



IMPROVE LIFE.



# Muck Crops Research Station IPM 2019

Forecasting/weather information as of 13 August

Standard Growing Degree Day Model (starting 1 April):

MODELS	CUMULATIVE DEGREE DAYS	DEGREE DAYS SINCE LAST REPORT
Growing degree days (DD base 5)	1361	57

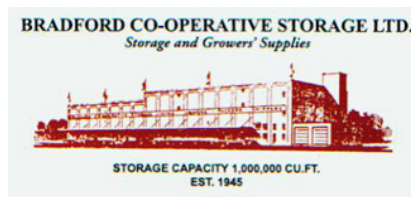
Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
<b>CARROT RUST FLY</b> (DD base 3)	1609	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
<b>ONION MAGGOT</b> (DD base 4)	1483	Emergence at 210 DD (1 <sup>st</sup> gen)	Emergence at 1025 DD (2 <sup>nd</sup> gen)	2 <sup>nd</sup> generation
<b>CARROT WEEVIL</b> (DD base 7)	1124	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	2 <sup>nd</sup> generation should be starting
<b>ASTER LEAFHOPPER</b> (DD base 9)	908	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Active
<b>TARNISHED PLANT BUG</b> (DD base 12)	627	Activity can start at 40 DD		Active
<b>CABBAGE MAGGOT</b> (DD base 6)	1241	Emergence at 314 DD (1 <sup>st</sup> gen)	Emergence at 847 DD (2 <sup>nd</sup> gen)	2 <sup>nd</sup> generation
<b>SEEDCORN MAGGOT</b> (DD base 4)	1483	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)	78	+6	Low risk, no inoculum present
DOWNCAST (Onion downy mildew)	No sporulation-infection periods	Little to no activity	Low risk
BSPCast (Stemphylium leaf blight)	Favourable conditions on 1 of 4 days	Little activity	Low risk, leaf wetness has dropped
White Rot on Onions	12	+4	No risk until conditions are favourable for 35 days
Sclerotinia (White Mold) on Carrot	0	0	Soil is too dry for white mold
TOMCAST (General conditions for disease)	112	+3	Favourable conditions for leaf blights
BREMCAST (Lettuce downy mildew)	2 sporulation-infection periods	Some activity	Moderate risk

### Daily Temperature and Rain

Date (August, 2019)	Max temperature	Min temperature	Rain (mm)
9	24.8	13.3	0.4
10	23.6	12.1	0.0
11	28.7	9.6	0.0
12	28.9	13.1	0.0

Soil Temperature (°C): 5cm: 22.0                      10cm: 23.5                      20 cm: 22.1

