



Science For A Better Life



## MUCK CROPS RESEARCH STATION IPM 2017

**This is the Muck Crops Research Station Report and IPM Information for Friday August 25, 2017**

On Thursday, September 7<sup>th</sup> 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.

Onion harvest is well underway, mostly for transplants. Seeded onions are also starting to lie down. Scouting for onions will finish up next week, and once September starts carrots will be scouted once a week.

### *Onion Diseases*

Over the past four days, downy mildew has had multiple sporulation periods, although infection has been limited by leaf dryness. Downy mildew seems to have slowed a little, although we do continue to find it and there are significant outbreaks in the marsh. 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. Applications made to control stemphylium should be effective in controlling botrytis.

Overall, it is extremely important to control downy mildew and applications for downy mildew should be prioritized. However, it is still important to control stemphylium, particularly if it has been found to be spreading in your field. Most fungicides have a window of 7-10 days of protection but the label should always be advised when planning spray schedules. Keeping control of the foliar diseases is still important to ensure adequate green tissue for the application of MH (sprout inhibitor) as the onions lodge. Once the onions are lodging, additional sprays are likely not needed.

### *Onion Insects*

Onion maggot fly counts are going down, with 0.13 flies/trap/day on station and 0.06 at our Jane street field. Onion maggot counts have been relatively low all year.

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.





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### Carrot

Current rust fly counts are 0.05 flies/trap/day on station and 0.0 flies/trap/day at 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 moderate, although there have been a few peaks in some fields.

Both Cercospora and Alternaria leaf blight have appeared on carrots in the marsh. We have also noticed some fusarium rot developing.

### Celery

A lot more celery is being harvested lately.

Celery leaf curl has been identified in multiple fields in the marsh. 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.

**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 24: 5 cm – 18.7  
10 cm – 17.5  
20 cm – 19.3

DATE (August, 2017)	TEMPERATURE (°C)		ACCUMULATED RAINFALL (mm)
	MAX	MIN	
22	30.4	13.7	19.6
23	25.7	15.3	0.0
24	22.7	11.9	0.0

