

This is the Muck Station Report and IPM Information for Monday August 18, 2008.

-DOWNCAST has predicted onion downy mildew sporulation infection periods occurred in the last three days. Risk of downy mildew development is high.

At this time growers should spray for downy mildew control regularly by alternating Ridomil Gold MZ with Alliette. Alliette should not be tank mixed with other products, especially not with micronutrients. Refer page 138 table 9-59 of the OMAFRA's publication 363 for registered fungicides.

An increase in daytime temperatures is forecasted for this week and would remain in the mid to high 20's with night-time temperatures also increasing. There is a 70% chance of thunder showers for Monday. Considering the weather forecast and the size of crop canopies, risk of leaf disease symptoms either appearing or increasing in your crops over the week remain moderate to high.

Due to the humid and wet conditions, bacterial diseases continue to be a problem in many crops especially on onions, celery and lettuce. Copper sprays may reduce bacterial disease spread somewhat but copper cannot be used on every crop. Check the label first.

No rain has been accumulated in the last four days.

BOTCAST, which is used to predict botrytis on onions, has a cumulative disease severity index of 49. This means that fungicides should be applied regularly to protect the crop. Risk of lesion counts reaching threshold at this time is high. Irrigation or rain increases the risk of botrytis blight.

Onion white rot has been found on onion fields within the Holland Marsh. Periodically inspect your fields and check any yellowing, stunted or wilting plants carefully. If you find white fungal growth or black sclerotia, rogue out these plants and make sure they are disposed of carefully. Do not leave these infested plants in the fields. Wash all implements used in infested area.

In lodging onion fields maleic hydrazide (Royal MH 60) is applied to limit sprouting and extend the storage life of many onion cultivars. If maleic hydrazide is applied too early it can result in spongy bulbs. The optimum time for application is when at least 50 percent of the tops have fallen but the tops are still green. These conditions usually occur 8 to 14 days before harvest. Plants with less than 3 green leaves and or severely diseased foliage will not absorb maleic hydrazide. Best results are obtained when MZ in the early morning or on a cloudy day, and 24 hours before or after rain.

BREMCAST has predicted a couple of sporulation infection periods over the past few days. Risk of disease development is high.

Onion thrips count on station increased to 0.7 thrips per leaf. The threshold is 1 thrips per leaf.

Onion maggot counts on station remain same as last week at 2.5 flies per trap per day.

Rust fly counts on station are 0.08 and at our other research site are 0.07 flies/trap/day, which is close to threshold.

Tarnished plant bug counts in celery in our research plots are still below threshold and damage is also low.

Carrot leaf blight is continuing to develop in most fields. As canopies close moisture and humidity levels increase and the risk of blight also increases. Therefore, growers should regularly spray their carrots with fungicide. Carrot disease control recommendations are listed on page 97 in publication 363 of the 2008-2009 edition.

We have been monitoring carrot plots on station for the presence of Sclerotinia. At this stage Sclerotinia spores are released from the apothecia. Development of the disease in the field occurs under cool, wet conditions. The weather condition we are having and the growth stage of carrots is an ideal condition for the development of white mould. Growers should monitor your fields for symptoms of Sclerotinia. Infection in the field starts at the base of the leaf stalk, causing the petiole to turn brown and die. Currently there are no registered fungicides to effectively control the disease but maintaining a healthy crop may help. These include rotation with a non-susceptible crop. Avoid rotating with susceptible crops like lettuce or celery. Use wider row spacing to encourage good air movement. Foliar trimming of the carrot canopy also has potential for reducing the severity of Sclerotinia.

Celery growers should regularly check your fields for late blight, which develops brownish-black leaf spots. Both spores of early and late blight transfer from plant to plant either by splashing water or wind. Control methods for early or late blight in celery can be found on page 91 in publication 363, vegetable production recommendations.

Aster leafhopper counts on station and fields around the Holland Marsh are currently low.

The Muck Crops Research Station annual field day will be held on Thursday September 4, 2008 from 8:30 am to 4 pm. All growers are invited and encouraged to drop by. Coffee and donuts will be provided by Jim Robinson from Stokes Seeds. Lunch will be complements of John Verkaik from Solar Seed.