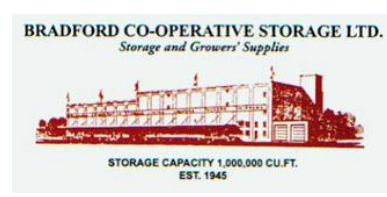




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Ontario Crops Research Centre – Bradford (Muck Station) IPM Report 2023

This is the Muck Crops IPM Update for July 31, 2023

Highlights

- Conditions remain favourable for Stemphylium leaf blight development and we continue to find airborne conidia.
- Bacterial rot has been somewhat common with the hot and wet conditions last week.
- Early transplant onion fields are being harvested.
- We are closely monitoring closed in carrot canopies for Sclerotinia white mold.
- Some Cercospora leaf blight has been found in carrot fields.
- The Muck Station will be closed on Monday, August 7th next week for the Civic Holiday. We are planning to scout Monday fields on Tuesday, and Tuesday fields on Wednesday next week.

Disease Forecasting Highlight:

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

Onion Update

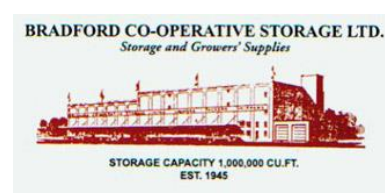
Conditions have been somewhat favourable for further development of onion downy mildew. If it has been around 10 days since your last downy mildew spray another may be needed. It is important to rotate fungicides. There are many products registered for control of downy mildew and Orondis Gold (group 4/49) was also recently registered. Its registered rate is 1L/ha and does not need an adjuvant to be mixed with it. Our research at the Muck Station has shown that Orondis Ultra (group 40/49), Orondis Gold (group 4/49), Zampro (group 45/40) and Ridomil Gold MZ (group 4/M3) are the most effective for controlling this disease. These systemic products should protect onions for 10 days.

Mancozeb products, such as Manzate Pro-Stick, Dithane Rainshield and Penncozeb 75 DF Raincoat (all group M3), can be effective for controlling downy mildew if applied before infection takes place. Therefore, if you sprayed a mancozeb product for Stemphylium last week then the onions should be protected for 7 - 10 days. Ridomil Gold MZ also contains mancozeb which may help control both downy mildew and Stemphylium leaf blight. Orondis Ultra should be applied with a non-ionic surfactant.





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Symptoms of Stemphylium leaf blight continue to increase in many fields. The risk for the disease continues to be high. Some tip dieback has been seen as well, which can be an entry point for Stemphylium. We recommend alternating the group 7 fungicide sprays (Miravis Duo, Sercadis, Aprovia/Aprovia Top and Merivon) with Allegro (group 29) for Stemphylium leaf blight suppression and resistance management. The group 7 systemic products are effective for around 10-14 days and the contact Allegro fungicide is effective for around 7-10 days. 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 management continues. Agri-Mek SC (group 6), Delegate WG (group 5), Minecto Pro (group 6/28), or Exirel (group 28) are registered for thrips control. These insecticides should also be applied back-to-back, no more than 2 weeks apart.

Some bacterial rot has been found which is likely a result of the hot and wet conditions last week.

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

We are closely monitoring for Sclerotinia white mold in the closed carrot canopies. Some Cercospora leaf blight has been identified as well. When you are over the 25% of plants infected with Cercospora threshold, Cabrio, Flint, Quadris Top, Merivon, Bravo/Echo and Copper 53W are registered for control. We are also approaching the second generation carrot rust fly emergence and will be monitoring sticky traps for any activity. This second generation can cause damage to the carrot root that can go undetected until harvest.

For weed control in carrots, LoroX L, Ultra Blazer, Poast Ultra, Select, Venture and Aim EC are registered. Rates and use recommendations for these products can be found in OMAFRA's [Weed Control Guide for Hort Crops](#) (carrots starting on page 94) and the [Ontario Crop Protection Hub](#).

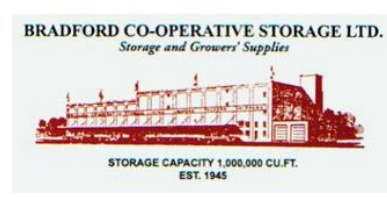
Celery Update

Early blight has become more common in celery fields. There are many fungicides registered to manage blights in celery, which can be found on the [Ontario Crop Protection Hub](#). If you are finding celery leaf curl after the wet weather, Switch 62.5 WG and Quadris Flowable are registered for control. More bacterial rot has been identified as well.





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Daily Weather

Date (July)	Max temperature (°C)	Min temperature (°C)	Rain (mm)
27	28.6	20.1	6.6
28	30.9	16.4	0.0
29	21.9	15.4	10.4
30	24.4	11.4	1.2

Soil Temperature (°C): 5cm: 17.1

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

