



Tuesday, August 18, 2020

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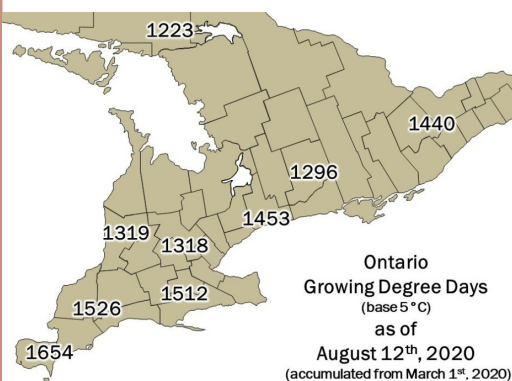
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## VCR – Vegetable Crop Report – August 13th

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** – Temperatures are expected to remain high over the weekend with humidity but are forecasted to drop as we move into next week. All regions remain above their GDD 10 year average. Carrot Rust Fly is at its second threshold in all regions except Essex, Chatham-Kent and Norfolk. Onion Maggot has reached threshold in Huron, Wellington, Simcoe, Peterborough and Sudbury. Cabbage Maggot is at threshold in Essex county.

Degree day data for each region is shown below.

**Rainfall** – There is a chance of rain and a risk of thunderstorms over the weekend and Monday in all regions. Some regions in the east and north may see some rain continue into the week. Huron and Simcoe counties have already surpassed their 10 year precipitation averages and many other regions have received more than half. Essex, Peterborough and Sudbury have received less than half of their August 10 year averages so far. Precipitation data for each region is shown below.

### Crop Updates

**Brassica Crops** – Keep levels of Alternaria low by incorporating all plant material after harvesting a block and avoid irrigating in the evening to reduce the time that leaves are wet. During the hot weather, dig suspect plants with a shovel and inspect the roots for clubroot, root knot nematode. Pulling the plants will often result in weak roots being left in the soil and then both of these pathogens may be hard to correctly identify. Calcium deficiency causing tip burn has been observed.

**Carrots** – As canopies close, the risk of Sclerotinia white mold increases. Consider applying a fungicide before the canopies close and become dense. Carrot trimming (<https://www.youtube.com/watch?v=0rz3MHssQ9M>) is also a good way to reduce white mold without affecting yield. Keep an eye out for the second generation of carrot rust fly.

### “In This Issue”

- ♦ VCR – Vegetable Crop Report – August 13th
- ♦ Episode 8: Resistant Weeds and Colorado Potato Beetles

## VCR – Vegetable Crop Report – August 13th...con't



Fig. 1 – Sclerotinia white mold infecting the carrot petiole.

**Celery** – Plants are nearing harvest. Carefully dig up stunted plants and examine the roots for root knot nematode (Figure 2). Bacterial leaf spot, celery leaf curl, *Cercospora* leaf blight and blackheart/calcium deficiencies have been observed. Avoid working in the field when the humidity is high and/or the leaves are wet as celery leaf curl spores will stick to clothes and equipment. Tarnished plant bugs, Leafminers and wireworms are active.



Fig. 2 – Root knot nematode on celery roots – July 2019.

**Cucurbits** – Powdery mildew continues to develop on squash and pumpkin as described in last week's VCR (<https://onvegetables.com/2020/08/06/2020vcr-15/>). Downy mildew symptoms are advanced on untreated cucumbers and *Pseudoperonospora cubensis* spores are still being detected in spore traps at Ridgetown and Simcoe stations. Early detection of downy mildew this year increases the possibility of fungicide resistance. If you think that you may have downy mildew that is not well controlled by rotating Orondis Ultra, Torrent, and Zampro, please contact Andrew C Wylie ([andrew.c.wylie@ontario.ca](mailto:andrew.c.wylie@ontario.ca)) or Katie Goldenhar – Pathologist-Horticulture ([katie.goldenhar@ontario.ca](mailto:katie.goldenhar@ontario.ca)).

**Garlic** – The Garlic Growers Association of Ontario has just announced that it is taking orders from members for clean planting material from the SPUD unit at the New Liskeard Agricultural Research Station, University of Guelph. E-mail [garlicgrowersofontario@gmail.com](mailto:garlicgrowersofontario@gmail.com) for the roundel order form and if you are not a member, the membership form as well. The cut-off to become a member and order this year is **August 15th, 2020**. Roundels are expected to ship in September. For more information, see the recent article on garlic clean seed program here: <https://onvegetables.com/2020/08/05/spud/>

**Onions** – Many areas have received conducive conditions for downy mildew sporulation and infection. If the DOWNCAST forecasting model is not available to predict outbreaks for your area, a protective fungicide program for downy mildew is recommended during cool and humid weather we have been experiencing. Stemphylium leaf blight is expanding down the leaves and in many fields the outer leaves are senescing. Botrytis leaf blight, purple blotch and bacterial leaf spot is prevalent. Transplant onions are starting to lodge and seeded onions are bulbing. As transplants fields dry down, be mindful of younger, direct-seeded onions in border fields as the level of thrips may surge as they move to a greener crop.

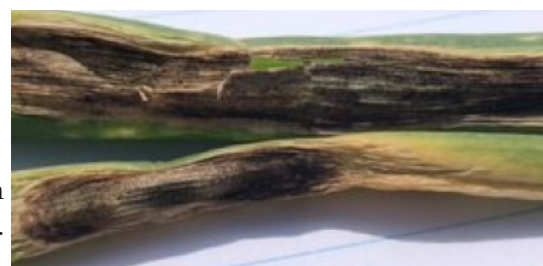


Fig. 3 – Purple blotch as well as Stemphylium lesions progressing down the leaf – August 12, 2020.



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**Peppers** – Fruit set, sizing and hand harvest for both processing and fresh market peppers is ongoing. The second generation of European corn borer is flying and laying eggs so be sure to be on the lookout for adults and scout for larval entry holes in the peppers. As of Wednesday, August 13th 2020, **no pepper weevil** have been caught on any **outdoor** traps in our pepper weevil monitoring program. A few anonymous specimens have been received and identified, though exact locations are known and no established populations identified. Recently there have been a number of inquiries about sprays for pepper weevil in field peppers. With limited options for pepper weevil control, sprays should only be used when pepper weevil is present in your field, which is why monitoring traps and scouting regularly is so important. Pepper weevil can look similar to other native weevil species so if you think you have pepper weevil adults on traps, or damage in your crop, please confirm the ID by send pictures or specimens to Amanda Tracey ([amanda.tracey@ontario.ca](mailto:amanda.tracey@ontario.ca)) or Cara McCreary ([cara.mccreary@ontario.ca](mailto:cara.mccreary@ontario.ca)). Another helpful tool for correctly identifying pepper weevil adults on sticky cards can be found here: What weevil warrants worry (<https://medium.com/ongreenhousevegetables/which-weevil-warrants-worry-6f6a8402b23c>).

**Potatoes** – Late blight has been reported on potatoes in Wisconsin this week. No late blight positives have been reported in nearby regions and spore traps are not finding spores. We have had some conducive weather so continue with protectant sprays. Early blight has been showing up on the lower canopy leaves so make sure you balance your fungicide program to consider both late and early blight at this time of the year.



Fig. 4 – Early blight showing up on potatoes.

**Tomatoes** – Bulk harvest for processing tomatoes has begun for early varieties and hand harvest for fresh market is ongoing. Some fruit and foliage are showing signs of bacterial spot/speck. It's important to remember that prevention is the best tool against bacterial diseases in tomatoes. Late blight has been reported in Wisconsin in potato. Spores that cause this serious disease in tomatoes tend to move up from the southern US throughout the season and will cause brown, greasy-looking spots on developing fruits. Be sure to scout thoroughly for late blight symptoms. Spray applications targeting late blight should not be applied until symptoms are seen in your field or neighbouring crops. If you are looking for a refresher on scouting and identifying diseases in tomatoes, you can click here to watch this lecture(<https://www.youtube.com/watch?v=Y8cqKfUHpm0&t=944s>) by OMAFRA pathologist, Katie Goldenhar.

**Sweet corn** – Hand and machine harvest of sweet corn continues this week, and lepidopterans continue to build. Western Bean Cutworm counts have continued to climb indicating that we should be at or nearing peak flight. When timing spray applications, remember that WBC control products target emerged larvae, not egg masses. Monitor the Great Lakes and Maritime Pest Monitoring Network(<https://ontarioca11.maps.arcgis.com/apps/MapSeries/index.html?appid=df7c044f224e4345825e75d1fa561560>) for up-to-date reports of WBC and other pest levels.

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NOTE: Data as of August 12th, 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*	1934	1790	1404	1185	885	1526	1790	1083
Chatham-Kent*	1792	1654	1293	1083	754	1405	1654	983
Norfolk**	1780	1643	1270	1061	735	1386	1643	961
Huron***	1556	1435	1107	905	596	1211	1435	808
Wellington**	1563	1437	1104	907	606	1208	1437	813
Simcoe County***	1592	1468	1140	942	643	1245	1468	849
Durham***	1705	1576	1231	1031	718	1337	1576	935
Peterborough	1545	1416	1079	879	575	1184	1416	784
Kemptville***	1689	1563	1221	1023	718	1326	1563	929
Sudbury***	1433	1325	1030	852	567	1123	1325	766

\*- 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/2020/08/13/2020vcr-16/#essex>)

Chatham-Kent County(<https://onvegetables.com/2020/08/13/2020vcr-16/#chatham-kent>)

Norfolk County(<https://onvegetables.com/2020/08/13/2020vcr-16/#norfolk>)

Huron County(<https://onvegetables.com/2020/08/13/2020vcr-16/#huron>)

Wellington County(<https://onvegetables.com/2020/08/13/2020vcr-16/#wellington>)

Simcoe County(<https://onvegetables.com/2020/08/13/2020vcr-16/#simcoe>)

Durham County(<https://onvegetables.com/2020/08/13/2020vcr-16/#durham>)

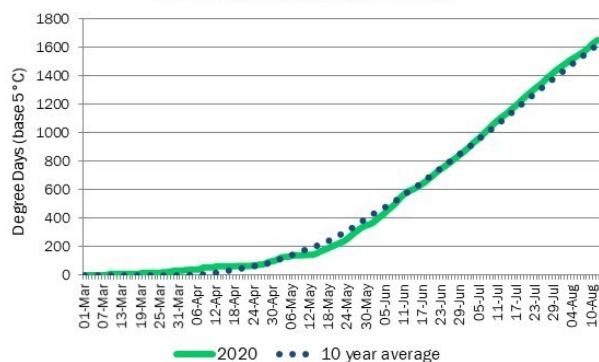
Peterborough(<https://onvegetables.com/2020/08/13/2020vcr-16/#peterborough>)

Kemptville(<https://onvegetables.com/2020/08/13/2020vcr-16/#kemptville>)

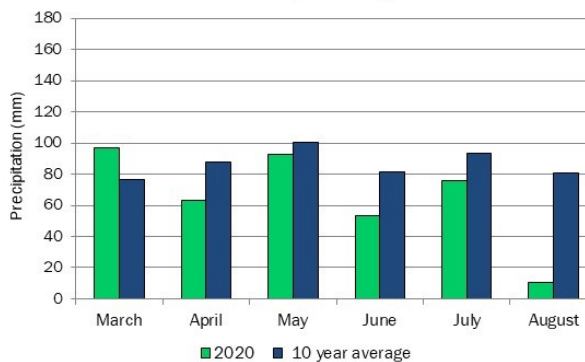
Sudbury(<https://onvegetables.com/2020/08/13/2020vcr-16/#sudbury>)

## Essex County

Essex Growing Degree Days



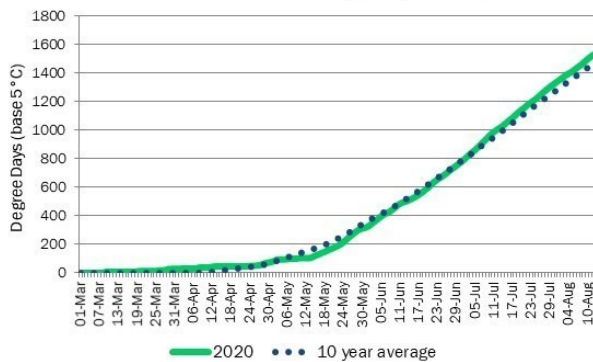
Essex Total Precipitation per Month



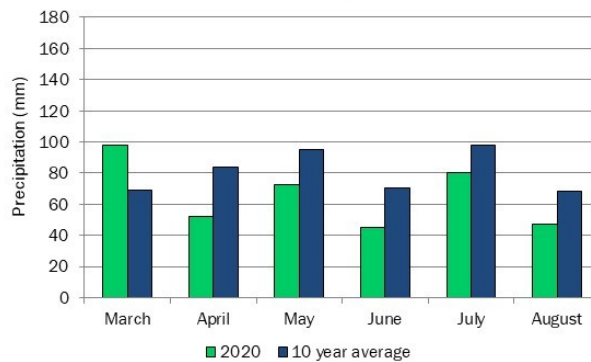
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## Chatham-Kent County

Chatham-Kent Growing Degree Days

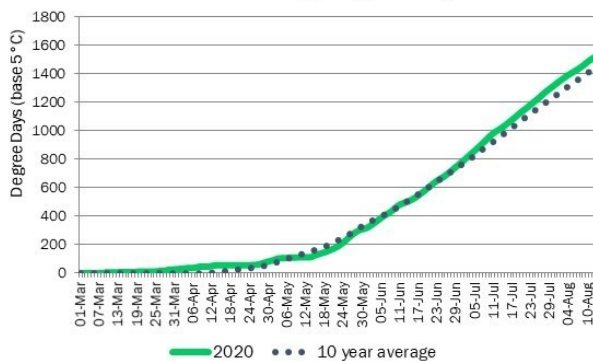


Chatham-Kent Total Precipitation per Month

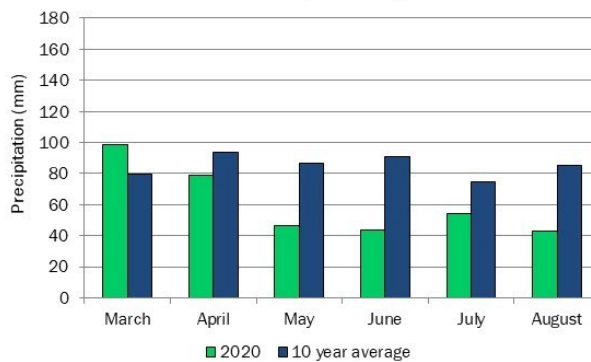


## Norfolk County

Norfolk Growing Degree Days

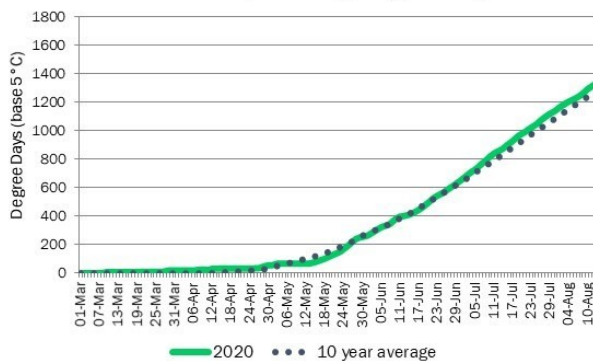


Norfolk Total Precipitation per Month

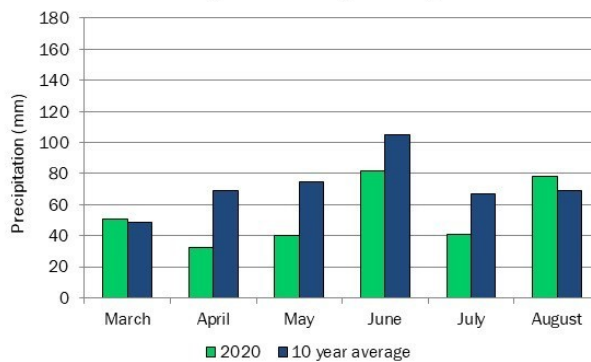


## Huron County

Huron County Growing Degree Days

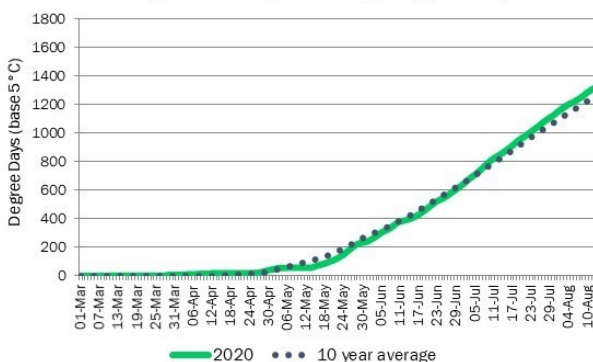


Huron County Total Precipitation per Month

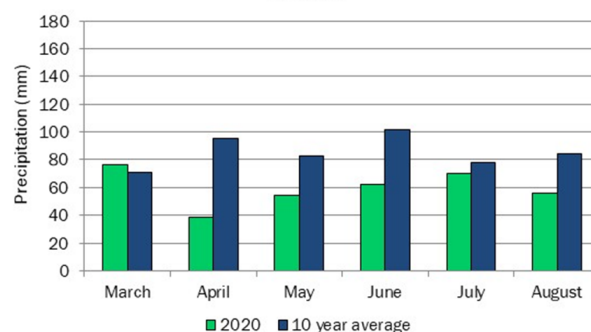


## Wellington County

Wellington County Growing Degree Days



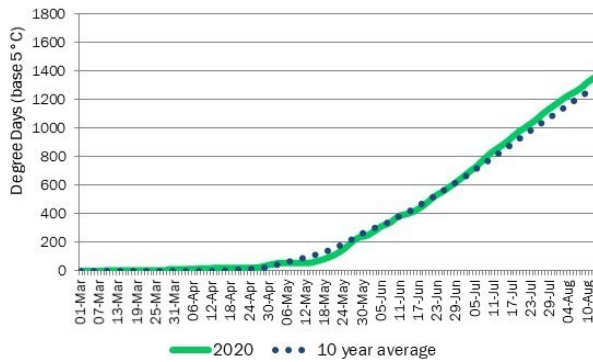
Wellington County Total Precipitation per Month



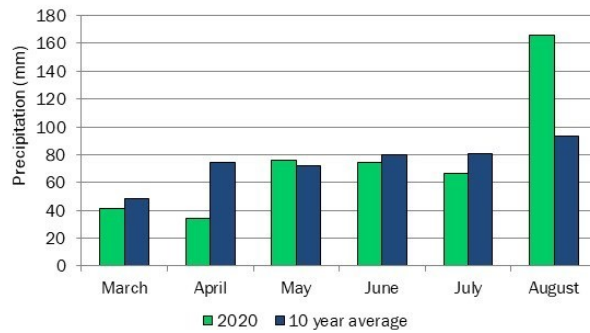
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## Simcoe County

Simcoe County Growing Degree days

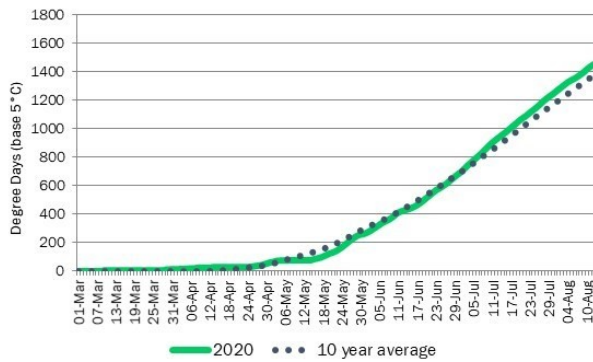


Simcoe County Total Precipitation per Month

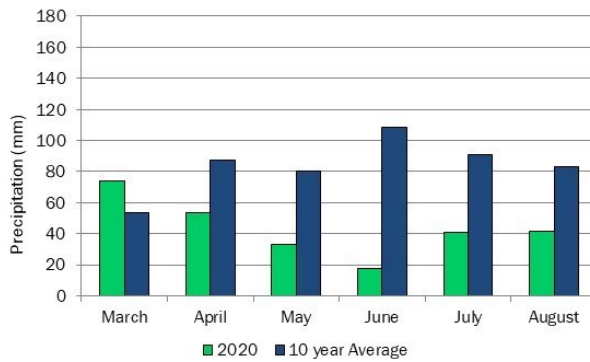


## Durham County

Durham Growing Degree Days

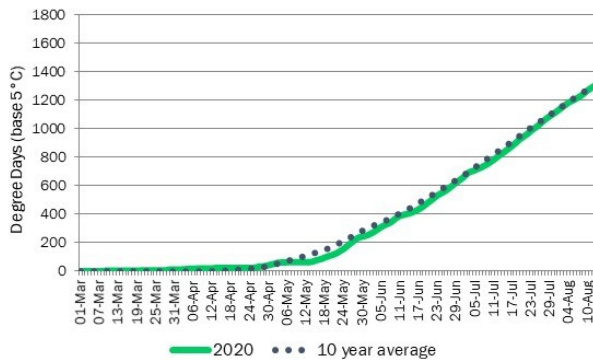


Durham Total Precipitation per Month

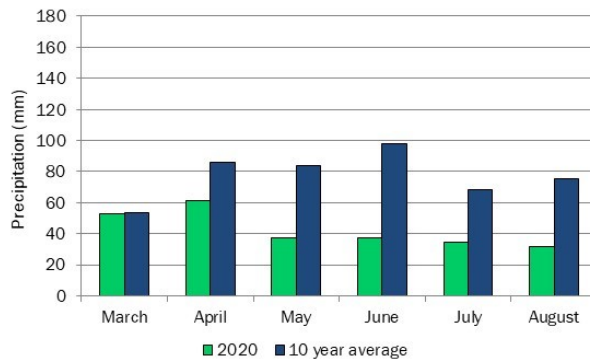


## Peterborough

Peterborough Growing Degree Days

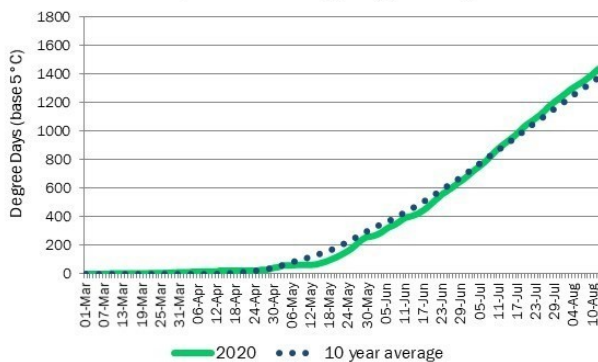


Peterborough Total Precipitation per Month

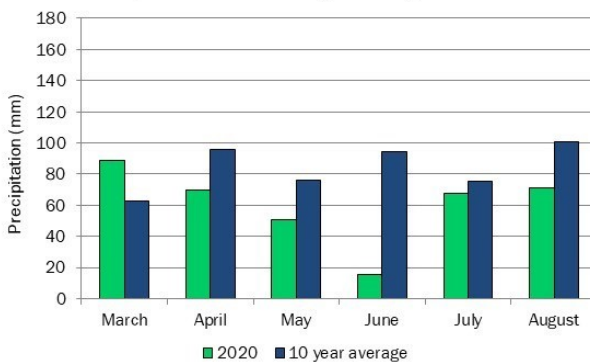


## Kemptville

Kemptville Growing Degree Days



Kemptville Total Precipitation per Month

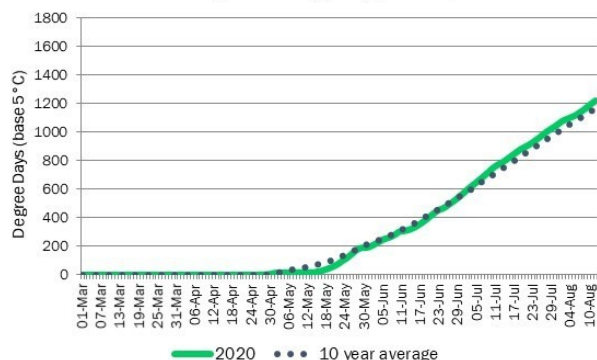




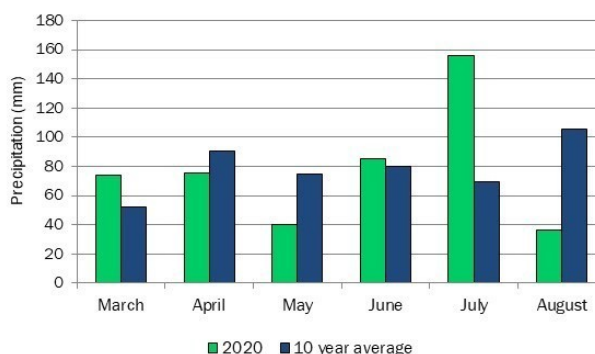
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Sudbury

Sudbury Growing Degree Days



Sudbury Total Precipitation per Month



## Episode 8: Resistant Weeds and Colorado Potato Beetles



In this episode, we are joined by Kristen Obeid, Weed Specialist for horticulture crops to talk about the status of herbicide resistance in Ontario and a provincial resistance testing project that is underway. For more information on how to get your fields tested for free, contact Kristen at [kristen.obeid@ontario.ca](mailto:kristen.obeid@ontario.ca).

Continuing the pesticide resistance theme this week, we also hear from Dennis van Dyk, Vegetable Crop Specialist, about the Colorado potato beetle (CPB); an insect pest that is infamously known to have major resistance issues in potato and tomato crops. Suspect you have resistance populations of CPB on your farm? Contact Dennis at [dennis.vandyk@ontario.ca](mailto:dennis.vandyk@ontario.ca).

[https://www.buzzsprout.com/1111115/5000372-herbicide-resistance-colorado-potato-beetle?client\\_source=small\\_player&iframe=true&referrer=https://www.buzzsprout.com/1111115/5000372.js?container\\_id=buzzsprout-player-5000372&player=small](https://www.buzzsprout.com/1111115/5000372-herbicide-resistance-colorado-potato-beetle?client_source=small_player&iframe=true&referrer=https://www.buzzsprout.com/1111115/5000372.js?container_id=buzzsprout-player-5000372&player=small)

Music: Aspire by Scott Holmes

Have a question or a topic you would like us to cover? Email us at [ONhortcrops@gmail.com](mailto:ONhortcrops@gmail.com)

Click here(<https://onvegetables.com/podcast/>) for a list of previous **What's Growing ON?** episodes