Keswick IPM 2019

Forecasting/weather information as of 12 September

BOTCAST (Botrytis leaf blight)	DOWNCAST (Onion downy mildew)	BSP Cast (Stemphylium leaf blight)	White Rot on onions	Sclerotinia (White Mold) on Carrot	TOMCAST (General conditions for disease)	BREMCAST (Lettuce downy mildew)
LOW RISK	LOW RISK	LOW RISK	LOW RISK	LOW RISK	MODERATE RISK	HIGH RISK

Daily Weather and Soil Temperatures:

Date (September, 2019)	Max temperature	Min temperature	Rain (mm)
31	21.2	8.2	0.0
1	21.6	7.7	0.0
2	22.6	14.7	4.4
3	20.3	10.2	0.6
4	20.8	10.3	0.0
5	23.7	3.9	0.0
6	19.5	7.5	3.6
7	20.9	8.1	0.0
8	17.0	7.8	0.0
9	18.8	4.7	0.0
10	21.6	4.8	0.2
11	25.2	15.2	13.0

Soil Temperature (°C): 5cm: 16.8

Disease Forecasting:

Disease model	Cumulative DSI	Change since last report	Comments
BOTCAST (Botrytis leaf blight)	0	0	Low risk of botrytis
DOWNCAST (Onion downy mildew)	5 sporulation-infection periods	Some activity	Low risk, 3 sporulation-infection periods needed in a row for high risk
BSPCast (Stemphylium leaf blight)	Favourable conditions on 2/12 days	Little activity	Low risk, conditions are not very conducive for infection
White Rot on Onions	19	+12	Low risk still
Sclerotinia (White Mold) on Carrot	0	0	Soil too dry for white mold

Disease model	Cumulative DSI	Change since last report	Comments
TOMCAST (General conditions for disease)	174	+16	Leaf blights could develop
BREMCAST (Lettuce downy mildew)	12 sporulation infection periods	Increased activity	Favourable conditions for lettuce downy mildew, high risk

Standard Growing Degree Day Model (1 April):

MODELS	CUMULATIVE DEGREE DAYS	DEGREE DAYS SINCE LAST REPORT
Growing degree days (DD base 5)	**1549**	118

Insect Degree Day Models:

MODELS	CUM DEGREE DAYS	THRESHOLD ONE	THRESHOLD TWO	COMMENTS:
CARROT RUST FLY (DD base 3)	**1817**	Emergence at 329-395 DD (1st gen)	Emergence at 1399-1711 DD (2nd gen)	2nd generation
ONION MAGGOT (DD base 4)	**1683**	Emergence at 210 DD (1st gen)	Emergence at 1025 DD (2nd gen)	2nd generation
CARROT WEEVIL (DD base 7)	**1289**	Egg laying starts at 138-156 DD	Egg laying 90% complete at 455 DD	Egg laying complete
ASTER LEAFHOPPER (DD base 9)	**1038**	Nymphs emerge at 128 DD	Adults emerge at 390 DD	Active
TARNISHED PLANT BUG (DD base 12)	**698**	Activity can start at 40 DD		Active
CABBAGE MAGGOT (DD base 6)	**1417**	Emergence at 314 DD (1st gen)	Emergence at 847 DD (2nd gen)	2nd generation
SEEDCORN MAGGOT (DD base 4)	**1683**	Emergence at 200 DD (1st gen)	Emergence at 600 DD (2nd gen)	Well past 2nd generation