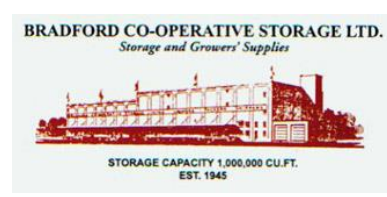




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Ontario Crops Research Centre – Bradford (Muck Station) IPM Report 2023

This is the Muck Crops IPM Update for July 20, 2023

Highlights

- **Onion downy mildew has been identified in the marsh. There is a high risk of disease development, and a protective spray is recommended as soon as possible.**
- Stemphylium leaf blight remains at a high risk for development.
- Many seeded onions are around the 6-8 leaf stage.
- Some early transplants are now lodging.
- Some carrot canopies are now closing in.
- Many carrot fields are around the 4-6 leaf stage.

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

Onion Update

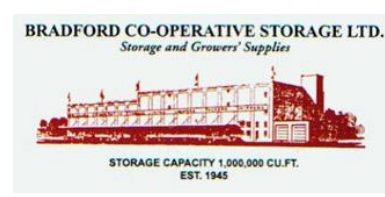
Downy Mildew

Onion downy mildew has been identified in the marsh. There is a high risk of disease development, and a protective spray is recommended as soon as possible. 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. Rotating fungicides is very important.





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Many seeded onions are now around the 6-8 leaf stage. Some early transplants are lodging. Symptoms of Stemphylium leaf blight are present in most onion fields now. The current risk for the disease continues to be high. Allegro 500F is now registered for Stemphylium suppression on onions. The rate is the same as other diseases, 1.16 L/ha (0.47 L/acre).

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 populations vary from field to field at the moment. After the two Movento applications, switch to a registered insecticide with a different mode of action. Products we would recommend applying next are Agri-Mek SC (group 6), Delegate WG (group 5), Minecto Pro (group 6/28), or Exirel (group 28). These insecticides should also be applied back-to-back, no more than 2 weeks apart.

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 carrot fields are now around the 4-6 leaf stage and some canopies are starting to close in. We are approaching second generation carrot rust fly emergence and will be monitoring fields closely for activity. Aster leafhopper activity has decreased as of late.

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](#).

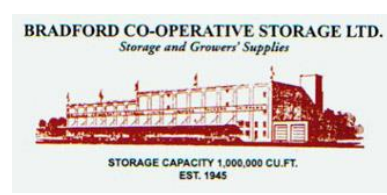
Celery Update

Celery transplanting looks to be finished. Some early celery has been harvested. Blights continue to be minor and only some pink rot and bacterial rot has been found recently. We will be monitoring fields closely for leaf curl.





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Daily Weather

Date (July)	Max temperature (°C)	Min temperature (°C)	Rain (mm)
17	26.8	16.3	0.0
18	24.1	13.4	0.6
19	25.7	9.6	0.0

Soil Temperature (°C): 5cm: 19.8

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

