



MUCK CROPS RESEARCH STATION IPM 2011

This is the Muck Crops Research Station Report and IPM Information for Friday July 15, 2011

The current thrips count at our Research Station increased to 0.9 thrips/leaf. The hot temperatures are helping the population build quickly. Thus, monitor your field regularly. The threshold for insecticide application is 1 thrips per leaf.

The weather remains relatively warmer with no rain predicted for the weekend. It has been more than 18 days since we received significant amount of rainfall. We have observed growers irrigating their fields around the Marsh. A combination of warm weather and moisture from rain or irrigation makes a good environment for bacterial infection, especially where plants have already been damaged from insects or other problems. Irrigation also results in extended leaf wetness period. Therefore the risk of foliar disease symptoms appearing in crops may increase especially in fields that have larger canopy.

BOTCAST has a cumulative disease severity index (CDSI) of 38. Risk of developing botrytis on onions at this time is moderate. Lesion counts at this moment are very low. Growers should monitor their fields regularly for botrytis leaf blight and apply fungicide if their field has 3 lesion/leaf. The first spray threshold is when the CDSI is more than 30 or when botrytis lesion count is 3/leaf. Recommendations for fungicide spray are listed on page 138 of the OMAFRA's publication 363.

DOWNCAST predicted a sporulation infection period in the last 3 days. Taking into account the weather forecast, risk of downy mildew on onions is moderate.

The carrot rust fly activity around the marsh is very low. No rust fly was caught on sticky traps at our station.

The onion fly activity around the marsh is generally low. Onion fly count at our station was 0.1 flies/trap/day.

If you are not applying manganese sulphate with Goal, continue to spray onions with manganese sulfate at a rate of 1.5 to 2.75 Kg/ha in 300 L of water repeated in 4 to 5 sprays 10 days apart.

Foliar application of calcium in the form of calcium chloride or calcium nitrate reduce development of black heart of celery especially if celery is under heat and moisture stress. Calcium is also beneficial to young lettuce and Romaine to reduce the risk of tipburn during hot, humid periods.

Tarnished plant bugs (TPB) have been found in celery fields. We also have seen tarnished plant bug damage in celery. Spray thresholds are 0.1 TPB/plant (from transplanting until three weeks before harvest) and 0.2 TBP/plant (during the last 3 weeks before harvest) and/or 6% of the plants showing damage. Besides pesticide control, good weed control is an important management tool to reduce TPB populations.

BREMCAST predicted a sporulation infection period in the last 3 days. Risk of downy mildew incidence on lettuce is moderate to high. Symptoms of downy mildew have been seen in lettuce fields around the Marsh.

On July 14 at the Research Station the soil temperature at 5 and 10 cm depth was 19.4 and 18.9°C respectively. No rain fell between July 12 and July 14.

ANY QUESTIONS OR COMMENTS? Call Michael Tesfaendrias or Mary Ruth McDonald at 905-775-3783

