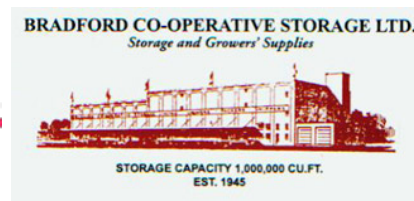




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# Muck Crops Research Station IPM 2019

Forecasting/weather information as of 23 August

Standard Growing Degree Day Model (starting 1 April):

MODELS	CUMULATIVE DEGREE DAYS	DEGREE DAYS SINCE LAST REPORT
Growing degree days (DD base 5)	1514	77

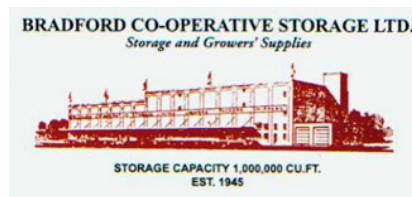
Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
<b>CARROT RUST FLY</b> (DD base 3)	1782	Emergence at 329-395 DD (1 <sup>st</sup> gen)	Emergence at 1399-1711 DD (2 <sup>nd</sup> gen)	2 <sup>nd</sup> generation should be complete
<b>ONION MAGGOT</b> (DD base 4)	1646	Emergence at 210 DD (1 <sup>st</sup> gen)	Emergence at 1025 DD (2 <sup>nd</sup> gen)	2 <sup>nd</sup> generation likely complete for finishing up
<b>CARROT WEEVIL</b> (DD base 7)	1257	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	2 <sup>nd</sup> generation activity could be occurring
<b>ASTER LEAFHOPPER</b> (DD base 9)	1021	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Active
<b>TARNISHED PLANT BUG</b> (DD base 12)	711	Activity can start at 40 DD		Active
<b>CABBAGE MAGGOT</b> (DD base 6)	1384	Emergence at 314 DD (1 <sup>st</sup> gen)	Emergence at 847 DD (2 <sup>nd</sup> gen)	Past 2 <sup>nd</sup> generation
<b>SEEDCORN MAGGOT</b> (DD base 4)	1646	Emergence at 200 DD (1 <sup>st</sup> gen)	Emergence at 600 DD (2 <sup>nd</sup> gen)	Well past 2 <sup>nd</sup> generation





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### Disease Forecasting Models:

Disease model	Cumulative DSI	Change since last report	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 Temperature and Rain

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

