



Science For A Better Life



MUCK CROPS RESEARCH STATION IPM 2017

This is the Muck Crops Research Station Report and IPM Information for Tuesday August 29, 2017

On Thursday, September 7th the Muck Crops Research Station will be hosting its annual Grower Field Day. All are welcome to view this year's variety and research trials from 8:30 a.m. to 4 p.m.

Most onions are either being harvested or lodging and being windrowed although a few seeded fields still need some more time. Some early carrot harvest is also starting up. Scouting for onions will finish up this week, and next week carrots will be scouted only once a week.

Onion Diseases

Over the past four days, downy mildew has been actively producing spores but leaf wetness has limited its ability to infect new plants. Fields with wet leaves in early to mid morning are at highest risk. There are significant outbreaks in the marsh, although if onions have lodged it is much less of a concern and likely doesn't warrant additional applications. The first product we recommend is Ridomil Gold MX 68WG (+). Afterwards, regular sprays should always involve a rotation involving different modes of action. Rotating Ridomil with Aliette on a ~10 day schedule provides similar control to applying just Ridomil every 10 days. Aliette should not be tank mixed with any other product, particularly micronutrients. Apart from Ridomil, we have seen the best downy mildew control using Orondis Ultra and Zampro at the research station. Ensure the label rate is being applied for the most effective control. Other products registered for control are Revus, Forum, Torrent 400SC, and Manzate Pro-stick. Phostrol is also registered for suppression and has shown some synergistic activity when applied with other downy mildew control products.

Stemphylium has established in many fields throughout the marsh. The fungicides registered for stemphylium, Luna Tranquility, Sercadis, and Quadris Top, are only registered for suppression, meaning protective sprays are more valuable than reactive sprays. Sercadis also shares a mode of action with Luna Tranquility meaning they are not effective rotation partners.

Botrytis has essentially been absent in the marsh all season likely due to fungicides for stemphylium control.

Onion Insects

Onion maggot fly counts are generally low, with 0.25 flies/trap/day on station and 0.13 at our Jane street field.

So far, no major thrip problems have been noted, although some feeding has been noticed and the occasional group of plants have had a small infestation.

Carrot

Current rust fly counts spiked up a bit last week but seem to have settled down again. We have 0.05 flies/trap/day on station and our Jane street field. Rust fly thresholds are 0.1 flies/trap/day for fresh market carrots and 0.2 flies/trap/day for processing carrots. Mako (used to be Ripcord), Up-Cyde, Matador/Warrior, and Silencer are registered for rust fly control. Diazinon has officially rotated out and is no longer registered for rust fly control.

Aster leafhopper counts are generally low, and aster yellows are sporadic in some fields.

Both Cercospora and Alternaria leaf blight have appeared on carrots in the marsh. In a few fields, sclerotinia white mold is starting.





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Celery

Celery harvest seems to be ramping up around the marsh.

Celery leaf curl has been identified in multiple fields in the marsh, although hasn't progressed in fields as much as other years. Quadris and Switch are the currently registered fungicides for control. Other research has indicated applications of Pristine, Bravo ZN, Flint, or mancozeb (Dithane, Penncozeb, Manzate) for leaf blights may also contribute to leaf curl control, although Bravo and mancozebs likely act more preventatively than curatively.

We haven't seen many tarnished plant bugs this year although we have seen some carrot weevil feeding damage in some stalks.

A bacterial stem rot is showing up in a couple celery fields. Rogueing out affected plants/stems is the only reliable control recommendation.

BREMCAST – There has been no sporulation infection periods (SIP) for downy mildew on lettuce in the past four days, meaning risk is low.

Soil Temperatures:

Aug 28: 5 cm – 18.1
10 cm – 17.0
20 cm – 17.7

DATE (August, 2017)	TEMPERATURE (°C)		ACCUMULATED RAINFALL (mm)
	MAX	MIN	
25	20.8	10.4	0.0
26	21.5	6.9	0.0
27	22.9	5.3	0.0
28	22.5	5.5	0.0

