

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

This is the Muck Crops IPM Update for July 18, 2024

Highlights

- Onion downy mildew has been identified on seeded and transplant onions in the marsh. A protective fungicide spray is recommended if you have not done so already.
- Conditions have been favourable for Stemphylium leaf blight. Stemphylium is very common throughout the marsh.
- Thrips populations are variable from field to field.
- Some early transplant onions are starting to lodge.
- Aster leafhopper populations are high in some fields, but vary from field to field.
- Cercospora and Alternaria leaf blights have started to show up in some 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	HIGH RISK	LOW RISK	LOW RISK	HIGH RISK	LOW RISK

Onion Update

Downy Mildew

Onion downy mildew has been identified on seeded and transplant onions in the marsh and a protective spray is recommended on all onions if you have not done so already. Conditions have been 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 Stemphylium last week then the onions



Dom Blass - Scout







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should be protected for ~7 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.

Stemphylium Leaf Blight

Stemphylium leaf blight is very common in the marsh and conditions are favourable for disease development. 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.

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. For thrips management, it is important to first apply Movento 240 SC once thrips are present in your field and their population is building. Movento should be sprayed backto-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.



Madison Sirois - Scout

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

Carrot Update

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













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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 is still a common disease in celery. Early blight is also present in some fields. There are many fungicides registered to manage blights in celery, which can be found on the Ontario Crop Protection Hub. The rainy conditions we have had can spread celery leaf curl to new plants if it has been found in your field. Switch 62.5 WG and Quadris Flowable are registered for control. 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)
15	27.5	18.7	0.4
16	28.4	20.4	9.8
17	26.4	16.4	0.0

Soil Temperature (°C): 5cm: 22.1

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



