



Wednesday, September 07, 2022

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SERENE Herbicide label expanded via Minor Use Program to help manage labelled weeds in various vegetable crop groups

Josh Mosiondz, Minor Use Coordinator, OMAFRA



The Pest Management Regulatory Agency (PMRA) recently announced the approval of a minor use label expansion registration for SERENE® Herbicide for control or suppression of labelled weeds in various vegetable crop groups in Canada. SERENE® Herbicide was already labeled for management of weeds crops in Canada. These minor use proposals were submitted by The Ontario Ministry of Agriculture, Food, and Rural Affairs as a result of minor use priorities established by growers and extension personnel.

The following is provided as an abbreviated, general outline only. Users should be making weed management decisions within a robust integrated weed management program and should consult the complete label before SERENE® Herbicide.

"In This Issue"

- ♦ SERENE Herbicide label expanded via Minor Use Program to help manage labelled weeds in various vegetable crop groups
- ♦ SuffOil-X spray oil emulsion label expanded via Minor Use Program to help manage aphids, spider mites, and powdery mildew on various vegetable crops and crop groups in Canada
- ♦ Late blight update: Phytophthora infestans detected in Chatham-Kent
- ♦ VCR – Vegetable Crop Report – September 1st, 2022

Crop / Crop Group	Target	Rate (L product/ha)	Application Information
Crop Group 1 (Root and Tuber Vegetables)	Suppression or Control of Labelled Weeds	179 – 717.5	Apply Serene as a uniform band or spot application directed at weeds on the ground between the crop. Apply using hooded or shielded application equipment. Ensure spray drift will not come in contact with foliage. Do not spray the crop directly. Do not apply when plants are under stress. Retreatment is required for regrowth of weeds.
Crop Group 3-07 (Bulb Vegetables)			
Crop Group 4-13 (Leafy Vegetables) (greenhouse or field)			
Crop Group 5-13 (Brassica Head and Stem Vegetables)			
Crop Group 8-09 (Fruiting Vegetables) (greenhouse or field)			
Crop Group 9 (Cucurbit Vegetables) (greenhouse or field)			
Crop Group 22 (Stalk, Stem and Leaf Petioles)			

SERENE Herbicide label expanded via Minor Use Program to help manage labelled weeds in various vegetable crop groups...con't

Toxic to aquatic organisms and non-target terrestrial plants. Observe buffer zones specified under DIRECTIONS FOR USE. To reduce runoff from treated areas into aquatic habitats avoid application 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 strip between the treated area and the edge of the water body.

Follow all other precautions, restrictions, and directions for use on the SERENE® Herbicide label carefully.

For a copy of the new minor use label contact Josh Mosiondz, Provincial Minor Use Coordinator OMAFRA, Guelph (226) 971-3407, your 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

SuffOil-X spray oil emulsion label expanded via Minor Use Program to help manage aphids, spider mites, and powdery mildew on various vegetable crops and crop groups in Canada

Josh Mosiondz, Minor Use Coordinator, OMAFRA



The Pest Management Regulatory Agency (PMRA) recently announced the approval of a minor use label expansion registration for SuffOil-X® spray oil emulsion for management of aphids, spider mites, and powdery mildew on various vegetable crops and crop groups in Canada. SuffOil-X® spray oil emulsion was already labeled for management of insects and diseases on a wide range of crops in Canada. These minor use proposals were submitted by the Ontario Ministry of Agriculture, Food, and Rural Affairs as a result of minor use priorities established by growers and extension personnel.

The following is provided as an abbreviated, general outline only. Users should be making insect and disease management decisions within a robust integrated insect and disease management programs and should consult the complete label before using SuffOil-X® spray oil emulsion.

Crop(s)	Target	Rate (L product / 1000L of water)	Application Information
Crop Group 1 (Root and Tuber Vegetables)	Suppression of spider mites. Deter feeding by Aphids.	13	Begin applications when pests appear. Apply at 7-14- day intervals. Do not apply more than 8 applications per year.
Crop Group 4-13 (Leafy Vegetables)			
Crop Group 22 (Stem, Stalk, and Petiole Vegetables)			
Asian Water Spinach (field and greenhouse)			
Globe Artichokes			

TOXIC to aquatic organisms. Observe BUFFER ZONES specified under DIRECTIONS FOR USE. To reduce runoff from treated areas into aquatic habitats avoid application 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 SuffOil-X® spray oil emulsion label carefully.

For a copy of the new minor use label, contact Travis Cranmer, Vegetable Crops Specialist, OMAFRA, Guelph (519) 835-3382, Dennis Van Dyk, Vegetable Crops Specialist, OMAFRA, Guelph (519) 766-5337, 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

Late blight update: *Phytophthora infestans* detected in Chatham-Kent

Joseph Tomecek (Tomecek Agronomic Services/M.Sc. candidate, Dept. of Plant Agriculture, Univ. of Guelph); Amanda Tracey (OMAFRA), Dr. Cheryl Trueman (Ridgetown Campus, Univ. of Guelph)



Since June 6 of this year, a project has been underway to assess Spornado and rotorod devices for the capture of *Phytophthora infestans*. Low levels of *Phytophthora infestans* DNA were detected at one of the eight locations setup across the municipality of Chatham-Kent on August 25 and again on August 29.

For more information on this project, see our previous article (<https://onvegetables.com/2022/06/24/spore-traps-monitoring-for-causal-agents-of-tomato-late-blight-in-chatham-kent/>) posted on June 24.

If you suspect late blight in your tomato (or potato) crop, please reach out to Amanda Tracey (Amanda.tracey@ontario.ca, 519-350-7134) or Cheryl Trueman (ctrueman@uoguelph.ca, 226-971-0654) to confirm diagnosis.

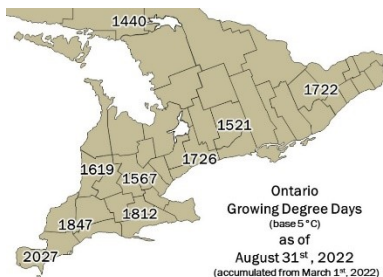
Late blight was confirmed (<https://onvegetables.com/2022/07/26/late-blight-update-july-26-2022/>) in eastern Ontario (Ottawa County) in late July this year.

Project collaborators: Yaima Arocha Rosete and Kristine White (Sporometrics), Hervé van der Heyden (Phytodata), and Genevieve Marchand (AAFC).

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

VCR – Vegetable Crop Report – September 1st, 2022

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 – All regions continue to match or surpass their 10 year average GDD trend except Peterborough. After some cooler weather this past week daytime temperatures will run high again into the mid- to high- 20s. Eastern and Northern regions may also see some days in the high teens as well as nighttime temperatures occasionally dropping to the low teens.

Precipitation – Huron and Peterborough received more rain than their 10 year average cumulative precipitation levels for August. Essex, Chatham-Kent, and Wellington were slightly below their 10 year averages. Norfolk, Simcoe, Kemptville and Sudbury received

well over half and Durham received just under half its 10 year average rainfall for August. Rain is expected to be scattered throughout next week across the province, sometimes with the risk of thunderstorms.

Crop Updates

Brassica Crops – Imported cabbageworms, tarnished plant bugs and cabbage maggot are very active in some regions. Black rot has been observed in several fields but is not as prevalent as 2021. Alternaria is starting to become prominent in some fields. Multiple species of Alternaria including *A. alternata*, *A. brassicae* and *A. brassicola* can create lesions on different parts of Brassica crops including the marketable heads, leaves and sprouts. It is important to rotate fungicides from different FRAC groups to reduce the chance of fungicide resistance to Alternaria. An Emergency Use Registration (EUR) for SWITCH® 62.5WG Fungicide was approved from July 8th, 2022, until July 7th, 2023. For more details see this post:

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, Prince Edward Island, and Newfoundland and Labrador (<https://onvegetables.com/2022/07/12/switchfungicideuralternarialeafblightbrusselsproutsbroccolicauliflower/>)

VCR – Vegetable Crop Report – September 1st, 2022...con't

Table 1. Products registered for use on broccoli, brussels sprouts, and cauliflower against *Alternaria* spp..

Fungicide	FRAC Group (s)	Maximum Number of Applications
Bravo ZN/ZNC Echo 720	M5	1
Miravis Duo	3 / 7	2
Quadris Top	3 / 11	4
Fontelis	7	4
Sercadis	7	3
Luna Sensation	7 / 11	3
Switch 62.5 WG	9 / 12	3 (Emergency Use for 2022)

Celery – Conditions continue to be favourable for bacterial blight. Continue to scout for *Cercospora*, *Septoria*, *Sclerotinia* pink rot and celery leaf curl. Avoid scouting when leaves are wet as pathogens can spread easily on clothes/equipment throughout the field. Disc harvested blocks to reduce pest pressure and plant a cover crop to prevent soil erosion. Continue to scout for tarnished plant bugs and aphids.

Garlic – Planting season will commence over the next month. Early plantings have an increased chance of bolting and winterkill. When purchasing planting stock this fall, send some cloves for stem and bulb nematode testing prior to planting. Even cloves with an intact basal plate and no observable damage may have nematodes living inside.

Onions – Harvest is underway in many areas while many other areas are starting to lodge. The **2022 Muck Crops Research Station Grower Field Day** is **September 8th** from **8:30 AM– 4:00 PM** at the Muck Crops Research Station (Ontario Crops Research Centre – Bradford). Check out cultivar evaluations and research trials at 1125 Woodchoppers Lane, King, ON.

Pest Degree Day Forecasting

*NOTE: Data as of August 31st, 2022

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
Essex*	2344	2184	1728	1453	1075	1876	2184	1322
Chatham-Kent*	2152	1997	1557	1291	881	1700	1997	1167
Norfolk**	2113	1961	1523	1252	838	1667	1961	1125
Huron***	1916	1767	1341	1080	685	1478	1767	956
Wellington**	1867	1720	1297	1037	646	1434	1720	919
Simcoe County***	1903	1755	1335	1075	686	1472	1755	954
Durham***	2027	1874	1442	1177	770	1582	1874	1051
Peterborough	1814	1666	1243	989	606	1380	1666	869
Kemptville***	2027	1872	1442	1182	774	1578	1872	1057
Sudbury***	1703	1571	1184	941	564	1311	1571	826

*- 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/2022/09/01/vcr2022-18/#essex>)

Chatham-Kent County(<https://onvegetables.com/2022/09/01/vcr2022-18/#chatham-kent>)

Norfolk County(<https://onvegetables.com/2022/09/01/vcr2022-18/#norfolk>)

Huron County(<https://onvegetables.com/2022/09/01/vcr2022-18/#Huron>)

Wellington County(<https://onvegetables.com/2022/09/01/vcr2022-18/#wellington>)

Simcoe County(<https://onvegetables.com/2022/09/01/vcr2022-18/#simcoe>)

Durham County(<https://onvegetables.com/2022/09/01/vcr2022-18/#durham>)

Peterborough(<https://onvegetables.com/2022/09/01/vcr2022-18/#peterborough>)

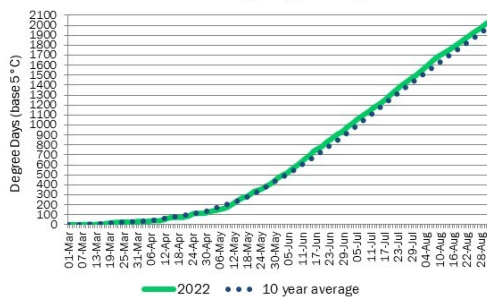
Kemptville(<https://onvegetables.com/2022/09/01/vcr2022-18/#kemptville>)

Sudbury(<https://onvegetables.com/2022/09/01/vcr2022-18/#sudbury>)

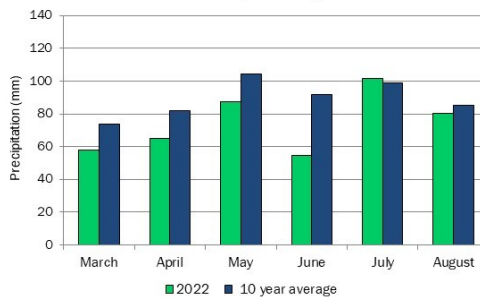
VCR – Vegetable Crop Report – September 1st, 2022...con't

Essex County

Essex Growing Degree Days

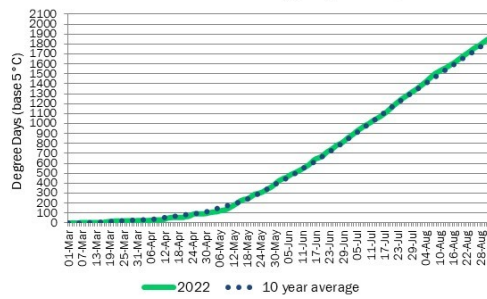


Essex Total Precipitation per Month

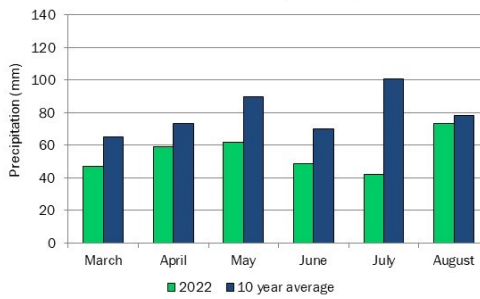


Chatham-kent County

Chatham-Kent Growing Degree Days

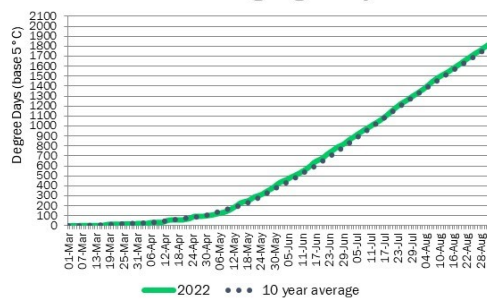


Chatham-Kent Total Precipitation per Month

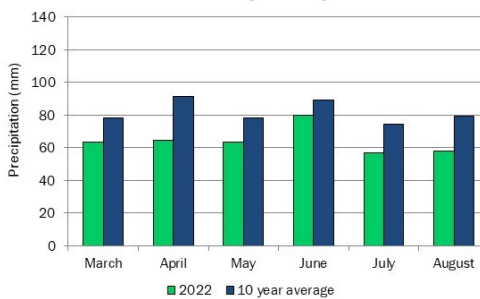


Norfolk County

Norfolk Growing Degree Days

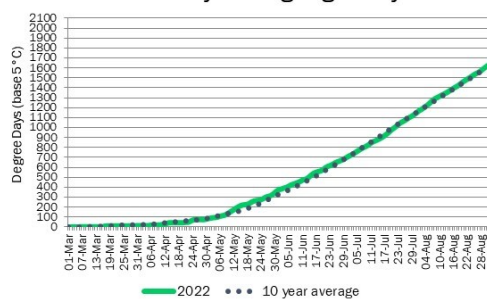


Norfolk Total Precipitation per Month

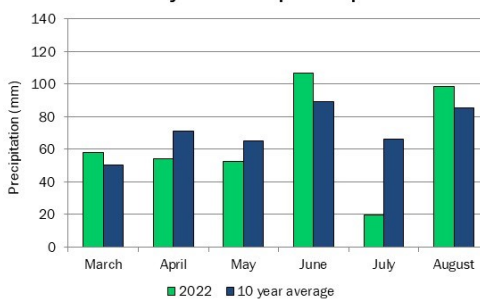


Huron County

Huron County Growing Degree Days

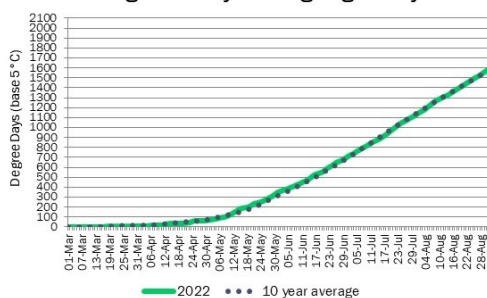


Huron County Total Precipitation per Month

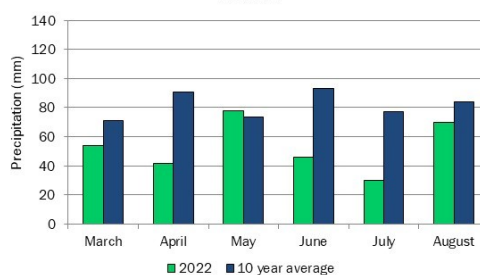


Wellington County

Wellington County Growing Degree Days

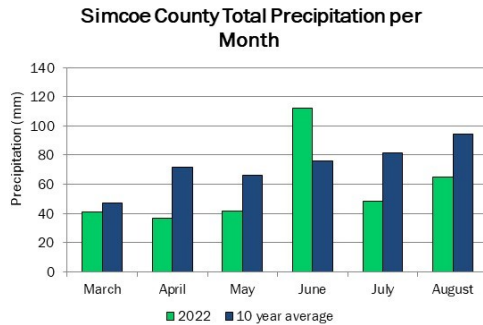
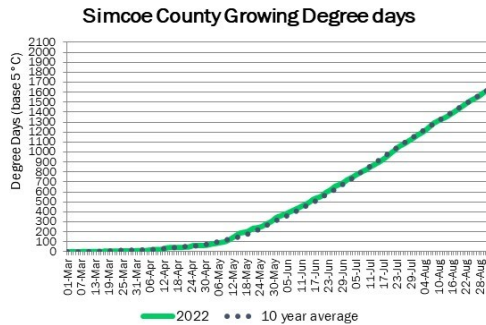


Wellington County Total Precipitation per Month

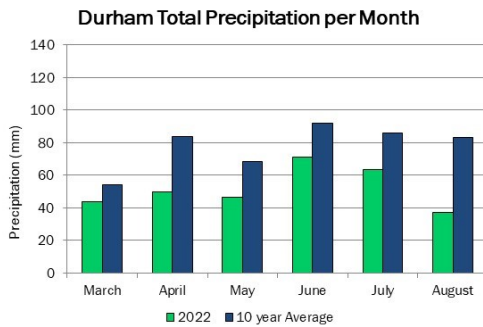
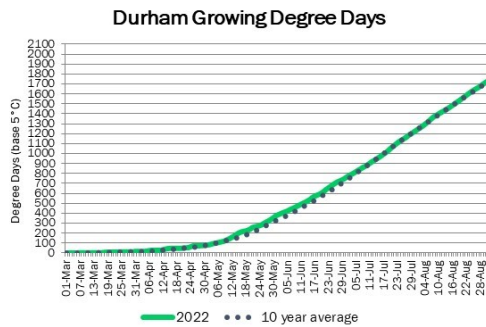


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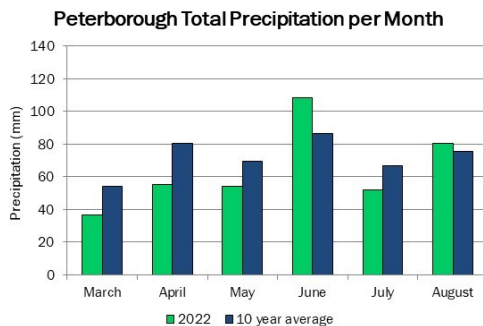
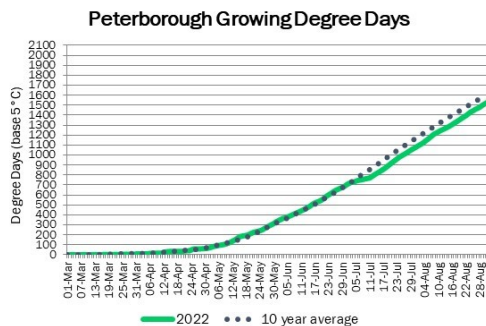
Simcoe County



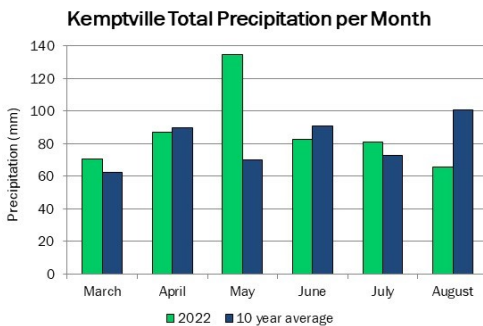
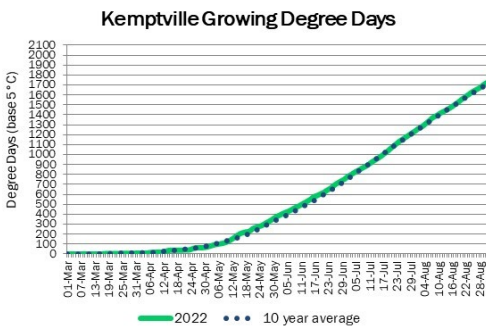
Durham County



Peterborough



Kemptville



Sudbury

