

## MUCK CROPS RESEARCH STATION IPM 2014

This is the Muck Crops Research Station Report and IPM Information for Monday August 18, 2014

### Onion Downy Mildew Alert

Downy mildew has been confirmed on onions in the Holland Marsh east of the 400. 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 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. If growers plan to apply Royal MH and store onions it may be important to preserve healthy leaf area for proper application.

**At this time growers should spray for downy mildew control regularly. Mancozeb (Dithane, Penncozeb and Manzate), Ridomil Gold, Pristine, Cabrio, Rovral, Aliette, Revus, Serenade Max, Quadris Top, Reason, Zampro and Acrobat are registered for onion downy mildew control. Rotate fungicides with different chemical groups. Aliette should not be tank mixed with other products, especially not with micronutrients.**

Rust fly activity has increased over the weekend. The current count at the station is 0.23 flies/trap/day which is over threshold. The spray threshold is 0.1 flies/trap/day for fresh market carrots and 0.2 flies/trap/day for processing carrots. Ripcord, Up-Cyde, Matador, Silencer, and Diazinon are registered for control of rust fly.

Onion maggot activity has been elevated the last few days. The current count at our station is 6.3 flies/trap/day.

Onion thrips continue to increase in most part of the Marsh. The spray threshold is 1 thrips/leaf. Good spray coverage is crucial for thrips control.

Carrot leaf blight has continued to develop around the Marsh. The risk of leaf blight increases when the crop canopy closes in along with increased moisture and humidity. The spray threshold is 25% disease incidence. Bravo, Echo, mancozeb (Dithane, Pancozeb, and Manzate), Pristine, Cabrio, Lance, Cantus, Switch, and Allegro are registered for control of carrot leaf blight.

Many seeded onions fields around the Marsh are lodging. Maleic hydrazide (Royal MH 60) is applied to limit sprouting and extend storage life of most onion cultivars. Onion should have more than 3 green leaves when Royal MH 60 is applied. The optimum time for application is when at least 50 % of tops are down but the leaves are still green. Best results are obtained when Royal MH is applied in the early morning or on a cloudy day, and 24 hours before or after rain.

Stemphylium leaf blight, purple blotch, and tip burn have been found in all scouted onion fields. For purple blotch control Quadris Top, Fontelis, mancozeb (Dithane, Penncozeb, and Manzate), Pristine, Lance, Cabrio, Inspire, Aliette, Cantus, Scala, and Switch are registered fungicides. Only Quadris Top is registered for control of Stemphylium leaf blight.

DOWNCAST: The onion downy mildew forecasting model predicted 1 sporulation infection period in the past 4 days. Taking into account the crop canopy size and weather forecast, the risk of downy mildew at this time is high. An increasing number of downy mildew spores are being detected on the spore trap rods.

**BOTCAST:** The cumulative disease severity index (CDSI) for botrytis leaf blight is now at 50. The risk of botrytis leaf blight at this time is high. The spray threshold is 3 lesions/leaf.

Periodically inspect your fields for onion white rot. Use extra caution in infected fields to prevent spread of the disease in the field or to another field.

Early blight, Septoria late blight, and bacterial leaf spot have been confirmed in celery fields. Both diseases can be spread through wind and water so it is important to stay out of infected celery fields when foliage is wet.

Tarnished plant bugs are still being detected in celery fields but damage has been fairly low all season. Spray thresholds are 0.1 TPB/plant (transplanting – 3 weeks before harvest) and 0.2 TPB/plant (less than 3 weeks before harvest) and/or 6% of plants with damage.

Aster leafhopper counts have been low so no insecticide sprays are recommended at this time.

**BREMCAST:** The lettuce downy mildew forecasting model predicted 2 sporulation infection period in the last 4 days. The risk of downy mildew on lettuce is high and we have seen lettuce downy mildew in the Marsh.

A total of 6.2 mm of rain has been accumulated in the past 4 days. Soil temperatures at the Research Station as of August 14 at the 10 cm and 20 cm depths are 21.5, and 17.6°C respectively.

The Muck Crops Research Station Annual Field Day is on Thursday September 4, 2014 from 8:30 am to 4:00 pm. All growers are invited and encouraged to drop by. Lunch will be compliments of John Verkaik from Solar Seed. Coffee and donuts will be provided by Jim Robinson from Stokes Seeds.

**ANY QUESTIONS OR COMMENTS?** Call Dennis Van Dyk or Mary Ruth McDonald at 905-775-3783

Follow us on twitter @MuckIPM for up-to-date disease alerts and insect emergence updates.