



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 11, 2017

It has been a week of good weather in the marsh, though plants are still struggling with the previous rainfall. Several dying leaves, particularly on onions, have been noticed but this is likely caused by roots struggling with the wet soil.

#### *Onion*

First generation onion maggot damage was quite low around the marsh. We are currently at 987 degree days and the second generation is expected at 1025, which should arrive by the end of the week. Onion maggot fly counts are 0.19 flies/trap/day on station and 0.31 flies/trap/day at our Jane street field.

A few thrips have been noted, but populations are scattered and small.

Disease activity is starting up in onions. Stemphylium has been confirmed and is being found more frequently around the marsh. 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*

On station, we have been monitoring carrot weevil egg laying using carrot baits. While captures had slowed using the wooden traps, and the degree day model predicted egg laying to stop, we have seen a slight surge in carrot weevil egg laying using these carrot baits. It's possible that the heavy rain and later season may have pushed weevil egg laying back a bit. As such, we're recommending one more weevil insecticide application. 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 a few 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 0.05 at our Jane street field.

We have seen a few aster leafhoppers in fields, but counts are sporadic and still very low. No aster yellows have been seen yet.

#### *Celery*

Lorox and Gesegard can be used for weed control in celery. Apply Lorox 8-10 days after transplanting. Do not apply Gesegard until 21 days after transplanting. So far, we have not seen much tarnished plant bug activity.

Blackheart in celery has been noticed 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 33, 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 have been no sporulation infection periods (SIP) for downy mildew on lettuce in the past four days, meaning risk is low.





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**Soil Temperatures:**

July 10: 5 cm – 20.8  
10 cm – 19.3  
20 cm – 19.5

DATE (July, 2017)	TEMPERATURE (°C)		ACCUMULATED RAINFALL (mm)
	MAX	MIN	
7	30.7	12.5	3.0
8	28.1	18.1	0
9	23.0	14.5	0.2
10	26.5	12.1	2.4

