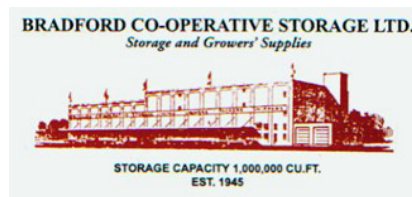




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# Muck Crops Research Station IPM 2019

Forecasting/weather information as of 20 August

Standard Growing Degree Day Model (starting 1 April):

MODELS	CUMULATIVE DEGREE DAYS	DEGREE DAYS SINCE LAST REPORT
<b>Growing degree days</b> (DD base 5)	1467	63

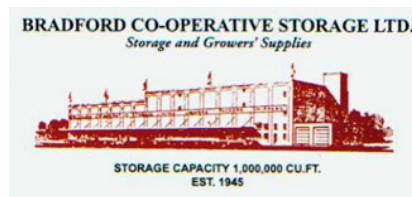
Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
<b>CARROT RUST FLY</b> (DD base 3)	1729	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)	1496	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)	1216	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)	986	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Active
<b>TARNISHED PLANT BUG</b> (DD base 12)	685	Activity can start at 40 DD		Active
<b>CABBAGE MAGGOT</b> (DD base 6)	1340	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)	1596	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)	92	+8	No inoculum in marsh, low risk
DOWNCAST (Onion downy mildew)	1 sporulation-infection period	Little activity	Need 3 sporulation-infection periods for risk, fog has been dissipating too quickly and rainfall prevents downy mildew
BSPCast (Stemphylium leaf blight)	Favourable conditions on 4/4 days	Much increased activity	High risk, leaf wetness has allowed greater stemphylium activity
White Rot on Onions	0	Activity ceased	Soil too warm
Sclerotinia (White Mold) on Carrot	0	No activity	Soil too dry for white mold
TOMCAST (General conditions for disease)	126	+8	High activity, wet leaves allow for leaf blights to develop
BREMCAST (Lettuce downy mildew)	Sporulation-infection periods on 3/4 days	Increased activity	High risk of lettuce downy mildew

### Daily Temperature and Rain

Date (August 2019)	Max temperature	Min temperature	Rain (mm)
16	26.3	12.5	0.0
17	28.2	13.9	9.8
18	29.1	15.2	3.4
19	27.9	13.7	0.6

Soil Temperature (°C): 5cm: 23.4      10cm: 25.5      20 cm: 23.7

