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"In This Issue"

 VCR – Vegetable Crop Report – September 24th, 2020

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This will be the final week of the Vegetable Crop Report for 2020.

Temperature – A small heatwave is hitting across Ontario over the weekend. Temperatures are rising to the mid 20s and may feel in the high 20s and even 30 with the humidex in southern Ontario and will return to mid teens at the beginning of next week. Northern Ontario may see temperatures in the mid to low 20s before dropping again on Monday. All regions mostly followed their 10 year average GDD

trend, with the exceptions of Peterborough and Sudbury, which have begun to lag marginally behind in September. Cabbage maggot is at threshold in Peterborough and will soon be at threshold in Sudbury. Degree day data for each region is shown below

Precipitation – There are chances of rain throughout the week in Northern regions but the rest of Ontario may see rain beginning Sunday or Monday and the chance of showers continues through to next Thursday. Sudbury has reached its 10 year average for September precipitation levels and Huron county has received more the double. However, other regions across Ontario lag far behind. Precipitation data for each region is shown below.

Crop Updates

Brassica Crops – Harvest continues throughout Ontario. Alternaria and bacterial head rot continue to be problems in broccoli and cauliflower in later plantings. Downy mildew has been an issue in some areas but does not seem to be widespread. Diamondback moths, imported cabbageworm numbers continue to be high in some areas and the level of thrips is high in many storage cabbage fields. Interested in Brassica pest and pathogen training? We will be hosting a spring Brassica IPM workshop online in spring 2021. A registration announcement will be posted on the ONvegetables blog in early 2021.

Carrots – The recent dry weather has thankfully not been conducive for disease development. Sclerotinia white mould risk is lower but continue to monitor later carrot fields to reduce the amount of disease brought into storage. For Alternaria blight, generally once the average daily temperature (max+min/2) is less than 9°C disease development slows considerably and fungicides are not necessary. The risk of Cercospora leaf blight also remains lower if there is no rainfall.





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Figure 1. Alternaria Leaf Blight on carrots. Photo credit - Brian Collins

BELOW: Figure 2. and Figure 3. Cercospora leaf blight on carrots.





Celery – Harvest is underway and there are a few late season pathogens causing issues including leaf curl, bacterial rots, Cercospora and Septoria. We will be hosting a spring Celery, Carrot and Onion pest and pathogen workshop online in spring 2021. A registration announcement will be posted on the ONvegetables blog in early 2021.

Cucurbits – Some frost damage was seen this week resulting from last weekend's cold conditions. This damage will cause "water-soaked" lesions on the upper surface of fall cucurbit rinds, some hardier squash such as ornamental gourds and some winter squash can still harden after light frost damage, others will not.

Fruit rot caused by *Phytophthora capsici* has been found in several areas. Scouting for signs and symptoms caused by this pathogen will enable growers to implement measures to control its spread. See previous weeks of VCR at <u>https://onvegetables.com/2020/09/17/vcr2020-21/</u> and <u>https://onvegetables.com/2020/09/10/2020vcr-20/</u> for pictures and additional resources. This pathogen builds up over time, and spreads easily through wet soils, and on soil attached to farm equipment. Early detection of this pathogen can prevent large-scale losses if fields are rotated away from susceptible species, including Cucurbit and Solanaceous crops. Biosecurity is very important for limiting the spread of this pathogen, which can survive in soils for over 10 years.



Figure 4. Progression of gummy stem blight lesions caused by *Didymella bryoniae* on butternut squash. From left: Sept 2, Sept 9, Sept 18. Ridgetown ON.

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Garlic – Garlic planting has started across SW Ontario for the 2021 crop. If you are purchasing planting stock, it is extremely important to purchase cloves that are free of bulb and stem nematode. Even cloves with an intact basal plant and no observable damage my have nematodes present. The UofG Pest Diagnostic Lab in Guelph as well as A&L labs in London conduct nematode testing for garlic. For growers using a herbicide like Chateau at planting, be sure to apply the product within the time frame that is indicated on the label. Crop injury was observed last season in several fields where Chateau was applied greater than 3 days after planting.

Onion – Harvest is underway. No downy mildew outbreaks have been confirmed in Ontario. In green onions, keep an eye open for leafminer damage, including distorted leaves and brown pupae within the compromised leaf. If leafminer damage is found, please contact <u>travis.cranmer@ontario.ca</u>. We will be hosting a spring onion, carrot, and celery pest and pathogen workshop online in spring 2021. A registration announcement will be posted on the ONvegetables blog in early 2021.

Potatoes – Harvest conditions have been excellent recently and storages are filling. Yields are quite variable from field to field. Quality overall is good with the common problems being heat/drought related issues (secondary growth, heat necrosis), common scab, bacterial rots, and hollow heart from a lower set.



Figure 5. Common scab on potatoes.



Figure 6. Common scab on potatoes.

Sweet Corn - Harvest is getting close to finished for the season. Frost damage occurred in some counties last weekend.

NOTE: Data as of September 23rd, 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*	2613	2427	1915	1612	1191	2079	2427	1468
Chatham-Kent*	2417	2237	1751	1458	995	1904	2237	1318
Norfolk**	2394	2214	1716	1424	966	1873	2214	1284
Huron***	2125	1962	1508	1226	787	1653	1962	1089
Wellington**	2108	1939	1481	1203	778	1627	1939	1071
Simcoe County***	2146	1979	1526	1248	825	1672	1979	1116
Durham***	2301	2130	1658	1376	933	1807	2130	1240
Peterborough	2077	1906	1444	1166	743	1590	1906	1034
Kemptville***	2216	2048	1580	1305	885	1727	2048	1176
Sudbury***	1878	1729	1311	1059	671	1443	1729	938

*- 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.

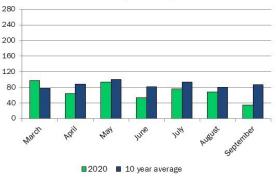
Select a region below for the latest weather, crop and pest degree day information: Essex County(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#essex</u>) Chatham-Kent County(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#horfolk</u>) Norfolk County(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#horfolk</u>) Huron County(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#horfolk</u>) Wellington County(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#wellington</u>) Simcoe County(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#wellington</u>) Simcoe County(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#wellington</u>) Purham County(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#kellington</u>) Peterborough(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#kellington</u>) Kemptville(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#kemptville</u>) Sudbury(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#kemptville</u>) Sudbury(<u>https://onvegetables.com/2020/09/24/vcr2020-22/#kemptville</u>)

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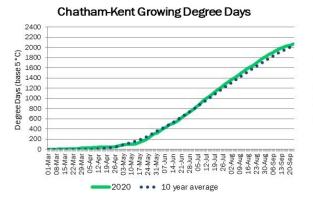
Essex County



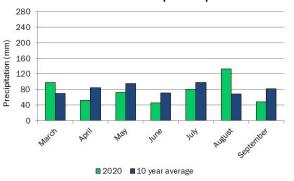
Essex Total Precipitation per Month



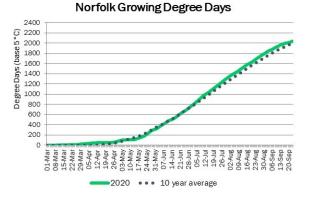
Chatham-Kent County



Chatham-Kent Total Precipitation per Month

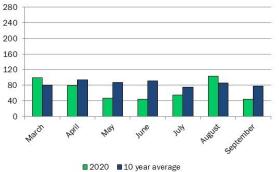


Norfolk County



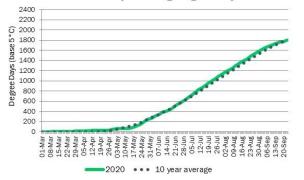
Norfolk Total Precipitation per Month

Precipitation (mm)

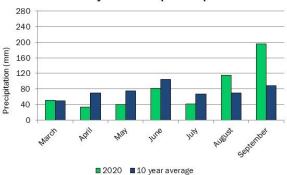


Huron County

Huron County Growing Degree Days

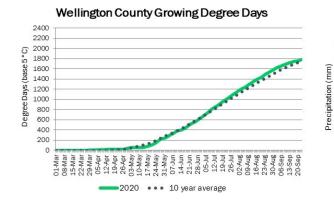


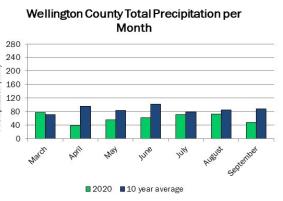
Huron County Total Precipitation per Month



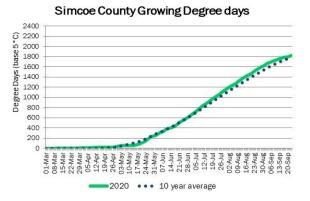
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Wellington County

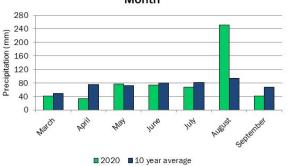




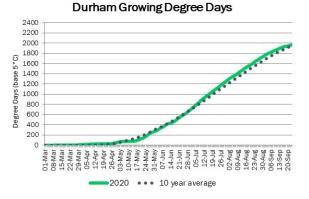
Simcoe County



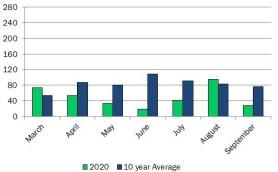
Simcoe County Total Precipitation per Month







Durham Total Precipitation per Month

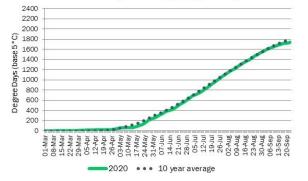


Precipitation (mm)

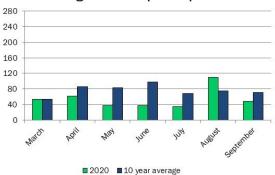
Precipitation (mm)

Peterborough



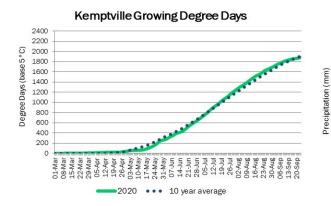


Peterborough Total Precipitation per Month

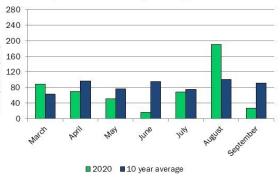


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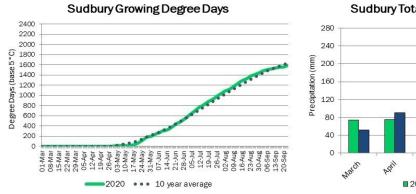
Kemptville



Kemptville Total Precipitation per Month



Sudbury



Sudbury Total Precipitation per Month

