







Ontario Crops Research Centre – Bradford (Muck Station) IPM Report 2024

This is the Muck Crops IPM Update for July 22, 2024

Highlights

- Onion downy mildew continues to be high risk for onions in the marsh. A protective fungicide spray is recommended if you have not done so already.
- Thrips populations vary from field to field.
- Some early transplant onions are lodging.
- Carrot rust flies are emerging and some fields are over the spray threshold.
- Aster leafhopper populations are high in some fields and aster yellows has been showing up in carrot fields.

Disease Forecasting Highlight:

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

Onion Update

Downy Mildew

Onion downy mildew has been identified on seeded and transplant onions in the marsh and an effective fungicide spray is recommended on all onions if you have not done so already. Conditions remain favourable for continued disease development and sporangia are being caught in our spore traps. 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), Orondis Gold (group 4+49) and Zampro (group 45/40) are the most effective for controlling this disease. Ridomil Gold MZ (group 4/M3) is no longer being produced, but if you have some it is an effective product as well. 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 Purple Blotch last week then the onions should be protected for ~7 days. Ridomil Gold MZ also contains mancozeb which



Dom Blass - Scout













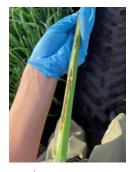




may help control both downy mildew and Stemphylium leaf blight. Orondis Ultra should be applied with a non-ionic surfactant. Rotating fungicides is very important.

Stemphylium Leaf Blight

Stemphylium leaf blight is very common in the marsh and conditions are favourable for disease development. Many lesions are starting to sporulate and, in turn, more conidia are being caught in spore traps. Some tip dieback has also been observed, which can be an entry point for Stemphylium. We recommend alternating the group 7 fungicides (Miravis Duo, Sercadis, Aprovia/Aprovia Top and Merivon) with Allegro (group 29) for Stemphylium leaf blight suppression and resistance management. Resistance has been developing to the active ingredient in Sercadis and Merivon. The group 7 systemic products are effective for around 10-14 days and the contact fungicide Allegro is effective for around 7-10 days.



Madison Sirois - Scout

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 are still variable from field to field. Movento should be sprayed back-to-back no more than 2 weeks apart for resistance management. 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. As some early transplants start to lodge thrips populations may increase in nearby seeded fields.

For weed control, post weed emergence herbicides include Goal 2XL, Pardner and bromoxynil products. Registered herbicides can be found in the Ontario Crop Protection Hub.

Carrot Update

Carrot fields are ranging from the $3^{rd} - 7^{th}$ true leaf stage. Some carrot canopies are closing in a number of fields as well.

Second generation carrot rust flies are emerging and have been found in a few fields. This generation can cause damage and it is important to spray if your field is over threshold. If your field is over the 0.1 rust flies/trap/day threshold Mako, UP-Cyde 2.5 EC, Labamba, Matador 120EC and Silencer 120 EC are registered for control.



Eriel Strauch - Scout



















Aster leafhopper numbers are variable but are high in some fields. Sevin XLR, Admire 240 F, Actara 25WG, Closer and Sivanto Prime are registered if your field is over the 20 leafhoppers/trap or 1 leafhopper/sweep threshold.



Eriel Strauch - Scout

Some blights are starting to show up, but incidence is still very low in fields that have it.

For fields with canopies starting to close in, it may be important to apply a Sclerotinia white mold fungicide soon to get the product down to the soil while you can. This may be even more important in high white mold risk fields.

For weed control, registered herbicides can be found in the Ontario Crop Protection Hub.

Celery Update

Alternaria leaf spot and early blight are common in fields. There are many fungicides registered to manage blights in celery, which can be found on the Ontario Crop Protection

Some celery leaf curl has also been identified. Switch 62.5 WG and Quadris Flowable are registered for control.



Dom Blass - Scout

With the on and off wet conditions some soil borne diseases, such as fusarium, are being identified in celery. Insect damage continues to be minimal so far.



















Daily Weather

| Date (July) | Max temperature (°C) | Min temperature (°C) | Rain (mm) |
|-------------|----------------------|----------------------|-----------|
| 18 | 21.0 | 12.9 | 0.0 |
| 19 | 25.7 | 10.2 | 0.0 |
| 20 | 27.7 | 11.4 | 0.0 |
| 21 | 27.7 | 14.4 | 0.0 |

Soil Temperature (°C): 5cm: 21.3

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





