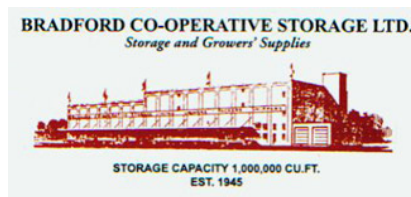




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# Muck Crops Research Station IPM 2019

Forecasting/weather information as of 27 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)	1560	46

Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
<b>CARROT RUST FLY</b> (DD base 3)	1836	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)	1696	Emergence at 210 DD (1 <sup>st</sup> gen)	Emergence at 1025 DD (2 <sup>nd</sup> gen)	2 <sup>nd</sup> generation should be finishing up
<b>CARROT WEEVIL</b> (DD base 7)	1295	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	2 <sup>nd</sup> generation activity is possible
<b>ASTER LEAFHOPPER</b> (DD base 9)	1051	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Active
<b>TARNISHED PLANT BUG</b> (DD base 12)	729	Activity can start at 40 DD		Active
<b>CABBAGE MAGGOT</b> (DD base 6)	1426	Emergence at 314 DD (1 <sup>st</sup> gen)	Emergence at 847 DD (2 <sup>nd</sup> gen)	Well past 2 <sup>nd</sup> generation
<b>SEEDCORN MAGGOT</b> (DD base 4)	1696	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)	104	+6	Low risk, no inoculum
DOWNCAST (Onion downy mildew)	1 sporulation-infection period	Little activity	Low risk, 3 sporulation-infection periods needed in a row to be of high concern
BSPCast (Stemphylium leaf blight)	Conditions have not been favourable for development	Reduced activity	Low risk, activity has decreased over the past 4 days
White Rot on Onions	4	Some activity	Low risk, disease takes several weeks to develop and onions should be harvested before then
Sclerotinia (White Mold) on Carrot	0	No activity	Soil too dry for white mold
TOMCAST (General conditions for disease)	138	+4	Moderate risk, good conditions for leaf blights to develop
BREMCAST (Lettuce downy mildew)	4 sporulation-infection periods	Continued high activity	High risk, ideal conditions for lettuce downy mildew

### Daily Temperature and Rain

Date (August, 2019)	Max temperature	Min temperature	Rain (mm)
23	22.7	9.2	0.0
24	23.4	6.9	0.0
25	24.5	6.7	0.0
26	24.4	14.4	0.0

Soil Temperature (°C): 5cm: 21.0                      10cm: 22.0                      20cm: 20.8

