











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

This is the Muck Crops IPM Update for July 17, 2023

### **Highlights**

- Stemphylium leaf blight has been confirmed in many onion fields and the current risk for further disease development is high.
- Many seeded onions are around the 5-7 leaf stage.
- Some early transplants are now lodging.
- Many carrot fields are around the 4-6 leaf stage.

# Disease Forecasting Highlight:

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

# **Onion Update**

Many seeded onions are now around the 5-7 leaf stage. Some early transplants are lodging. Symptoms of Stemphylium leaf blight are present in most onion fields now. The current risk for disease is 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.

First generation onion maggot damage has been low. Although minimal, most damage was seen in transplant onions.

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 <a href="OMAFRA's Weed Control Guide for Hort Crops">OMAFRA's Weed Control Guide for Hort Crops</a> (dry bulb onions starting on page 128) and the <a href="Ontario Crop Protection Hub">Ontario Crop Protection Hub</a>.

### **Carrot Update**

Many carrot fields are now around the 4-6 leaf stage. 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 <u>Weed Control Guide for Hort Crops</u> (carrots starting on page 94) and the <u>Ontario Crop Protection Hub</u>.

# 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 after the precipitation we received recently.

# **Daily Weather**

| Date (July) | Max temperature (°C) | Min temperature (°C) | Rain (mm) |
|-------------|----------------------|----------------------|-----------|
| 13          | 20.8                 | 14.5                 | 26.2      |
| 14          | 26.1                 | 10.2                 | 0.0       |
| 15          | 24.4                 | 17.0                 | 4.6       |
| 16          | 26.9                 | 18.5                 | 5.0       |

Soil Temperature (°C): 5cm: 20.5

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





