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Muck Crops Research Station Agriphone 2019

Highlights for 23 August

- Overall, an uneventful week for pests and diseases in the marsh. Onions are lodging and some early carrots coming out
- Aside from crops, this will be the last Agriphone Zach will be preparing at the station. I'll be moving to a new position at the University of Guelph in the Office of Research. Tyler Blauel, a Research Associate at the Muck Crops Research Station will be taking over as the IPM Program Coordinator. Expect the Agriphone to come from tblauel@uoguelph.ca next week. Thank you everyone for participating in the IPM Program at the Station, and I've really enjoyed the experience working in the muck with all the growers and industry here. I hope harvest goes well for everyone!

Disease Forecasting Highlight:

BOTCAST (Botrytis leaf blight)	DOWNCAST (Onion downy mildew)	BSP Cast (Stemphylium leaf blight)	White Rot on onions	Sclerotinia (White Mold) on Carrot	TOMCAST (General conditions for disease)	BREMCAS (Lettuce downy mildew)
LOW RISK	LOW RISK	MODERATE RISK	LOW RISK	LOW RISK	HIGH RISK	HIGH RISK

Onion Update:

Thrip counts have been creeping up a little bit this week, but we are still well below threshold. With onions lodging throughout the marsh and temperatures cooling down, it's unlikely there should be an issue. As far as diseases go as well, it's been a good week for onions; the cooler weather should slow stemphylium as the onions start to finish and so far the weather hasn't been conducive to downy mildew development. For your storage onions, just ensure you get Royal MH on in time with plenty of green left on the leaves so it can be transported to the bulb when they size up.

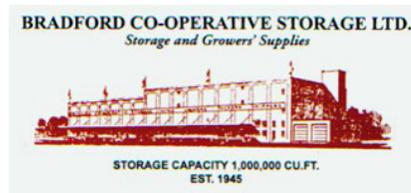
Carrot Update:

A few early carrots are being harvested in the marsh. Rust fly counts have generally been very low, with the exception of a field or two. To date, there's been a low risk of white mold developing; the lack of rain keeps the soil too dry for white mold to start up. However, the cooler morning have come with longer periods of dew and leaf wetness which can help leaf blights develop and spread. You can allow leaf blight to develop a little, our threshold is 25% of plants infected, as the tops can manage a little bit of blight before they'll weaken. If you do need to manage blight in your field, Cabri, Flint, Quadris Top, Manzate/Dithane/Penncozeb, Polyram, and Bravo/Echo are registered for both Cercospora and Alternaria, while Copper 52W is registered just for Cercospora and Fontelis, Sercadis, Cantus, Pristine, Switch, and Allegro are registered to only control Alternaria.





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Celery Update:

Blackheart (calcium deficiency) has been seen in some fields. Leaf curl has been found in the marsh and if you see any symptoms, Quadris Flowable and Switch are registered. If you're applying Flint for leaf blights, it will also provide some control of leaf curl. We have seen some insect activity (tarnished plant bug, carrot weevil feeding on stalks), but it's been low.

Disease Forecasting:

Disease model	Cumulative DSI	Change	Comments
BOTCAST (Botrytis leaf blight)	98	+6	No inoculum present, low risk
DOWNCAST (Onion downy mildew)	1 sporulation-infection period	Little activity	Need 3 sporulation-infection periods, risk is still low
BSPCast (Stemphylium leaf blight)	Good conditions on 2/4 days	Reduced activity	Some activity this week, but has slowed, moderate risk
White Rot on Onions	1	Some activity	White rot takes several weeks to infect onions, most onions should be safe until harvest
Sclerotinia (White Mold) on Carrot	0	No activity	Soil too dry for white mold
TOMCAST (General conditions for disease)	134	+8	Ideal conditions for leaf blights to develop this week, high risk
BREMCAST (Lettuce downy mildew)	3 sporulation-infection periods	Continued activity	Good conditions, high risk of lettuce downy mildew

Daily Weather and Soil Temperatures:

Date (August 2019)	Max temperature	Min temperature	Rain (mm)
20	29.3	10.7	0.0
21	30.1	18.5	0.0
22	23.6	12.3	0.0

Soil Temperature (°C): 5cm: 22.5 10cm: 23.1 20 cm: 22.5

Any questions or comments? Please call Zach Telfer or Mary Ruth McDonald at 905-775-3783

