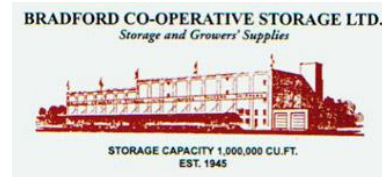# Ontario Crops Research Centre – Bradford (Muck Station) IPM Report 2023

Forecasting, weather and degree day information as of 17 August 2023

Standard Growing Degree Day Model (starting 1 April):

MODELS	CUMULATIVE DEGREE DAYS	DEGREE DAYS SINCE LAST REPORT
Growing degree days (DD base 5)	1509	49

Insect Degree Day Models:

MODELS	CUMULATIVE DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
CARROT RUST FLY (DD base 3)	1780	Emergence at 329-395 DD (1st gen)	Emergence at 1399-1711 DD (2nd gen)	2nd generation activity
ONION MAGGOT (DD base 4)	1643	Emergence at 210 DD (1st gen)	Emergence at 1025 DD (2nd gen)	2nd generation activity
CARROT WEEVIL (DD base 7)	1255	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	Activity finished
ASTER LEAFHOPPER (DD base 9)	1023	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Activity
TARNISHED PLANT BUG (DD base 12)	701	Activity can start at 40 DD		Activity
CABBAGE MAGGOT (DD base 6)	1379	Emergence at 314 DD (1st gen)	Emergence at 847 DD (2nd gen)	2nd generation activity
SEEDCORN MAGGOT (DD base 4)	1643	Emergence at 200 DD (1st gen)	Emergence at 600 DD (2nd gen)	2nd generation activity
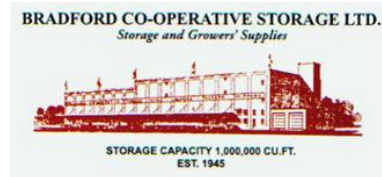
Disease Forecasting

Disease model	Cumulative DSI	Change since last report	Comments
BOTCAST (Botrytis leaf blight)	124	+5	Low risk
DOWNCAST (Onion downy mildew)	Sporulation infection period on 1/3 days	Continued high risk	High risk
BSPCast (Stemphylium leaf blight)	Favourable conditions on 1/3 days	-	Moderate risk
White Rot on Onions	0	-1	Low-Moderate risk
Sclerotinia (White Mold) on Carrot	0	-	Low-Moderate risk
TOMCAST (General conditions for disease)	150	+6	High risk
BREMCAST (Lettuce downy mildew)	Sporulation-infection period on 3/3 days	Continued high risk	High risk

Daily Weather

Date (Aug)	Max temperature (°C)	Min temperature (°C)	Rain (mm)
14	25.8	12.2	0.0
15	25.2	16.0	0.6
16	28.9	17.1	0.0

Soil Temperature (°C): 5cm: 19.3