labeled for use on a number of crops in Canada for control / suppression of several diseases.



The following is provided as an abbreviated, general outline only. Users should be making pest management decisions within a robust integrated disease management program and should consult the complete label before using **Tilt 250E® Foliar Fungicide**.

Crop(s)	Target	Rate (mL/ha)	Application Information	PHI (days)
Garden beets	Cercospora Leaf Spot	500	Apply prior to when conditions are favourable for disease development. Repeat at 10 – 14 day intervals until conditions are no longer favourable for disease development. Apply a maximum of two applications per season.	14

Follow all precautions and detailed directions for use on the **Tilt 250E® Foliar Fungicide** label carefully.

For a copy of the new minor use label contact your local crop specialist, regional supply outlet or visit the PMRA label site <http://www.hc-sc.gc.ca/cps-spc/pest/registrant-titulaire/tools-outils/label-etiq-eng.php>

Note: This article is not intended to be an endorsement or recommendation for this particular product, but rather a notice of registration activity