



## MUCK CROPS RESEARCH STATION IPM 2011

### This is the Muck Crops Research Station Report and IPM Information for Friday August 19, 2011

DOWNCAST predicted sporulation infection period in the last 3 days. Risk of downy mildew on onions is moderate to high. Risk will increase if leaves remain wet for longer periods, if growers are having onions on onions and the field has a history of onion downy mildew. For onion fields that are still standing and still mostly green, onion downy mildew can still be a problem. Thus, downy mildew control will depend on the growth stage of individual onion field. Control measures for onion diseases can be found on page 138 of the OMAFRA publication 363.

Downy mildew has been confirmed in onion plots at our research site located at Jane street. Growers should monitor your fields regularly for downy mildew. Symptoms are not usually visible until infected areas of leaves sporulate. The best time to see early downy mildew symptoms is early in the morning when the leaves are still wet. Infections usually occur in patches within the field. A violet or greyish growth develops, and the tissue dies quickly, resulting in straw-coloured lesions and eventually plant death.

The carrot rust fly activity around the marsh is moderate in most parts of the Holland Marsh, but increased in some locations including our Research sites. The carrot rust fly count at both sites of our Research Station was 0.2 flies/trap/day, which is above the spray threshold. Insecticide spray thresholds are 0.1 flies/trap/day for fresh market and 0.2 for processing carrots.

Seeded onion fields around the Holland Marsh are beginning to lodge. Maleic hydrazide (Royal MH 60) is applied to limit sprouting and extend the storage life of many onion cultivars. Onions should have more than 3 green leaves when MH 60 is applied. The optimum time for application is when at least 50 percent of the tops have fallen, but tops are still green. Best results are obtained when MH 60 is applied in the early morning or on a cloudy day, and 24 hours before or after rain.

The thrips count in onion plots at our Research Station continues to decrease. The counts at our Research station decreased to 0.2 thrips/leaf. The count at our other site at Jane street was 0.5 thrips/leaf, which is below a spray threshold. The threshold for insecticide application is 1 thrips per leaf. Good spray coverage and rotating between insecticide classes is crucial for thrips control.

The onion fly activity around the marsh is generally low. The onion fly count at our station currently is at 0.2 flies/trap/day.

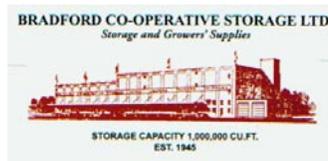
The cumulative disease severity index (CDSI) for botrytis in onions is at 56. Growers should monitor their fields regularly for botrytis leaf blight and apply fungicide if their field has 3 lesions/leaf. The first spray threshold occurs when the CDSI is more than 30 or when the botrytis lesion count is 3/leaf. Recommendations for fungicide spray are listed on page 138 of the OMAFRA publication 363.

Carrot leaf blight has continued to develop. As canopies close, moisture and humidity levels increase. This creates ideal condition for leaf blight development. Thus, a fungicide should be applied as the canopy close over. Carrot disease control recommendations are listed on page 96 of the OMAFRA publication 363.

Celery growers should check regularly your fields for late blight, which develops brownish-black leaf spots. Thus far we have not found late blight around the Marsh including celery plots at our Research Station.

Seeding spring barely or oilseed radish as cover crops after celery, lettuce, early carrots and onions can help





reduce erosion.

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

BREMCAST predicted sporulation infection period in the last 3 days. Risk of downy mildew incidence on lettuce is moderate to high.

There was no rain between August 16 and August 18. The soil temperature at the Muck Crops Research Station at 5 and 10 cm depth is currently 21.1 and 20.4°C respectively.

The Muck Crops Research Station annual field day is Thursday, September 1, 2011 from 8:30 a.m. to 4:00 p.m. All growers are invited and encouraged to drop by. Lunch will be complements of John Verkaik from Solar Seed. Coffee and donuts will be provided Jim Robinson from Stokes Seeds.

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

