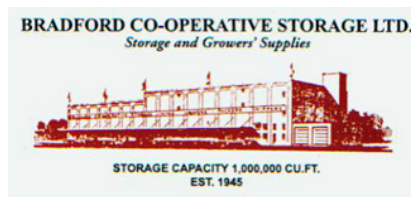




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Muck Crops Research Station IPM 2019

Forecasting/weather information as of 25 June

Standard Growing Degree Day Model (starting 1 April):

MODELS	CUMULATIVE DEGREE DAYS	DEGREE DAYS SINCE LAST REPORT
Growing degree days (DD base 5)	541	97

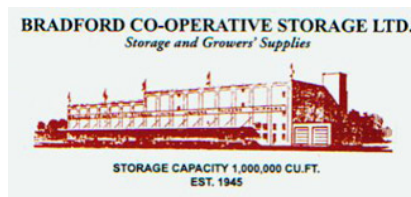
Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
CARROT RUST FLY (DD base 3)	692	Emergence at 329-395 DD (1 st gen)	Emergence at 1399-1711 DD (2 nd gen)	Past peak rust fly emergence
ONION MAGGOT (DD base 4)	614	Emergence at 210 DD (1 st gen)	Emergence at 1025 DD (2 nd gen)	First generation flights have peaked
CARROT WEEVIL (DD base 7)	402	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	Nearing completion of egg laying period
ASTER LEAFHOPPER (DD base 9)	284	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Nearing adult emergence
TARNISHED PLANT BUG (DD base 12)	151	Activity can start at 40 DD		Active
CABBAGE MAGGOT (DD base 6)	470	Emergence at 314 DD (1 st gen)	Emergence at 847 DD (2 nd gen)	First generation
SEEDCORN MAGGOT (DD base 4)	614	Emergence at 200 DD (1 st gen)	Emergence at 600 DD (2 nd gen)	Second generation active





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Disease Forecasting Models:

Disease model	Cumulative DSI	Change since last report	Comments
BOTCAST (Botrytis leaf blight)	51	+7	While weather is conducive, there is very low inoculum present so risk is low-moderate
DOWNCAST (Onion downy mildew)	1 sporulation-infection period	Minimal activity over past week	
BSPCast (Stemphylium leaf blight)	3 days of increased risk	Increased risk	Over the weekend, the weather was conducive to stemphylium development
White Rot on Onions	39	+7	Soil conditions appropriate for white rot development, risk is high
Sclerotinia (White Mold) on Carrot	0	0	Risk is low until carrot canopy closes
TOMCAST (General conditions for disease)	36	+12	Overall warmth and moisture allow for disease development
BREMCAST (Lettuce downy mildew)	2 sporulation-infection periods over the weekend	Some activity	Medium risk

Daily Temperature and Rain

Date (June 2019)	Max temperature	Min temperature	Rain (mm)
18	26.6	15.2	0.0
19	26.9	13.6	0.0
20	23.4	15.9	8.2
21	21.5	12.8	2.2
22	24.6	9.3	0.0
23	27.8	8.8	0.0
24	26.5	11.6	0.0

Soil Temperature (°C): 5cm: 21.1

10cm: 21.87

20 cm: 21.1

