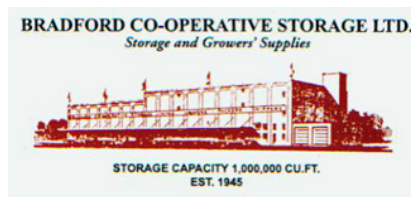




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# Muck Crops Research Station IPM 2019

Forecasting/weather information as of 18 June

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)	444	57

Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
<b>CARROT RUST FLY</b> (DD base 3)	580	Emergence at 329-395 DD (1 <sup>st</sup> gen)	Emergence at 1399-1711 DD (2 <sup>nd</sup> gen)	First generation
<b>ONION MAGGOT</b> (DD base 4)	510	Emergence at 210 DD (1 <sup>st</sup> gen)	Emergence at 1025 DD (2 <sup>nd</sup> gen)	Past peak first generation
<b>CARROT WEEVIL</b> (DD base 7)	320	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	Mid-point of egg laying
<b>ASTER LEAFHOPPER</b> (DD base 9)	215	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Nymphs present
<b>TARNISHED PLANT BUG</b> (DD base 12)	103	Activity can start at 40 DD		Active
<b>CABBAGE MAGGOT</b> (DD base 6)	380	Emergence at 314 DD (1 <sup>st</sup> gen)	Emergence at 847 DD (2 <sup>nd</sup> gen)	First generation
<b>SEEDCORN MAGGOT</b> (DD base 4)	510	Emergence at 200 DD (1 <sup>st</sup> gen)	Emergence at 600 DD (2 <sup>nd</sup> gen)	Nearing 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)	36	+4	
DOWNCAST (Onion downy mildew)	2 Sporulation-infection periods	Some activity	No downy mildew has been seen, risk is low-moderate
BSPCast (Stemphylium leaf blight)	Low risk		
White Rot on Onions	32	+4	White rot can be present on onions
Sclerotinia (White Mold) on Carrot	0	0	
TOMCAST (General conditions for disease)	14	+2	Overall, most disease want more heat
BREMCAST (Lettuce downy mildew)	1 sporulation infection period		

### Daily Temperature and Rain

Date (June 2019)	Max temperature	Min temperature	Rain (mm)
14	22.9	11.0	0.0
15	21.4	13.2	0.4
16	20.9	9.4	0.0
17	23.3	11.9	0.0

Soil Temperature (°C): 5cm: 18.3      10cm: 20.2      20 cm: 19.4

