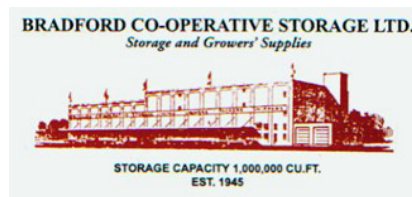




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# Muck Crops Research Station IPM 2019

Forecasting/weather information as of 16 July

Standard Growing Degree Day Model (starting 1 April):

MODELS	CUMULATIVE DEGREE DAYS	DEGREE DAYS SINCE LAST REPORT
Growing degree days (DD base 5)	892	60

Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
<b>CARROT RUST FLY</b> (DD base 3)	1084	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)	986	Emergence at 210 DD (1 <sup>st</sup> gen)	Emergence at 1025 DD (2 <sup>nd</sup> gen)	Nearing 2 <sup>nd</sup> generation, within next week
<b>CARROT WEEVIL</b> (DD base 7)	711	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	Egg laying complete
<b>ASTER LEAFHOPPER</b> (DD base 9)	551	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Adults present and active
<b>TARNISHED PLANT BUG</b> (DD base 12)	355	Activity can start at 40 DD		Active
<b>CABBAGE MAGGOT</b> (DD base 6)	800	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)	986	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	+7	Little risk as no inoculum is present
DOWNCAST (Onion downy mildew)	No sporulation-infection periods	No activity	Very low risk
BSPCast (Stemphylium leaf blight)	High risk on 4 of 4 previous days	Greatly increased risk	Weather is extremely favourable to stemphylium development
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)	63	+11	Conditions generally favourable
BREMCAST (Lettuce downy mildew)	1 sporulation-infection period	Some activity	Risk is low

### Daily Temperature and Rain

Date (July 2019)	Max temperature	Min temperature	Rain (mm)
12	24.9	14.3	0.0
13	29.6	13.8	4.2
14	26.3	13.4	0.0
15	28.8	9.1	0.0

Soil Temperature (°C): 5cm:23.4

10cm: 25.3

20 cm:23.4

