



Science For A Better Life



MUCK CROPS RESEARCH STATION IPM 2017

This is the Muck Crops Research Station Report and IPM Information for Friday July 14, 2017

The rain continues. In addition to nitrogen, ensure both carrots and onions have sufficient magnesium as we've seen some evidence of deficiency. Stemphylium has continued to spread and is quite challenging to control.

Onion

The second generation of onion maggot should be starting based on our degree day model. Onion maggot fly counts are 0.18 flies/trap/day on station and 0.19 flies/trap/day at our Jane street field, though with the second generation started we expect counts to be increasing.

A few thrips have been noted, but populations are scattered and small. Typically, the heavy rains we've been experiencing limit thrip populations.

Stemphylium has been found in nearly all regions around the marsh, and is very difficult to control. Particularly with the weather stressing the leaves, onions may be susceptible to infection. 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. Some purple blotch has been identified as well, attacking weaker, yellowing leaves. BOTCAST has also reached its first threshold meaning the risk of botrytis leaf blight has increased meaning protective sprays are recommended if rainfall is predicted or if you're going to irrigate.

Carrot

Similar to the last report, we are still seeing a little bit of carrot weevil egg laying on station despite being past the 90% egg laying threshold. As a reminder, our insecticide application thresholds for weevil are 1.5 and 5 cumulative CW/trap for the first and second spray. Rimon has shown good results at the research station, and the mode of action is effective even against weevil eggs in carrot plants. If you've recently applied Exirel for control of some of its labelled pests, recent research at the station suggests it is also effective against weevil meaning another insecticide application wouldn't be needed.

We're catching rust flies, but the second generation isn't expected for another week or two. Current counts are 0.1 flies/trap/day on station and 0.1 at our Jane street field.

Aster leafhopper counts are still generally low around the marsh. Cercospora leaf blight has just begun to show up in a few fields.

Celery

So far, we have not seen much tarnished plant bug activity.

Blackheart in celery has been noticed in multiple fields in the marsh. Blackheart develops due to calcium deficiency, and preventative applications of calcium are beneficial as it is more difficult to control blackheart once it begins developing.

Disease Forecasting

BOTCAST – Cumulative disease severity index (CDSI) for botrytis currently at 36, risk is low to moderate. Protective sprays can be recommended if rain or heavy irrigation is expected.

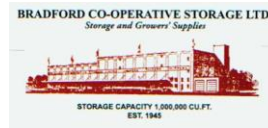
DOWNCAST – No sporulation has occurred all season, meaning risk of downy mildew on onion is low.

BREMCAST – There has been one sporulation infection period (SIP) for downy mildew on lettuce in the past four days, meaning risk is low.





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Soil Temperatures:

July 13: 5 cm – 25.7
10 cm – 24.8
20 cm – 22.7

DATE (July, 2017)	TEMPERATURE (°C)		ACCUMULATED RAINFALL (mm)
	MAX	MIN	
11	26.1	16.5	0.0
12	29.2	15.0	22.4
13	28.6	16.6	13.2

