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VCR - Vegetable Crop Report - July 4, 2019

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 – A generally drier week in most growing regions has given plants a good stretch of sunlight to grow this week, however, all regions are still marginally to significantly behind their 10-year average degree day accumulations. Planting is now mostly completed for long season crops in most growing regions of the province. With this year's later planting dates and below average degree day

accumulations, growth and development of crops is still behind in most growing regions compared to normal.

Rainfall – Rainfall has generally slowed in most regions again this week with exception to Eastern Ontario in the Kemptville region. Norfolk and Sudbury exceeded their 10-year average rainfall totals in June, but the remaining growing regions had a chance to dry, coming marginally to significantly below their 10-year averages for rainfall totals for the month.

Crop Updates

Brassica Crops – Flea beetle, swede midge and diamondback moth levels have been high in many areas of the province. **Table 1** highlights the different insecticides registered on the different brassica crop groups for diamondback moth. Scout for imported cabbageworms, cabbage looper, aphids, thrips and tarnished plant bugs. Alternaria has been observed in a few fields along with fusarium yellows. It is good practice to incorporate all residue into the soil after a block is harvested and this will prevent the residue from being an inoculate source for Alternaria and a refuge for flea beetles.



Ministry of Agriculture, Food and Rural Affairs

Table 1. Insecticides for Diamondback Moth on Brassica Crops														
Listed pathogen control products are not necessarily registered on all brassica crops. This table is meant to only act as a guide. See the most up-to-date product label to ensure registration on a														
specific сгор.														
LEGEND: C = control S = suppression														
RD = Reduction in damage														
R = registered														
— = not registered for control of this pathogen 1 = Forly coscon control														
- = carry season control														
		Crop Group 5-13				Crop Group 4-13B					-	CG-1		
Trade Name	Group	Control Level	Broccoli	Cauliflower	Cabbage	Brussels sprouts	Napa cabbage	Mustard Greens	Chinese cabbage / Bok choy	Collards	Rapini / Broccoli raab	Mizuna	Kale	Rutabaga
Sevin XLR	1A	С	_	_	-	_	-	-	_	-	-	-	-	R
Lannate	1A	С	R	R	R	R	-	-	-	-	-	-	-	-
Orthene 75%	1B	С	-	R	R	R	—	_	_	-	—	-	-	—
Mako	3	С	R	R	R	R	-	-	-	-	-	-	-	—
UP-Cyde 2.5 EC	3	С	R	R	R	R	—	-	_	-	-	-	-	-
Dibrom	1B	С	R	R	R	R	-	-	_	-	-	-	-	—
Decis 5 EC	3	С	R	R	R	R	-	-	-	-	-	-	R	-
Matador 120EC	3	С	R	R	R	R	R	_	_	_	—	-	-	—
Silencer 120 EC	3	С	R	R	R	R	-	-	-	-	-	-	-	—
Ambush 500 EC	3	С	R	R	R	R	R	-	R	-	-	-	-	-
Perm-UP	3	С	R	R	R	R	R	-	R	-	-	-	-	-
Pounce	3	С	R	R	R	R	R	-	R	-	-	-	-	-
Concept	3/4	С	R	R	R	R	R	-	١	-	-	-	-	-
Minecto Duo 40WG	4/28	C1	R	R	R	R	R	R	R	R	R	R	R	-
Entrust	5	С	R	R	R	R	R	R	R	R	R	R	R	R
Success	5	С	R	-	R	R	R	R	R	R	R	R	R	R
Delegate	5	с	R	R	R	R	R	R	R	R	R	R	R	R
Dipel 2X DF	11	С	R	R	R	-	R	-	R	-	R	-	-	-
Bioprotec CAF	11	с	R	R	R	R	R	R	R	-	R	-	R	-
Rimon 10 EC	15	С	R	R	R	R	R	R	R	R	R	R	R	-
Intrepid	18	S	R	R	R	R	R	R	R	R	R	R	R	-
Coragen	28	с	R	R	R	R	R	R	R	R	R	R	R	R
Exirel	28	С	R	R	R	R	R	R	R	R	R	R	R	-
Verimark	28	С	R	R	R	R	R	R	R	R	R	R	R	-

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Carrot - Stands are establishing well in most growing regions of the province. Carrot weevil activity should be winding down in most parts of the province but be on the lookout for damage.

Celery - Scout for aster yellows, tarnished plant bugs, cutworms and carrot weevils. The degree day threshold for aster leafhoppers and tarnished plant bugs has been reached in all growing regions.

Garlic - Leek moth captures are starting to build in all areas where leek moth has been recorded in the past. For the most effective management, use a delta trap with lure to take weekly counts of leek moth. Time applications 3-10 days after the peak adult capture from the sticky cards. Most insecticides registered must come into contact with the larvae, and by waiting 3-10 days after the peak capture you are timing the insecticide when most of the eggs have hatched and the larvae are starting to come out of the meristem. Take time to scout for leek moth damage; the damage can look like sawdust on the leaves. Managing leek moth levels this year will likely reduce damage next year.

Onions – The earliest seeded onions at the 6th to 8th leaf stage however most fields are averaging around the 5th leaf stage. Stemphylium leaf blight has been confirmed on transplants and direct seeded onions in the Holland and Thedford marshes. Luna Tranquility rotated with Quadris Top have shown to have the best activity on Stemphylium. Onion and seedcorn maggot flies are active in all areas. Relative to other years, low levels of thrips have been observed. Levels of thrips will generally start to increase as hay is cut and wheat is harvested, however, most areas have not reached the spray threshold of 1 thrips/leaf. Onion maggot damage, cutworm damage, smut and pink root have been found in transplants and direct seeded fields. When scouting, look for wilted plants and check the base for white, mycelial growth as conditions have been favourable for white rot.

Peppers – The earliest plantings of peppers are starting to see their first flowers open. Monitoring for pepper weevil should begin in most fields, as they can lay eggs in both flowers and buds. Peppers are also seeing more bacterial disease this spring and growers should monitor the situation in their crops closely, as wet weather will spread the disease.

Potatoes – Potato leafhopper numbers have been elevated in some fields. Be on the lookout for leafhoppers and symptoms of hopperburn on plants (seen in picture below). Eggs from overwintered Colorado Potato Beetle adults are hatching and larvae are actively feeding in some fields. If you used a neonic at seeding, make sure you are using a different mode of action for any follow-up applications on CPB. If you are not seeing the control you usually do, please contact Dennis (519-766-5337) for free resistance testing.



Tomatoes – The earliest plantings of tomatoes are starting to see canopy closure between the twin rows. If growers are doing a spray program for Phytophthora capsici, just before canopy closure is the ideal time for the first application. Growers are also seeing much more bacterial disease this spring when compared to others. Wet weather conditions will aide in the spread of bacterial disease across fields.

Pest Degre	e Day	Forecasting
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Pest	Carrot Rust Fly	Onion Maggot	Carrot Weevil	Aster Leafhopper	Tarnished Plant Bug	Cabbage Maggot	Seedcorn Maggot	European Corn Borer	
THRESH- OLD	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*	1100	999	723	565	368	811	999	491	
Chatham- Kent*	975	876	612	460	261	695	876	393	
Norfolk**	952	857	602	455	257	683	857	391	
Huron***	756	670	441	313	150	511	670	257	
Wellington**	776	692	462	336	174	533	692	283	
Simcoe County***	755	669	443	319	162	512	669	267	
Durham***	807	721	494	372	205	564	721	317	
Peterborough	779	692	462	330	164	534	692	275	
Kemptville***	853	766	535	400	216	608	766	336	
Sudbury***	629	557	371	270	137	427	557	118	

*- 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/2019/07/04/vcr-8/#essex) Chatham-Kent County(https://onvegetables.com/2019/07/04/vcr-8/#chatham-kent) Norfolk County(https://onvegetables.com/2019/07/04/vcr-8/#norfolk) Huron County(https://onvegetables.com/2019/07/04/vcr-8/#huron) Wellington County(https://onvegetables.com/2019/07/04/vcr-8/#simcoe) Durham County(https://onvegetables.com/2019/07/04/vcr-8/#simcoe) Durham County(https://onvegetables.com/2019/07/04/vcr-8/#durham) Peterborough(https://onvegetables.com/2019/07/04/vcr-8/#peterborough) Kemptville(https://onvegetables.com/2019/07/04/vcr-8/#kemptville) Sudbury(https://onvegetables.com/2019/07/04/vcr-8/#sudbury)

Essex County



Essex Total Precipitation per Month



Chatham-Kent County



Chatham-Kent Total Precipitation per Month



Norfolk County



Norfolk Total Precipitation per Month



140

120

100

80

60

40

20

0

March

Precipitation (mm)

Huron County



Wellington County



Wellington County Total Precipitation per Month



Simcoe County



Simcoe County Total Precipitation per Month



May ■2019 ■10 year average

April

June

July

Huron County Total Precipitation per Month



Durham County



Peterborough









Peterborough Total Precipitation per Month



Kemptville Total Precipitation per Month



Sudbury



Cucurbit Downy Mildew Update - July 5th, 2019



For the week of July 1-5, 2019 there was no downy mildew reported in the Norfolk/Elgin or Kent County areas.

Looking at the IPM pipe website, there were new reports of downy mildew in Alabama and North Carolina this week. The forecast predictions moving into the weekend are for a low-to-moderate risk of infections along the Eastern Seaboard, and minimal risk of spread into the Great Lakes Basin, at this time.

Click here to visit the IPM pipe website(<u>http://cdm.ipmpipe.org/</u>).

The 2019 downy mildew scouting program is funded by the Ontario Cucumber Research Committee. In Norfolk, the scouting services are provided by the Norfolk Fruit Growers Association. In Kent County, the program is managed by Tomecek Ag Services.