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"In This Issue"

 VCR – Vegetable Crop Report – July 21st, 2022

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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 – Most counties continue to match or surpass their 10 year GDD average except for Peterborough which is lagging significantly behind. Chatham-Kent, Huron and Sudbury are also trending marginally lower than their averages over the past week. Daytime temperatures will continue to range in the mid-20s to 30s across the province with the temperatures feeling even higher with the humidex. Nighttime temperatures range from the high-teens to

mid-20s in the south of the province to mid- to high-teens towards the north.

Precipitation – All regions received some rain over the past week. Essex and Kemptville are almost at their 10 year average precipitation level for July. Many are nearing or have reached half their July average except for Chatham-Kent, Huron, and Wellington which are lagging behind having only received a quarter to a third of their July averages. Possible showers with a risk of thunderstorms are forecasted for over the weekend and again mid-week.

Crop Updates

Cucumbers and Melons – continue to manage the crop for downy mildew control. Cool nights and dew fall promote disease infections and continued growth.

Garlic – Harvest is underway across the province where it has been dry enough to harvest. During harvest, look for bulbs that have a rotted basal plate or missing roots and send samples to the lab to test for stem and bulb nematode. Move bulbs out of direct sun once harvested. Good air circulation through totes, pallet boxes or baskets that reach all bulbs evenly will help to reduce over-curing some bulbs or under-curing others. Curing is complete when the bulb wrappers are crispy, the middle of the cut stem is hard, and the base of the stem is dry when cloves are removed. A shorter cure period focusing on reducing the relative humidity is key to avoiding bulb mites spreading pathogens over the next few months.

Ministry of Agriculture, Food and Rural Affairs



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Peppers – Pepper plants are progressing nicely, and we are coming up on the first harvest for many processing pepper growers. With the lack of rain there is quite a bit of blossom end rot being observed on fruit, especially bell peppers. Another issue to keep an eye out for is anthracnose. With the new, more aggressive species of anthracnose identified in 2021, it is imperative to look for early signs of anthracnose infection, removed diseased plants and maintain an appropriate fungicide program. If you are concerned about anthracnose in your pepper crop, feel free to reach out to <u>amanda.tracey@ontario.ca</u>.

Pumpkins and Squash – powdery mildew typically begins to appear in Southern Ontario in late-July to early August. Fungicide controls are most effective when applied at the first sign of disease. Scout fields regularly and consider applying a broad spectrum fungicide before row closure, when coverage is optimum. Look for the first signs of powdery mildew on the leaf undersides and petioles.



Figure 1. Powdery mildew on lower leaf surface

Early bloom is a good time to assess pumpkin and squash fields for pollinator activity. Many fields in Southwestern Ontario will benefit from the native pollinator, the hoary squash bee. These ground nesting bees are specialist pollinators and are more effective than honey bees if they are present in the area. They are most active in pumpkin and squash fields from sunrise to 9am. Their legs are much hairier then honey bees and are well adapted for collecting pollen



Figure 2. Hoary Squash Bee

Sweet Corn – we can expect to see an increase in activity of both Western bean cutworm and European corn borer over the next few weeks. Scout regularly for sign of egg masses and larval feeding. These pests are not always present in sweet corn, so scouting can really help to identify problem fields.



Figure 3. European corn borer in leaf whorl

Figure 4. Western bean cutworm eggs



Summer storm fronts originating in the American Gulf States bring the risk of corn earworm migration. While trapping reports from other Great Lakes jurisdictions has been low, consider the weather patterns and susceptible crop staging (fresh green silks) when planning an insecticide spray program.

Tar spot, a new disease of corn, has been identified in field corn in Ontario. While the risk to sweet corn production is considerably lower, infections occurring during the vegetative growth stages are concerning. Keep an eye out for symptoms. OMAFRA staff can help positively identify any suspicious lesions in sweet corn.

Tomatoes – With the many weeks of dry weather, growers are seeing much more blossom end rot (BER) this year versus most other years. BER is technically a calcium deficiency in the fruit, but it is not often due to a lack of calcium in the soil. A lack of soil moisture and root pressure needed to mobilize the calcium in the soil can make the fruit appear like they are deficient in calcium. Irrigating your tomato crop can help to reduce the amount of blossom end rot on fruit. Another concern right now comes with the much-needed rain that just blew through some areas of Southwestern Ontario. Pathogen spores, like those of *Phytophthora infestans*, the causal agent of late blight, are often blown in on winds from the south. Plants can show visual symptoms of late blight infection within 5 days of the initial infection. Make sure you are keeping your eyes peeled for greasy brown-green foliar lesions on upper leaves. If you suspect late blight in your crop, please reach out to amanda.tracey@ontario.ca.

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Pest Degree Day Forecasting

*NOTE: Data as of July 20, 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*	1544	1427	1097	905	654	1202	1427	817
Chatham-Kent*	1367	1255	944	764	501	1044	1255	683
Norfolk**	1367	1257	945	758	487	1046	1257	672
Huron***	1188	1081	781	604	352	876	1081	522
Wellington**	1180	1075	777	602	354	873	1075	525
Simcoe County***	1193	1087	793	616	370	887	1087	538
Durham***	1269	1158	852	672	407	950	1158	587
Peterborough	1119	1013	717	547	306	811	1013	468
Kemptville***	1282	1169	865	689	424	959	1169	606
Sudbury***	1038	950	695	539	308	779	950	467

*- Bivoltine region for ECB. First Peak Catch: 300-350 DD, Second Peak Catch 1050-1100 DD

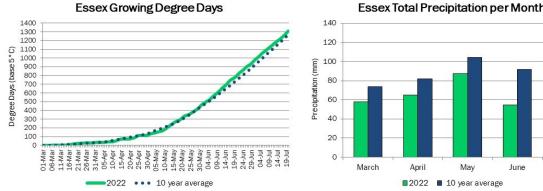
**- Overlap region for ECB. First Peak Catch: 300-350 DD Second Peak Catch 650-700 DD, Third Peak Catch 1050-1100 DD

***-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/2022/07/21/vcr2022-12/#essex) Chatham-Kent County(https://onvegetables.com/2022/07/21/vcr2022-12/#chatham-kent) Norfolk County(https://onvegetables.com/2022/07/21/vcr2022-12/#norfolk) Huron County(https://onvegetables.com/2022/07/21/vcr2022-12/#Huron) Wellington County(https://onvegetables.com/2022/07/21/vcr2022-12/#wellington) Simcoe County(https://onvegetables.com/2022/07/21/vcr2022-12/#simcoe) Durham County(https://onvegetables.com/2022/07/21/vcr2022-12/#durham) Peterborough(https://onvegetables.com/2022/07/21/vcr2022-12/#peterborough) Kemptville(https://onvegetables.com/2022/07/21/vcr2022-12/#kemptville) Sudbury(https://onvegetables.com/2022/07/21/vcr2022-12/#sudbury)

Essex County

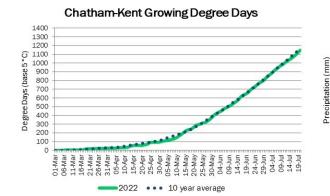




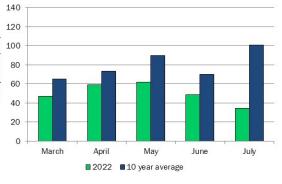
July

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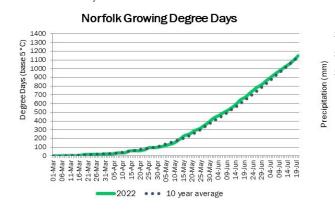
Chatham-kent County



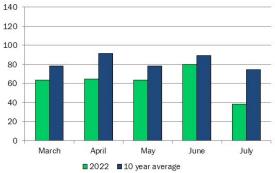
Chatham-Kent Total Precipitation per Month



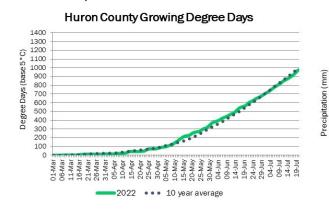
Norfolk County



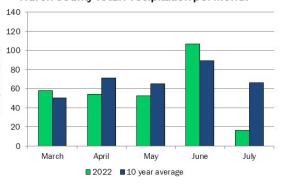
Norfolk Total Precipitation per Month



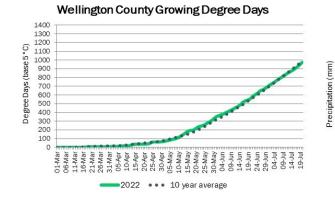
Huron County



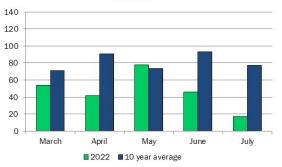
Huron County Total Precipitation per Month



Wellington County

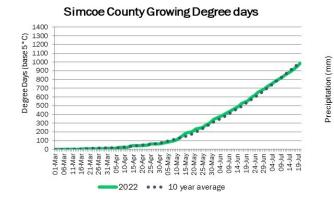


Wellington County Total Precipitation per Month



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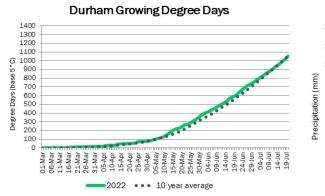
Simcoe County



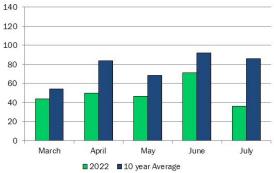
Simcoe County Total Precipitation per Month

■ 2022 ■ 10 year average

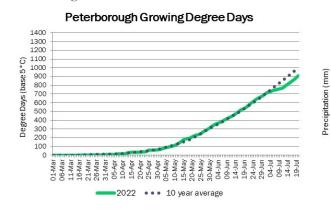
Durham County



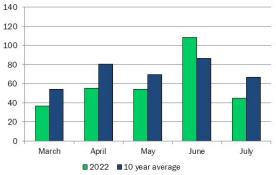
Durham Total Precipitation per Month



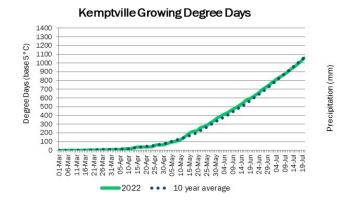
Peterborough



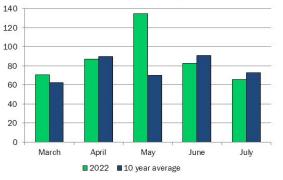
Peterborough Total Precipitation per Month



Kemptville



Kemptville Total Precipitation per Month



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Sudbury

