



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 7, 2017

After the rain, fields are being evaluated if they're worthwhile to keep, particularly carrot fields. In quite a few fields, there has been significant carrot losses due to water damage and pythium. A lot of onions are still showing leaf yellowing and tip dieback. Currently, we are not seeing actual diseases growing in most these onions and the symptoms are likely from the water stress.

#### *Onion*

We've started seeing some onion maggot damage occurring in fields, although damage is generally low. We are currently at 920 degree days and the second generation is expected at 1025, which would arrive in roughly one weeks time if temperatures remain roughly the same. Onion maggot fly counts are 0.25 flies/trap/day on station and 0.06 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 in 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*

Several carrot fields are being reworked and reseeded after fields were flooded.

Weevil activity has significantly slowed, and traps are being removed from the field. No more significant egg laying is expected at this point. Generally, insecticide applications for weevil are no longer recommended by the IPM program.

Rust fly counts are low. Current counts are 0.0 flies/trap/day on station and at our Jane street field.

We have seen a few aster leafhoppers in fields, but counts are still very low and aster yellows have not been seen.

#### *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.

Remember celery requires several nutrients, as the heavy rainfalls may have leached some of the nutrients out. Calcium is important to prevent black heart, while magnesium (Epsom salts) and boron are important as well.

#### *Disease Forecasting*

**BOTCAST** – Cumulative disease severity index (CDSI) for botrytis currently at 30, 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 7: 5 cm – 20.3  
10 cm – 20.2  
20 cm – 19.5

DATE (July, 2017)	TEMPERATURE (°C)		ACCUMULATED RAINFALL (mm)
	MAX	MIN	
4	27.2	15.0	2.2
5	28.1	19.6	0.2
6	25.6	16.4	3.0

