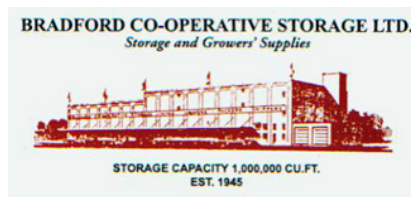




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# Muck Crops Research Station IPM 2019

Forecasting/weather information as of 19 September

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)	1815	59

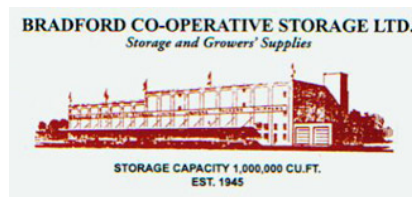
Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
<b>CARROT RUST FLY</b> (DD base 3)	2137	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 complete, in-field activity
<b>ONION MAGGOT</b> (DD base 4)	1974	Emergence at 210 DD (1 <sup>st</sup> gen)	Emergence at 1025 DD (2 <sup>nd</sup> gen)	2 <sup>nd</sup> generation complete
<b>CARROT WEEVIL</b> (DD base 7)	1504	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	2 <sup>nd</sup> generation activity possible
<b>ASTER LEAFHOPPER</b> (DD base 9)	1214	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Active
<b>TARNISHED PLANT BUG</b> (DD base 12)	823	Activity can start at 40 DD		Active
<b>CABBAGE MAGGOT</b> (DD base 6)	1658	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)	1974	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)	149	+12	Low risk, no inoculum
DOWNCAST (Onion downy mildew)	3 sporulation-infection periods	Increased activity	High risk, lower concern as most onions are finishing up
BSPCast (Stemphylium leaf blight)	Favourable conditions on 4/6 past days	Continued activity	Moderate risk, lower concern as most onions are finishing up
White Rot on Onions	26	+5	Low risk, low concern as most onions are being harvested
Sclerotinia (White Mold) on Carrot	0	No activity	Soils still too dry for white mold
TOMCAST (General conditions for disease)	164	+5	Low risk
BREMCAS (Lettuce downy mildew)	6 sporulation-infection periods	Continued activity	High risk, ideal conditions

### Daily Temperature and Rain

Date (September, 2019)	Max temperature	Min temperature	Rain (mm)
13	20.5	6.9	9.2
14	22.0	12.0	0.0
15	17.2	7.2	5.4
16	17.7	10.8	0.2
17	25.0	7.2	0.0
18	24.2	7.9	0.0

Soil Temperature (°C): 5cm: 17.5      10cm: 16.7      20 cm: 17.5

