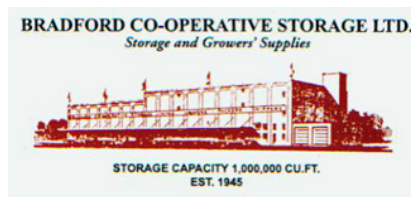




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# Muck Crops Research Station IPM 2019

Forecasting/weather information as of 5 July

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)	712	55

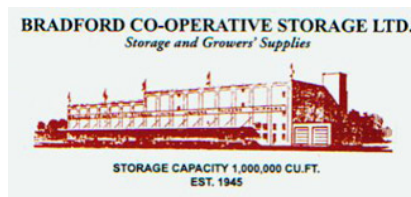
Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
<b>CARROT RUST FLY</b> (DD base 3)	882	Emergence at 329-395 DD (1 <sup>st</sup> gen)	Emergence at 1399-1711 DD (2 <sup>nd</sup> gen)	In between generations
<b>ONION MAGGOT</b> (DD base 4)	795	Emergence at 210 DD (1 <sup>st</sup> gen)	Emergence at 1025 DD (2 <sup>nd</sup> gen)	In between generations
<b>CARROT WEEVIL</b> (DD base 7)	552	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	Egg laying past 90% threshold
<b>ASTER LEAFHOPPER</b> (DD base 9)	415	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Adult emerging
<b>TARNISHED PLANT BUG</b> (DD base 12)	251	Activity can start at 40 DD		Active
<b>CABBAGE MAGGOT</b> (DD base 6)	631	Emergence at 314 DD (1 <sup>st</sup> gen)	Emergence at 847 DD (2 <sup>nd</sup> gen)	Nearing 2 <sup>nd</sup> generation
<b>SEEDCORN MAGGOT</b> (DD base 4)	795	Emergence at 200 DD (1 <sup>st</sup> gen)	Emergence at 600 DD (2 <sup>nd</sup> gen)	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)	62	+3	No botrytis seen, risk is low
DOWNCAST (Onion downy mildew)	No sporulation-infection periods	No activity	Weather not conducive to downy mildew, risk is low
BSPCast (Stemphylium leaf blight)	3 days of favourable weather conditions	Moderate activity	Stemphylium can be actively growing
White Rot on Onions	0	Development stopped	Soil temperatures have reached temperatures needed to stop white rot in the soil, new infections should not occur
Sclerotinia (White Mold) on Carrot	0	0	No risk until carrot canopy closes
TOMCAST (General conditions for disease)	41	+6	Weather conducive to disease development
BREMCAST (Lettuce downy mildew)	No sporulation infection periods	No activity	Risk is low

### Daily Temperature and Rain

Date (July 2019)	Max temperature	Min temperature	Rain (mm)
2	28.3	19.2	0.0
3	31.8	15.9	0.0
4	32.6	12.7	0.0

Soil Temperature (°C): 5cm: 25.9      10cm: 28.9      20 cm: 25.7

