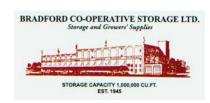




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Ontario Crops Research Centre – Bradford (Muck Station) IPM Report 2023

This is the Muck Crops IPM Update for June 27, 2023

Highlights

- Stemphylium leaf blight has been identified on onions in the marsh and an early spray is recommended to protect onions from infection.
- Most carrot fields are around the 3rd to 4th true leaf stage, but early carrots are around the 5-6th leaf stage and later carrots are at the bunny ear stage.
- Most seeded onions are at the 4th true leaf stage.
- Thrips populations were slowly rising but have remained the same or decreased slightly with the rain.
- We have received ~37mm of rain since late last week.
- The Muck Station will be closed on Friday, June 30th next week for Canada Day. We are planning to scout Thursday fields on Wednesday, and Friday fields on Thursday next week.
- 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 downy
leaf blight	mildew	leaf blight	on onions	(White Mold)	conditions	mildew
(BOTcast)	(DOWNcast)	(BSPcast)		on Carrot	for disease	(BREMcast)
					(TOMcast)	
LOW RISK	LOW RISK	MODERATE-	LOW RISK	LOW RISK	HIGH RISK	HIGH RISK
		HIGH RISK				

Onion Update

Most seeded onions are now at the 4th true leaf stage. Transplants are around the 5-8 leaf stage. Stemphylium leaf blight has been confirmed on onions. The current risk for disease is moderate-high, but we still recommend an early spray to protect the onions from infection. 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.

Thrips populations were slowly rising but have remained the same or decreased slightly with the rain. 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.

Weed control is important. Pre weed emergence herbicides include Chateau, Prowl H2O and Frontier Max. Post weed emergence herbicides include 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

Most carrots are now at the 3rd to 4th true leaf stage. For fields that are over the 1.5 weevils/trap threshold, a Rimon 10 EC or Exirel insecticide spray is recommended at the 2nd leaf stage. If your field is over the 5 weevils/trap threshold a second spray is recommended at the 4th leaf stage. Carrot weevils have nearly 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.



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!



















Carrot rust fly counts have decreased on sticky traps, however this 1st generation of rust flies cannot cause damage to carrots when they are this small anyways.

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 continues. Herbicide damage is common in celery and we are monitoring fields closely for the presence of diseases. Insect activity has been very low.

Daily Weather

Date (June)	Max temperature (°C)	Min temperature (°C)	Rain (mm)
22	27.5	11.3	0.0
23	24.5	17.7	7.6
24	25.8	19.0	2.6
25	29.1	15.6	0.0
26	23.8	18.1	12.8

Soil Temperature (°C): 5cm: 20.1

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





