











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

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

Standard Growing Degree Day Model (starting 1 April):

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MODELS	CUMULATIVE	DEGREE DAYS SINCE
	DEGREE DAYS	LAST REPORT
Growing degree	1038	62
days (DD base 5)		

Insect Degree Day Models:

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CUMULATIVE	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
DEGREE DAYS			
1247	Emergence at 329-	Emergence at 1399- Activity low	
	395 DD (1st gen)	1711 DD (2 nd gen)	
1141	Emergence at 210	Emergence at 1025	2 nd generation
	DD (1 st gen)	DD (2 nd gen)	emergence
846	Egg laying starts at	Egg laying 90%	Activity and egg
	138-156 DD	complete at 455 DD	laying period has
			finished
676	Nymphs emerge at	Adults emerge at	Activity
	128 DD	390 DD	
448	Activity can start at		Activity
	40 DD		
939	Emergence at 314	Emergence at 847	2 nd generation
	DD (1 st gen)	DD (2 nd gen)	emergence
1141	Emergence at 200	Emergence at 600	2 nd generation
	DD (1 st gen)	DD (2 nd gen)	activity
	DEGREE DAYS 1247 1141 846 676 448	DEGREE DAYS Emergence at 329-395 DD (1st gen) 1141 Emergence at 210 DD (1st gen) 846 Egg laying starts at 138-156 DD 676 Nymphs emerge at 128 DD 448 Activity can start at 40 DD 939 Emergence at 314 DD (1st gen) 1141 Emergence at 200	DEGREE DAYS 1247 Emergence at 329- 395 DD (1st gen) 1711 DD (2nd gen) Emergence at 210 DD (1st gen) DD (2nd gen) Egg laying starts at 138-156 DD 676 Nymphs emerge at 128 DD 448 Activity can start at 40 DD 939 Emergence at 314 DD (1st gen) Emergence at 314 DD (1st gen) Emergence at 314 DD (2nd gen) Egg laying 90% Egg laying 90% Emergence at 314 DD (2nd gen) Emergence at 314 Emergence at 847 DD (2nd gen) Emergence at 847 Emergence at 600





















Disease Forecasting

Disease model	Cumulative DSI	Change since	Comments
		last report	
BOTCAST (Botrytis leaf blight)	63	+8	Low risk
DOWNCAST (Onion downy	Sporulation	Increased risk	Moderate risk
mildew)	infection periods on		
	1/4 days		
BSPCast	Favourable	Increased risk	High risk
(Stemphylium leaf blight)	conditions on 4/4		
	days		
White Rot on Onions	0	0	Low-Moderate risk
Sclerotinia (White Mold) on	0	-	Low risk
Carrot			
TOMCAST	77	+11	High risk
(General conditions for			
disease)			
BREMCAST	Sporulation-	-	Low-Moderate risk
(Lettuce downy mildew)	infection periods on		
	1/4 days		

Daily Weather

Date (July)	Max temperature (°C)	Min temperature (°C)	Rain (mm)
13	20.8	14.5	26.2
14	26.1	10.2	0.0
15	24.4	17.0	4.6
16	26.9	18.5	5.0

Soil Temperature (°C): 5cm: 20.5





