



Tuesday, July 11, 2023

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SWITCH 62.5 WG Fungicide label temporarily expanded via Emergency Use Registration to help manage Alternaria Leaf Blight in Brussels Sprouts, Broccoli, and Cauliflower in Ontario, Quebec, Nova Scotia, and Newfoundland and Labrador

J. MOSIONDZ, Minor Use Coordinator, OMAFRA



The Pest Management Regulatory Agency (PMRA) recently announced the approval of an Emergency Use Registration (EUR) for SWITCH® 62.5WG Fungicide for suppression of Alternaria leaf blight (*Alternaria brassicicola*) on Brussels Sprouts, Broccoli, and Cauliflower in numerous provinces in Canada. This EUR for SWITCH® 62.5WG

Fungicide on listed Brassica crops can be used **only** in Ontario, Quebec, Nova Scotia, and Newfoundland and Labrador from **July 8th, 2023, until July 7th, 2024.**

“In This Issue”

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SWITCH® 62.5WG Fungicide is labeled for management of diseases on a wide range of crops in Canada. The use on Brussels sprouts, broccoli and cauliflower has already been submitted for review as a full label expansion via a provincial User Requested Minor Use Label Expansion (URMULE) with the hope for full registration by the 2024 field season. This EUR request was initiated by participating provinces in response to the reduced number of chlorothalonil applications permitted on the crops following RVD2018-11 and a lack of sufficient registered protective products to allow for proper rotation and season long disease protection. This EUR was led by Ontario in conjunction with the Fresh Vegetable Growers of Ontario (FVGO) and other participating province's provincial Ministries of Agriculture and their local growers' associations.

The following is provided as an abbreviated, general outline only. Users should be making disease management decisions within a robust integrated disease management program and should **consult the complete emergency use label before using SWITCH® 62.5WG Fungicide.**

SWITCH 62.5 WG Fungicide label temporarily expanded via Emergency Use Registration to help manage Alternaria Leaf Blight in Brussels Sprouts, Broccoli, and Cauliflower in Ontario, Quebec, Nova Scotia, and Newfoundland and Labrador...con't

Crop(s)	Target	Rate (g product/ha)	Application Information	Pre-Harvest Interval (PHI) (days)
Broccoli, Brussels Sprouts, Cauliflower	Suppression of Alternaria Leaf Blight (<i>Alternaria brassicicola</i>)	775 – 975	The first application should be made when disease first appears and continue on 7-to-10-day intervals. Apply in sufficient water volume to obtain thorough coverage; a minimum spray volume of 200 L/ha is recommended. Up to 3 applications per year may be made to the crop.	7

For these uses, Syngenta Canada Inc. has not fully assessed performance (efficacy) and/or crop tolerance (phytotoxicity) under all environmental conditions or for all crop varieties when used in accordance with the label. The user should test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.

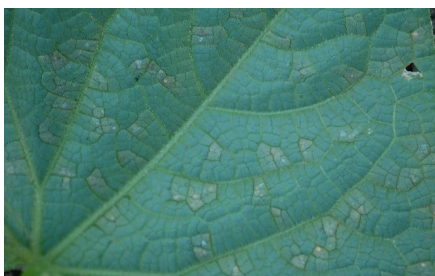
TOXIC to aquatic organisms. Observe spray buffer zones specified under DIRECTIONS FOR USE. Fludioxonil is persistent and may carryover. It is recommended that this product not be used in areas treated with any products containing fludioxonil during the previous season. To reduce runoff from treated areas into aquatic habitats avoid applications to areas with a moderate to steep slope, compacted soil, or clay. Avoid application when heavy rain is forecast. Contamination of aquatic areas as a result of runoff may be reduced by including a vegetative filter strip between the treated area and the edge of the water body.

Follow all other precautions, restrictions, and directions for use on the SWITCH® 62.5WG Fungicide label.

For a copy of the emergency use label, Ontario growers may contact Josh Mosiondz, Provincial Minor Use Coordinator, OMAFRA, Guelph (226) 971-3407, Katie Goldenhar, Pathologist – Horticulture, OMAFRA, Guelph (519) 835-5792, or Travis Cranmer, Vegetable Crops Specialist, OMAFRA, Guelph (519) 835-3382. Non-Ontario growers from participating provinces may contact their local Provincial Minor Use Coordinator or provincial crop specialist(s). Alternatively, you may contact your regional supply outlet, Syngenta Canada Inc. Representatives, or visit the PMRA label site(<https://www.canada.ca/en/health-canada/services/consumer-product-safety/pesticides-pest-management/registrants-applicants/tools/pesticide-label-search.html>)

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

Cucurbit Downy Mildew Identified in Kent County – July 4, 2023



Cucurbit downy mildew has been identified in a cucumber field in Kent County. Disease presence is very low with less than one percent of the plants exhibiting lesions at this time. The field has been treated with preventative fungicides. This is the first report of cucurbit downy mildew in Ontario for the 2023 growing season. Given the wet weather over the weekend, we can assume that fields across Ontario are at high risk of developing symptoms over the coming days.

Scout all cucumber and cantaloupe fields for signs and symptoms. Look for distinct angular lesions (dark green, to yellow, to tan coloured) on the upper leaf surface and grey fungal spores on the corresponding lower leaf surface.

For information on control, refer to the article, Downy Mildew – get out and scout! (<https://onvegetables.com/2022/06/14/cucurbit-downy-mildew-get-out-and-scout-2/>)

The 2023 Cucumber Downy Mildew Scouting Program is funded through the Ontario Processing Vegetable Growers and delivered by Tomecek Agronomy Services in Kent County and the Norfolk Fruit Growers Association in Norfolk/Elgin.

Cucurbit Downy Mildew Identified in Kent County – July 4, 2023...con't



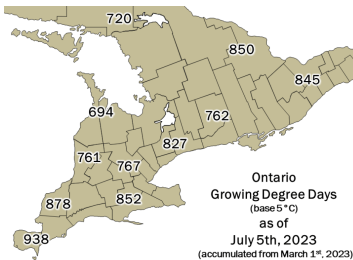
Cucurbit downy mildew lesions on the upper leaf surface



Dark grey sporulation on the lower leaf surface.

VCR – Vegetable Crop Report – July 6th, 2023

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.



Welcome back to the Vegetable Crop Report! As the first week of July comes to an end, we are beginning to see slow starts to our precipitation averages for most counties.

Brassica Crops – Rapid growth due to heat and excess moisture may lead to nutrient deficiencies, tip burn and hollow stem in broccoli over the next couple of weeks. These abiotic disorders often vary by cultivar in their severity. *Alternaria* is active and early detection and management of *Alternaria* will reduce potential inoculum later in the season. Incorporate all left over plant tissue immediately after harvest to lower the amount of inoculum available

to infect later plantings. Continue to scout for lepidopteran pests, aphids and thrips. Thresholds for lepidopteran pests using the cabbage looper equivalent can be found here: <https://onvegetables.com/2023/06/15/vcr2023-07/>

Garlic – Harvest is quickly approaching and some fields are quickly senescing if they are overly stressed. Allow the crop to reach at least 40% yellowing/senescence before harvesting for better yields and increased storability. Symptoms of *Fusarium* basal rot, *Botrytis* neck rot (<https://onvegetables.com/2023/06/30/botrytis/>) and stem and bulb nematode (<https://onvegetables.com/2022/03/10/velum-prime-garlic/>) will cause pre-mature senescence (**Figure 1**). Depending on how quickly your soil dries out, avoid irrigating too close to harvest as soil stuck to the bulb will make it more difficult to achieve a clean wrapper. If black plastic has been used for weed control, cutting it open to allow the soil to dry before harvest can also help with wrapper cleaning. If leek moth counts (<https://onvegetables.com/2023/05/17/leek-moth/>) were high last week, consider targeting the larvae that are now feeding on the crop. If mites or *Fusarium* were issues in storage last year, refer to this article with information about curing: <https://onvegetables.com/2021/12/09/stored-garlic-might-have-mites/>.



Figure 1– Infected plants with *Botrytis* neck rot appear stunted and green leaves can develop water-soaked lesions, wilt and eventually turn yellow (**A**). Plants infected with stem and bulb nematode show similar symptoms with yellowing of the leaves from the bottom of the plant moving upward, but the leaves turn yellow before wilting (**B**).

Onions – *Stemphylium* has been observed in multiple fields across the province. Conditions have been favourable for white rot development. There are no pesticides that are registered to control white rot. The best management strategy is prevention as spores can persist in the soil for at least 40 years. If only a few plants are observed, roguing out plants in these affected areas (**Figure 2**). The high humidity, heavy dews and colder mornings means that conditions may have been favourable for onion downy mildew in several areas across the province (**Figure 3**). The 2017 Muck Vegetable Cultivar Trial & Research Report from the Ontario Crops Research Centre – Bradford summarizes downy mildew product efficacy on page 66: [Click here](#) to visit page 66 of the 2017 report. Past research has shown Orondis Ultra (groups 40/49), Zampro (groups 45/40) and Ridomil Gold MZ (groups 4/M3) to be effective for downy mildew management when they are applied as a protective application, before infection. A full list of products registered for downy mildew on dry bulb onion can be found here: Onion x Downy Mildew – Ontario Crop Protection Hub (https://cropprotectionhub.omafra.gov.on.ca/control-solutions/crop-protection-vegetables?cs=91d15423-3ec2-4bf4-aa24-4c7918f70b10&st=*%&pe=06746dc5-d99f-4fde-9b70-316a82be29ca)

VCR – Vegetable Crop Report – July 6th, 2023...con't



Figure 2– White rot mycelium growing on onion bulb with black sclerotia present – July 2022.

Figure 3– Onion downy mildew will start as a tan lesion with purple-grey, velvety growth. Diseased leaves turn pale-green, yellow, and then collapse. Usually starts as a small patch then quickly spreads throughout the field – August 2019.



Tomatoes and Eggplants – Colorado potato beetle continues to be a concern for some growers. Two foliar applications of registered insecticides are recommend 5 days apart to ensure that newly hatched larva are also being targeted. Always read all product labels thoroughly before any pesticide application.

Growers should also be aware that early blight spores have been detected on spore traps across southwestern Ontario. Keeping up on a good general fungicide program should protect most crops, but be on the lookout for key symptoms, like foliar lesions with concentric rings, in your fields (**Figure 4**).



Figure 4– Early Blight on Tomato Plant

Pest Degree Day Forecasting

County	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
Bruce***	857	774	543	406	244	617	774	349
Essex*	1143	1038	759	603	391	845	1038	530
Chatham-Kent*	1065	964	697	545	343	781	964	475
Norfolk**	1045	945	685	535	336	766	945	464
Huron***	937	844	604	462	280	679	844	395
Wellington**	935	848	614	472	292	688	848	408
Simcoe County***	932	844	602	465	287	678	844	402
Durham***	1007	913	660	517	327	738	913	451
Peterborough	942	852	602	458	275	680	852	394
Kemptville***	1014	924	675	524	329	755	924	453
Sudbury***	871	793	576	446	282	646	793	387
Timiskaming***	849	771	549	419	262	621	771	361
Lambton**	1014	916	653	506	311	736	916	437
Thunder Bay	715	642	442	332	189	506	642	281
Middlesex*	1052	955	700	549	347	779	955	480
Renfrew	1011	923	677	528	337	757	923	461

*- 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

VCR – Vegetable Crop Report – July 6th, 2023...con't

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:

Norfolk(<https://onvegetables.com/2023/07/06/vcr2023-10/#NorfolkLink>)

Essex(<https://onvegetables.com/2023/07/06/vcr2023-10/#EssexLink>)

Sudbury(<https://onvegetables.com/2023/07/06/vcr2023-10/#SudburyLink>)

Chatham-Kent(<https://onvegetables.com/2023/07/06/vcr2023-10/#ChathamKentLink>)

Peterborough(<https://onvegetables.com/2023/07/06/vcr2023-10/#PeterboroughLink>)

Huron(<https://onvegetables.com/2023/07/06/vcr2023-10/#HuronLink>)

Durham(<https://onvegetables.com/2023/07/06/vcr2023-10/#DurhamLink>)

Thunder Bay(<https://onvegetables.com/2023/07/06/vcr2023-10/#ThunderBayLink>)

Bruce(<https://onvegetables.com/2023/07/06/vcr2023-10/#BruceLink>)

Kemptville(<https://onvegetables.com/2023/07/06/vcr2023-10/#KemptvilleLink>)

Lambton(<https://onvegetables.com/2023/07/06/vcr2023-10/#LambtonLink>)

Middlesex(<https://onvegetables.com/2023/07/06/vcr2023-10/#MiddlesexLink>)

Renfrew(<https://onvegetables.com/2023/07/06/vcr2023-10/#RenfrewLink>)

Simcoe(<https://onvegetables.com/2023/07/06/vcr2023-10/#SimcoeLink>)

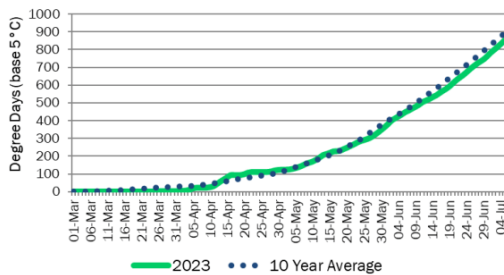
Wellington Centre(<https://onvegetables.com/2023/07/06/vcr2023-10/#WellCentreLink>)

Wellington North(<https://onvegetables.com/2023/07/06/vcr2023-10/#WellNorthLink>)

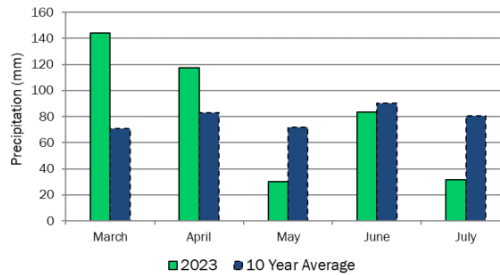
Timiskaming(<https://onvegetables.com/2023/07/06/vcr2023-10/#TimiskamingLink>)

Norfolk

Norfolk County Growing Degree Days

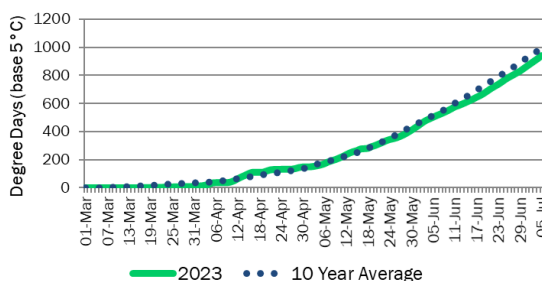


Norfolk Total Precipitation Per Month

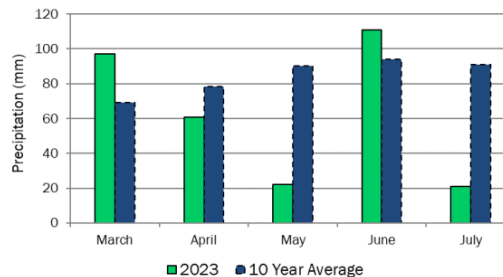


Essex

Essex County Growing Degree Days

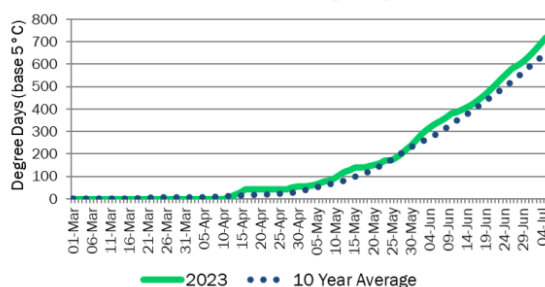


Essex Total Precipitation Per Month

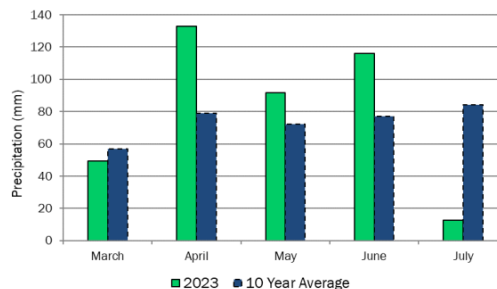


Sudbury

Sudbury County Growing Degree Days



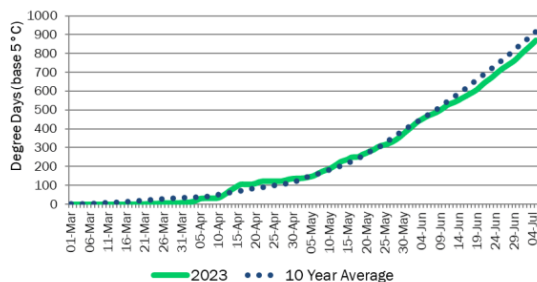
Subury Total Precipitation Per Month



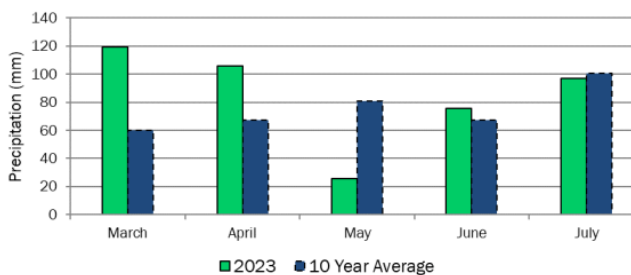
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Chatham-Kent

Chatham-Kent County Growing Degree Days

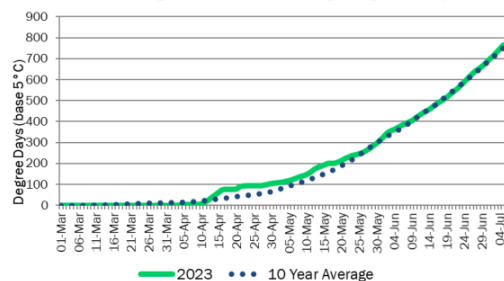


Chatham-Kent Total Precipitation Per Month

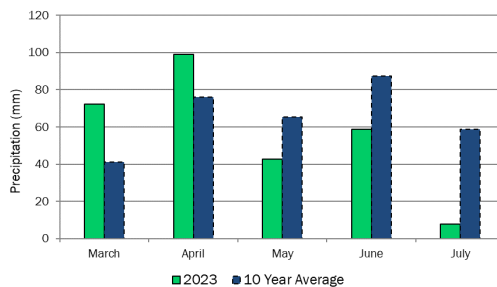


Peterborough

Peterborough County Growing Degree Days

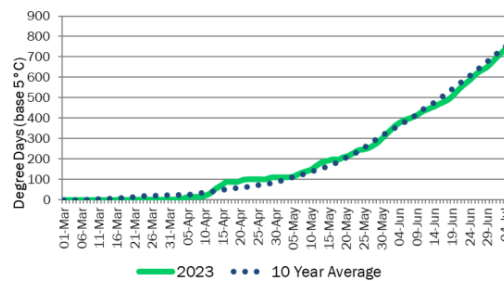


Peterborough Total Precipitation Per Month

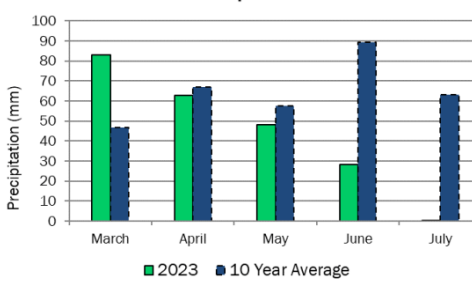


Huron

Huron County Growing Degree Days

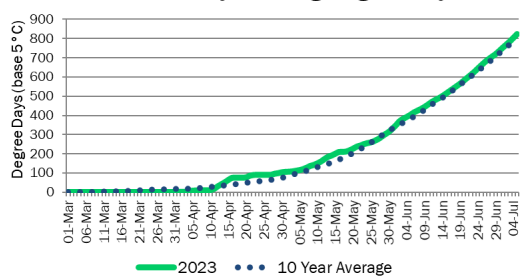


Huron Total Precipitation Per Month

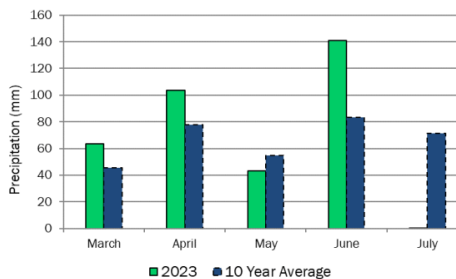


Durham

Durham County Growing Degree Days

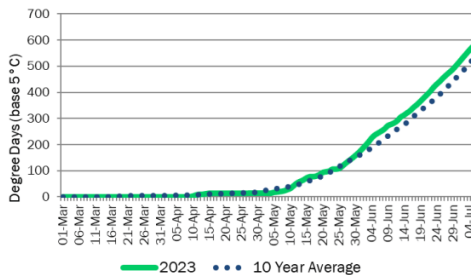


Durham Total Precipitation Per Month

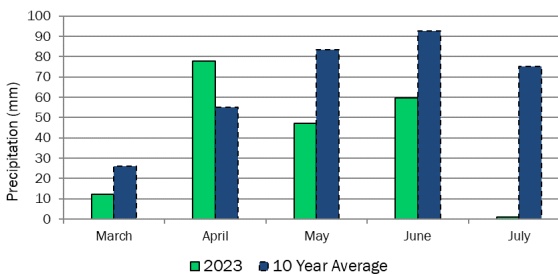


Thunder Bay

Thunder Bay Growing Degree Days



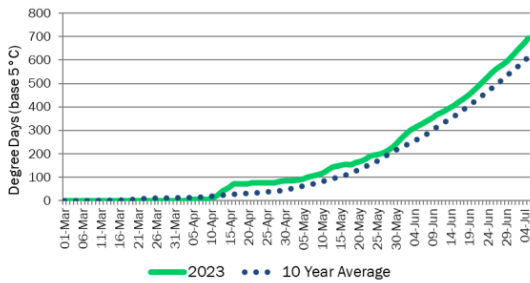
Thunder Bay Total Precipitation Per Month



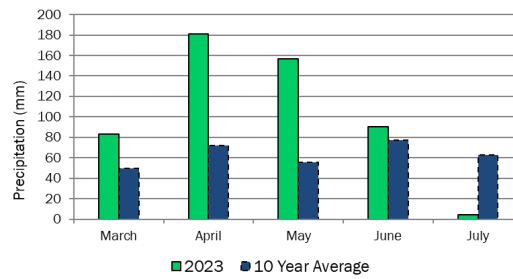
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Bruce

Bruce County Growing Degree Days

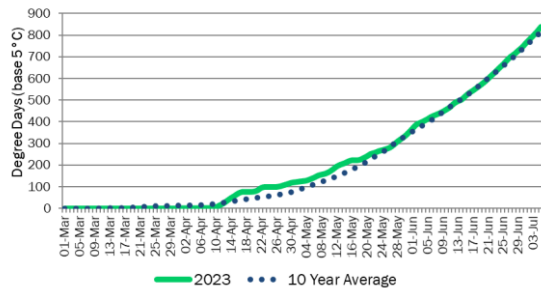


Bruce Total Precipitation Per Month

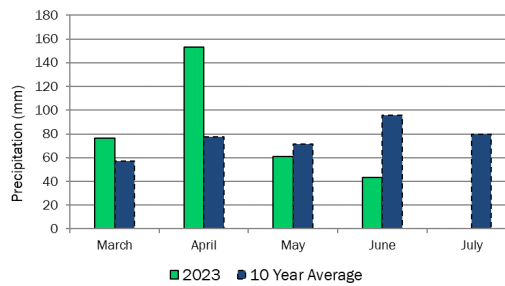


Kemptville

Kemptville County Growing Degree Days

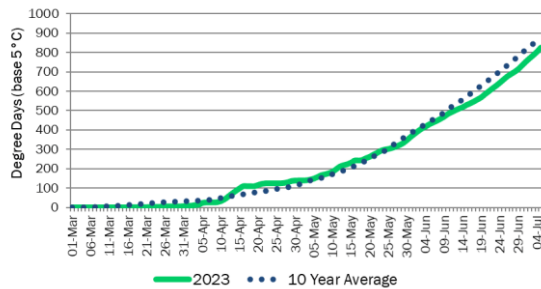


Kemptville Total Precipitation Per Month

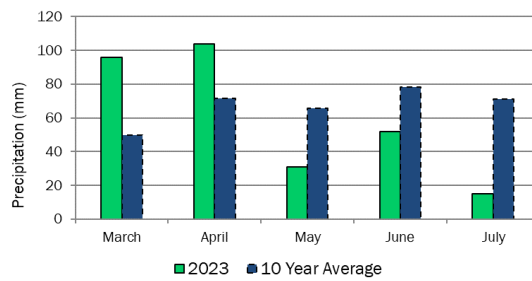


Lambton

Lambton County Growing Degree Days

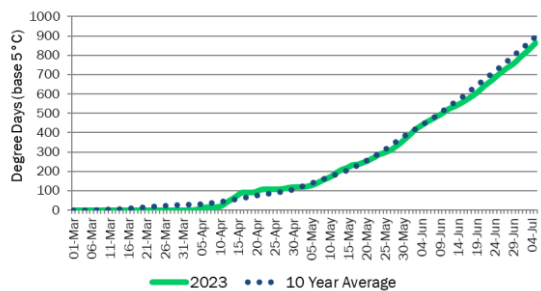


Lambton Total Precipitation Per Month

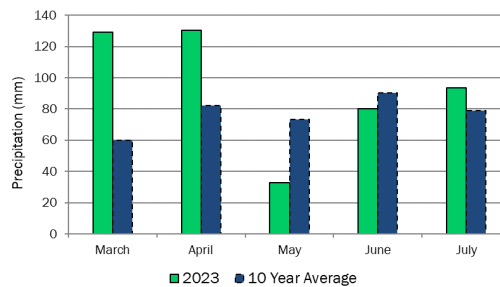


Middlesex

Middlesex County Growing Degree Days

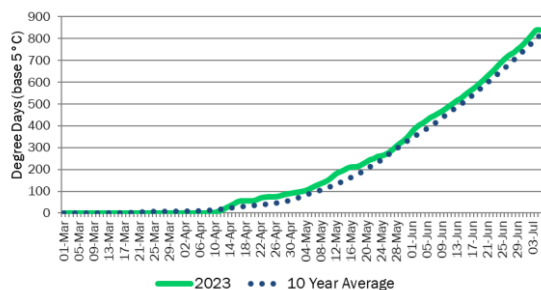


Middlesex Total Precipitation Per Month

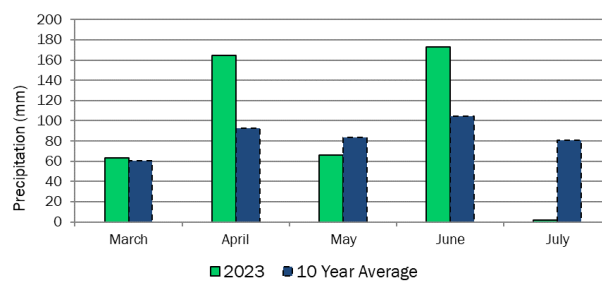


Renfrew

Renfrew County Growing Degree Days



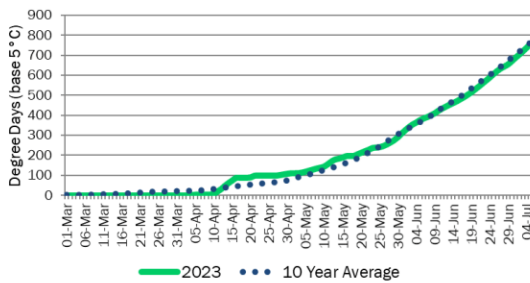
Renfrew Total Precipitation Per Month



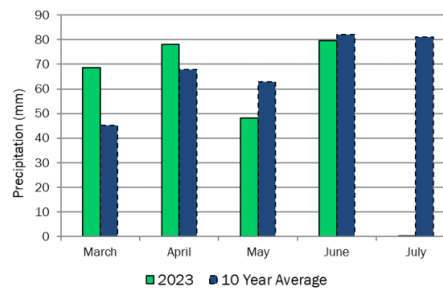
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Simcoe

Simcoe County Growing Degree Days

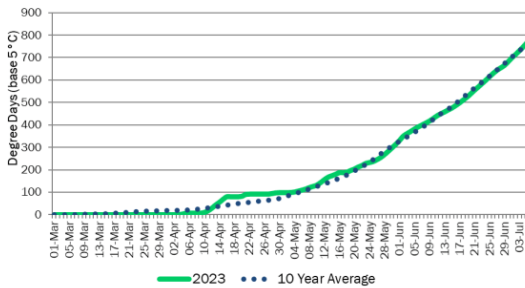


Simcoe Total Precipitation Per Month

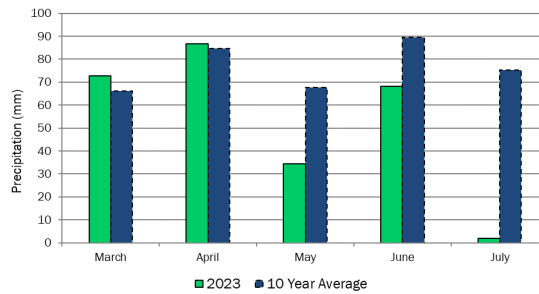


Wellington Centre

Wellington Centre County Growing Degree Days

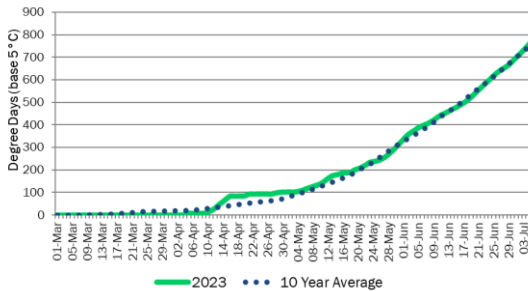


Wellington Centre Total Precipitation Per Month

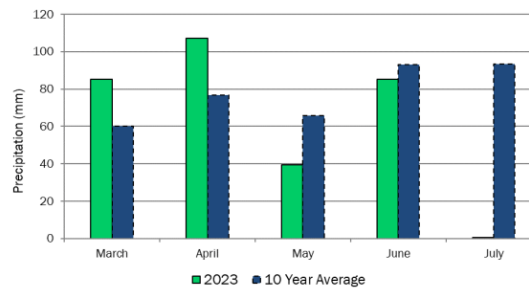


Wellington North

Wellington North County Growing Degree Days

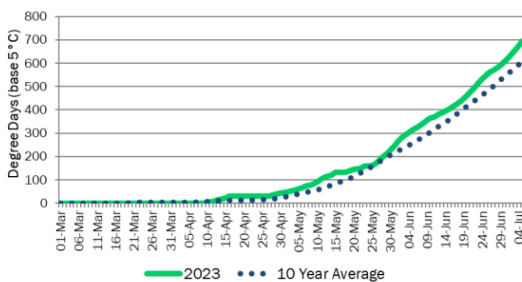


Wellington North Total Precipitation Per Month



Timiskaming

Timiskaming County Growing Degree Days



Timiskaming Total Precipitation Per Month

