

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

This is the Muck Crops IPM Update for July 29, 2024

Highlights

- Onion downy mildew conditions are moderate-high risk. Conditions are not very suitable for development at the moment but continued infection is possible, especially in fields that have the disease.
- Many onions in the marsh have tip dieback and burn symptoms which can be an entry point for Stemphylium and other diseases. Stemphylium and Purple Blotch are showing up in these injured areas.
- Carrot rust flies are emerging and some fields are over the spray threshold.
- Thrips populations are growing with the warm and dry conditions.
- Aster leafhopper populations are high in some carrot fields and aster yellows has been showing _ up.

Disease Forecasting Highlight:

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







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Onion Update

Downy Mildew

Conditions have not been very favourable for onion downy mildew development at the moment, but continued infection is still possible, especially in fields that are confirmed with having the disease. Extending the time between sprays may be an option right now. 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 may help control both downy mildew and Stemphylium leaf blight.



Dom Blass - Scout

Orondis Ultra should be applied with a non-ionic surfactant. Rotating fungicides is very important.

Stemphylium Leaf Blight

Tip dieback and burn on onion leaves are common and can be an entry point for Stemphylium.

Stemphylium leaf blight is very common in the marsh and conditions are somewhat favourable for disease development. Many lesions are starting to sporulate and, in turn, more conidia are airborne. 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 have grownwith the hot and dry weather. After your Movento applications, the next 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.







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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 canopies have closed in in many fields. Sclerotinia white mold has been identified in early seeded carrots with full canopies. Allegro 500F, Scholar 230SC, Luna Sensation and Switch 62.5 WG are registered for control and Miravis Duo and Fontelis are registered for suppression. It is important to try and get these products down into the crown and lower canopy as best you can.

Second generation carrot rust flies are emerging and have been found in a number of 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.

Aster leafhopper numbers continue to be 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

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Carrot blights, Cercospora and Alternaria, are starting to show up in fields. When you are over the 25% of plants infected with leaf blight threshold, Cabrio, Flint, Quadris Top, Merivon and Bravo/Echo are registered for both Cercospora and Alternaria leaf blights. Copper 52W is only registered for Cercospora. Fontelis, Sercadis, Cantus, Pristine, Switch, Miravis Duo, Luna Sensation and Allegro are only registered to control Alternaria.

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

Celery Update

Alternaria leaf spot and early blight (Cercospora) are common in fields. Some late blight (Septoria) has also been found. There are many fungicides registered to manage blights in celery, which can be found on the <u>Ontario Crop Protection Hub</u>.







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Celery leaf curl has been identified but it is relatively uncommon. Switch 62.5 WG and Quadris Flowable are registered for control.



Dom Blass - Scout

Daily Weather

Date (July)	Max temperature (°C)	Min temperature (°C)	Rain (mm)
25	23.5	11.6	0.0
26	27.8	10.9	0.0
27	29.0	11.2	0.0
28	30.7	11.1	0.0

Soil Temperature (°C): 5cm: 21.5

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



