











Ontario Crops Research Centre – Bradford (Muck Station) IPM Report 2023

This is the Muck Crops IPM Update for July 3, 2023

Highlights

- Stemphylium leaf blight has been identified on onions in the marsh and an early spray is recommended to protect onions from infection.
- White rot has been identified in a couple onion fields.
- Most seeded onions are around the 5 true leaf stage.
- Most carrot fields are around the 3rd to 4th true leaf stage, but early carrots are around the 6th leaf stage.
- A second insecticide application is recommended to control carrot weevils if your field is over the 5 weevils/trap threshold.
- The AgRobotics Working Group will be hosting a Robotics Demo Day on July 12, starting at the Muck Station. More information, and to register for the event (free), is available here.

Disease Forecasting Highlight:

Botrytis	Onion downy	Stemphylium	White Rot	Sclerotinia	General	Lettuce
leaf blight	mildew	leaf blight	on onions	(White	conditions	downy
(BOTcast)	(DOWNcast)	(BSPcast)		Mold) on	for disease	mildew
				Carrot	(TOMcast)	(BREMcast)
LOW RISK	LOW RISK	MODERATE	LOW-	LOW RISK	HIGH RISK	HIGH RISK
		RISK	MODERATE			
			RISK			

Onion Update

Most seeded onions are now at the 5th true leaf stage. Stemphylium leaf blight has been confirmed on onions in the marsh. The disease has mainly been found in transplant onions and symptoms are currently minor. The current risk for disease is moderate, but we still recommend an early spray to protect the onions from infection if you have not done so already. The seed treatment EverGol Prime (group 7) helps to protect onions early in the year from infection, but sprays are still necessary to manage the disease.

First spray: If your seed is treated with EverGol Prime or Pen 240 your first spray should be a product containing mancozeb (group M3) such as Manzate Pro-Stick, Dithane Rainshield or Penncozeb 75 DF Raincoat.







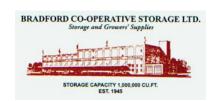












Manzate Pro-Stick is registered on onions for Purple Blotch and Botrytis leaf blight while Dithane Rainshield and Penncozeb 75 DF Raincoat are registered for Botrytis only, and if applied to control these diseases it could also help to suppress Stemphylium.

Second spray: Miravis Duo (group 7). Sercadis and Aprovia/Aprovia Top are also group 7s and are registered to suppress Stemphylium as well. Rotating these products is important even though they are all group 7s. Miravis Duo could be your first spray if your seeds were not treated with EverGol Prime or Pen 240.

We do not recommend spraying Quadris Top (group 11/3) or Luna Tranquility (group 7/9) as Stemphylium has developed resistance to these fungicides. There is very high resistance in Stemphylium to one of the fungicides in Quadris Top and high resistance to one of the fungicides in Luna Tranquility.

We are closely monitoring thrips for increasing populations. It is important to only start spraying once thrips are present and populations are starting to build in your field. Thrips populations are field specific and can vary from field to field. As your thrips population builds, Movento 240 SC is the first insecticide that should be sprayed. Movento should be sprayed back-to-back no more than 2 weeks apart for resistance management.

Onion maggot damage has been minor overall and is mainly being seen in transplants. White rot has been identified in a couple onion fields, but the risk remains low-moderate due to high temperatures.

For weed control, registered herbicides include Chateau, Goal 2XL, Pardner and bromoxynil products. Allowing the onions waxy leaf layer to develop can help protect the plant from herbicide injury. Registered herbicides can be found in OMAFRA's Weed Control Guide for Hort Crops (dry bulb onions starting on page 128) and the Ontario Crop Protection Hub.

Carrot Update

Many carrots are now at the 4th true leaf stage. If your field is over the 5 weevils/trap threshold a second spray of Rimon 10 EC or Exirel is recommended at the 4th leaf stage. Carrot weevils have likely completed their egg laying period. Later seeded carrots should avoid the majority of this egg laying period and likely do not need to be sprayed for weevil control. If needed, this second insecticide application can protect carrots from weevil damage for the rest of the season.



For more information on controlling carrot weevils, check out our "How to Control Carrot Weevil" video on our Muck Crops IPM YouTube channel by clicking on the thumbnail to the left. We hope this video is informative and please let us know if there is anything we can improve on for future videos!

For weed control, registered herbicides can be found in OMAFRA's <u>Weed Control Guide for Hort Crops</u> (carrots starting on page 94) and the <u>Ontario Crop Protection Hub</u>.



















Celery Update

Celery transplanting is finishing up throughout the marsh. Diseases and insect damage have been very low. Herbicide damage is the most common concern right now. We will be closely monitoring for any celery leaf curl or other diseases.

Daily Weather

Date (June/July)	Max temperature (°C)	Min temperature (°C)	Rain (mm)
29	26.5	7.1	0.0
30	27.6	17.6	0.0
1	28.7	18.0	0.4
2	24.7	17.2	0.0

Soil Temperature (°C): 5cm: 20.8

Any questions or comments? Please call Tyler Blauel or Mary Ruth McDonald at 905-775-3783





