

## OMAFRA Vegetable Team:

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## Garlic Workshop – Production and Pest Management Travis Cranmer, Vegetable Crops Specialist, OMAFRA



This workshop will focus on production and pest management of growing garlic in Ontario. Topics include clean seed production, cultivar selection, seeding spacing and density, crop insurance, weed control, pathogen and insect identification and management, crop rotation, scaping, upgrading equipment, cleaning, grading, curing and storage.

The workshop takes place at Fleetwood Hills Farm, **200 St Mary's Road** in Janetville, ON, **Friday, August 19th from 9:30-4:30**. The workshop will take place in an open-air barn with no heat or air conditioning.

If you or anyone else you know would like to attend this workshop, please **register** by contacting OMAFRA's Agricultural Information Contact Centre by calling **1-877-424-1300** or filling out this registration form online: <u>https://survey.clicktools.com/app/survey/go.jsp?iv=1y59n0qcz8rld</u>. Space is limited so please register early.



Insect identification on sticky cards



Workshop binder provided



Identify bulb and stem nematode as well as seedcorn and onion maggot fly

Workshop materials provided. Registration fee of \$25 (\$15 for GGAO members) is required at the door. A light lunch will be provided. If you have questions about what will be covered, please contact Travis Cranmer at <u>travis.cranmer@ontario.ca</u>.



# Setting Up a Stale Seedbed

Kristen Obeid, Weed Management Specialist - Horticulture, OMAFRA



As the rains continue to delay planting this spring, weeds are beginning to germinate and are getting a head start. But ... this may not be a bad thing. It is the perfect opportunity for growers to set up a stale seedbed, particularly horticulture growers that do not have a wide choice of herbicides to use in their crops.

The stale seedbed technique is an old method to enhance weed control in seeded crops. It was developed by farmers years ago, even before herbicides were available. This technique works best for later seeded

crops but may be adapted to many systems. A stale seedbed is created by tilling the soil early which encourages the weeds to germinate. In most springs, this means a tillage in April, with a good flush of weeds by mid-May. However, this year we are seeing some fields already covered with weeds even without the early tillage. The weeds are then killed with an herbicide without disturbing the soil. This is accomplished by using herbicides like glyphosate or Ignite, or by non-chemical means like flamers or mowing very close to the ground. The key is to NOT disturb the soil, so that weed seeds remain buried. The crop is then seeded or planted with minimal soil disturbance. In many cases, growers find that weeds only sprout in the small area disturbed around the seed or transplant.

If you are lucky, a new flush of weeds will emerge before the crop. Repeating the burndown herbicide or flaming just before the crop emerges will enhance the level of weed control. In many cases, two burndowns will control weeds through the critical period of weed control for most crops.

Soil applied herbicides can also be used pre-emergence or post-transplant where registered.

# VCR - Vegetable Crop Report - May 26th, 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 counties are meeting or surpassing their 10 year GDD averages. Temperatures are expected to rise into the mid- to high- twenties at the beginning of next week before dropping again slightly towards the end of the week.

**Precipitation** – All counties saw some rainfall over the past week though most are behind the 10 year average. Kemptville however has now greatly surpassed their 10 year average rainfall for May. Rain is forecasted for tomorrow in most regions except Sudbury

which may see rainfall later. There is also the risk of thunderstorms in some areas.

### **Crop Updates**

**Brassica Crops** – Flea beetles, swede midge and cutworms are active. Seedcorn maggot has reached the threshold for first generation emergence and cabbage maggot will be emerging soon in most regions across the province and is likely already active in Essex and Chatham-Kent. Diamondback moths and imported cabbageworms are likely to be observed very soon. Pull up wilted plants and inspect roots for larvae.

**Celery** – Transplants are establishing well, and most fields have been planted across Southwestern Ontario. The threshold for aster leafhopper has been reached in Essex, Chatham-Kent, Norfolk, Huron and Kemptville, Sudbury and every county has had enough growing degree days for tarnished plant bug.

**Garlic** – Plants showing tipburn earlier in the season are starting to look better as the newer leaves emerge. Scout for leek moth by looking for green frass and ragged leaves. Insecticides should be applied  $\sim$ 7 days after peak trap capture. Wireworm, cutworm and seedcorn maggot damage has been observed.

**Onions** – Earliest direct seeded onions are at the third leaf stage while the majority of fields are in the flag or 1st leaf stage. The cool weather has made germination rates variable in many fields. Transplant fields are establishing well. Onion and seedcorn maggot flies have reached their threshold for the first-generation emergence in all counties except for Sudbury and damage from early season activity has been observed. Dig up wilted plants and inspect roots for onion maggot larvae.

# VCR – Vegetable Crop Report – May 26th, 2022...con't

**Tomatoes** – planting is about 75-80% for processing tomatoes and fresh market tomatoes are continuing with their staggered planting schedules. Be sure to keep and eye out for early season insect pests like black cutworm, wireworm and Colorado potato beetle. These pests are becoming more of an issue with the loss of some key insecticides and early detection is key to managing them effectively.

### Pest Degree Day Forecasting

\*NOTE: Data as of May 25, 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*	488	427	265	185	102	314	427	153
Chatham-Kent*	426	369	223	153	76	268	369	126
Norfolk**	427	372	229	154	73	274	372	124
Huron***	385	334	202	137	68	241	334	111
Wellington**	356	307	177	114	54	217	307	93
Simcoe County***	351	301	175	110	53	213	301	88
Durham***	389	335	197	128	55	239	335	100
Peterborough	345	296	167	106	40	206	296	81
Kemptville***	398	341	205	141	67	243	341	114
Sudbury***	258	226	139	95	50	166	226	79

\*- 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(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#essex</u>) Chatham-Kent County(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#horfolk</u>) Norfolk County(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#horfolk</u>) Huron County(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#huron</u>) Wellington County(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#wellington</u>) Simcoe County(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#simcoe</u>) Durham County(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#durham</u>) Peterborough(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#durham</u>) Peterborough(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#durham</u>) Simcov County(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#durham</u>) Peterborough(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#durham</u>) Sudbury(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#kemptville</u>) Sudbury(<u>https://onvegetables.com/2022/05/26/vcr2022-4/#kemptville</u>)

### Essex County



## VCR - Vegetable Crop Report - May 26th, 2022...con't

Chatham-kent County





■ 2022 ■ 10 year average

Norfolk County



Norfolk Total Precipitation per Month



Huron County







Wellington County



Wellington County Total Precipitation per Month



# VCR - Vegetable Crop Report - May 26th, 2022...con't

#### Simcoe County





#### **Durham County**



#### **Durham Total Precipitation per Month**



#### Peterborough



#### Peterborough Total Precipitation per Month



#### Kemptville



#### Kemptville Total Precipitation per Month



#### Sudbury







# **New Carrot Herbicide Options for 2022**

Dennis Van Dyk, Vegetable Crops Specialist, OMAFRA



There are some new herbicide options for carrot growers to control weeds in 2022, Tough 600EC and Ultra Blazer. This will give growers a few more options with the current linuron supply issues.

As you may have seen in Tuesday's Fresh News from The Grower e-Newsletter, Tough 600EC has been registered for an Emergency Use Request (EUR) for the 2022 season(<u>https://</u>

www.thegrower.org/index.php/news/emergency-use-approved-labelled-weeds-carrots). A special thanks to the Fresh Vegetables Growers of Ontario (FVGO) for sponsoring this EUR!

In addition to the EUR for Tough 600EC, a User Requested Minor Use Label Expansion (URMULE) has been approved for Ultra Blazer.

Here are some further details about both products:

### Tough 600EC (pyridate)

Post-emergence control of labelled broadleaf weeds

Registration Period: May 1, 2022 – December 31, 2022

Group 6 herbicide

Weeds controlled: redroot pigweed, common lamb's quarters, black nightshade, false cleavers

Application rate: 0.5-0.75 L/ha (202-303 mL/acre)

**Application details:** Apply to actively growing carrots in the 2 to 7 leaf stage of crop growth. Use an appropriate spray volume that will provide sufficient coverage of the target weeds. Apply Tough 600 EC Herbicide at the high rate when weed pressure is high or for harder to control weeds. Apply to carrots when the weeds are young and actively growing. 1 application per season.

**REI:** 12 hours **PHI:** 60 days

**Further considerations:** Tough 600EC Herbicide has exhibited crop tolerance to carrots in development trials when used according to label recommendations and rates. However, Tough 600EC Herbicide has not been tested on all carrot varieties for tolerance. Use the following considerations prior to applying Tough 600EC Herbicide to carrots:

- Test the product on a small area first, under local conditions and using standard practices, to confirm the product is suitable for widespread application.
- Do not apply if the crop is under stress caused by nutrients, disease or insects or climatic conditions.
- Apply to carrots which are actively growing, that have sufficiently hardened off and have a substantial waxy cuticle.
- Avoid irrigation in the 3 days just prior to herbicide application.
- Delay application for 3 days after rainfall, cool, or cloudy weather to allow the crop to harden-off.
- Consult with your Belchim representative prior to adding any surfactants or tank-mix partners not specifically mentioned on the label.
- Do not apply Tough 600 EC Herbicide when temperatures exceed 25°C, as crop injury may result. Application of Tough 600EC Herbicide is discouraged when the 24-hour temperature difference is >10C, as this may increase the risk of crop injury.

**Comments:** Research conducted by Dr. Clarence Swanton at the University of Guelph has identified this post-emergence product with good crop tolerance.

View the Tough 600EC label(<u>https://onvegetables.com/wp-content/uploads/2022/05/</u>pyridateToughEURcarrotsweedsacceptedENlabel27April2022.pdf)

# New Carrot Herbicide Options for 2022...con't

### Ultra Blazer (aciflurofen)

Post-emergence suppression of redroot pigweed

### Group 14 herbicide

Weeds suppressed: redroot pigweed

Application rate: 94 mL/ha (38 mL/acre) NOTE: micro-rates, much lower than the rate registered for use on soybeans.

**Application details:** apply after carrots have emerged and redroot pigweed is in the 2-4 leaf stage. Apply with 0.5% v/v of Assist Oil Concentrate. 1 application per season.

**REI:** 12 hours **PHI:** 40 days

**Comments:** A priority identified in the 2012 Minor Use Meeting, the Ultra Blazer URMULE has been a long time coming and should be a helpful tool in the fight against Group 5 & 7 resistant pigweed.

View the Ultra Blazer label(<u>https://onvegetables.com/wp-content/uploads/2022/05/acifluorfenBlazerC63num2022-0894carrotsweedsENlabel29April2022.pdf</u>)