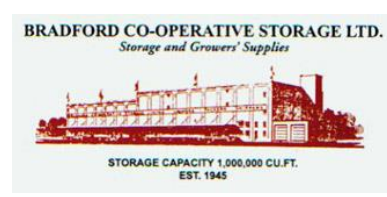




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Ontario Crops Research Centre – Bradford (Muck Station) IPM Report 2023

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

Highlights

- The wet and warm conditions recently are optimal for many diseases to develop.
- Onion downy mildew has been identified in the marsh, however the heat will have slowed any potential disease development
- Conditions continue to be favourable for Stemphylium leaf blight development.
- Some early transplant onion fields are being harvested.
- Many carrot canopies are now closed. We are closely monitoring for Sclerotinia white mold.

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 RISK	HIGH RISK	LOW-MODERATE RISK	LOW RISK	HIGH RISK	LOW-MODERATE RISK

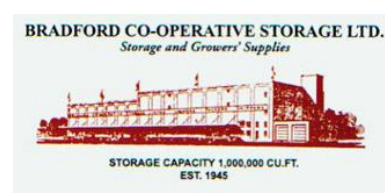
Onion Update

Early transplants are lodging and some fields are being harvested. Onion downy mildew has been identified in the marsh, but the hot conditions will prevent the disease from developing further. If conditions become favourable again it is important to rotate fungicides for future applications. There are many products registered for control of downy mildew, but our research at the Muck Station has shown that Orondis Ultra (group 40/49), 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 are increasing 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 with the hot weather, although populations may have been kept at bay with the recent rain. 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.

We will be conducting harvest assessments in lodged onions fields before they are harvested.

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

Carrot canopies in many fields are now closing in. We will be keeping a close eye out for Sclerotinia white mold. We are also approaching the second generation carrot rust fly emergence and will be monitoring sticky traps closely for any activity. This second generation can cause damage to the carrot root that can go undetected until harvest.

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

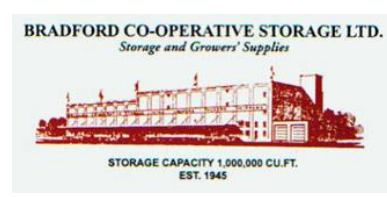
Celery Update

Earlier celery harvest continues. Blights continue to be minor and only some pink rot and bacterial rot has been found. Insect activity has been quite low.





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Daily Weather

Date (July)	Max temperature (°C)	Min temperature (°C)	Rain (mm)
24	25.6	15.6	13.2
25	27.8	14.9	0.0
26	29.7	18.4	1.2

Soil Temperature (°C): 5cm: 22.3

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

