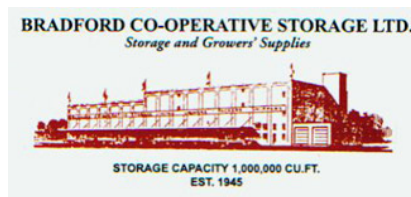




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# Muck Crops Research Station IPM 2019

Forecasting/weather information as of 12 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)	832	51

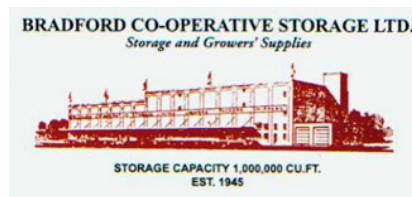
Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
<b>CARROT RUST FLY</b> (DD base 3)	1016	Emergence at 329-395 DD (1 <sup>st</sup> gen)	Emergence at 1399-1711 DD (2 <sup>nd</sup> gen)	Next generation could start in ~2 weeks
<b>ONION MAGGOT</b> (DD base 4)	922	Emergence at 210 DD (1 <sup>st</sup> gen)	Emergence at 1025 DD (2 <sup>nd</sup> gen)	Nearing 2 <sup>nd</sup> generation
<b>CARROT WEEVIL</b> (DD base 7)	659	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	Egg laying complete
<b>ASTER LEAFHOPPER</b> (DD base 9)	507	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Adults active, seen in fields
<b>TARNISHED PLANT BUG</b> (DD base 12)	323	Activity can start at 40 DD		Active
<b>CABBAGE MAGGOT</b> (DD base 6)	744	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)	922	Emergence at 200 DD (1 <sup>st</sup> gen)	Emergence at 600 DD (2 <sup>nd</sup> gen)	Well into/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)	71	+4	Little risk as no inoculum is present
DOWNCAST (Onion downy mildew)	No sporulation-infection periods	Little activity	Very low risk
BSPCast (Stemphylium leaf blight)	2/3 days with high risk	Increased activity	High risk of stemphylium, weather conditions have been ideal
White Rot on Onions	0	0	No risk of new white rot development
Sclerotinia (White Mold) on Carrot	0	0	No risk until carrot canopy closes
TOMCAST (General conditions for disease)	52	+6	Conditions have been favourable for disease development
BREMCAST (Lettuce downy mildew)	No sporulation-infection periods	Little activity	Very low risk of disease

### Daily Temperature and Rain

Date (July 2019)	Max temperature	Min temperature	Rain (mm)
9	29.2	10.7	0.0
10	31.4	10.9	0.4
11	30.9	15.9	1.8

Soil Temperature (°C): 5cm: 24.5      10cm: 25.0      20 cm: 24.4

