



MUCK CROPS RESEARCH STATION IPM 2009

Forecasting / weather / soil information as of June 16, 2009

MODELS	CUM DEGREE DAYS	THRESHOLDS		COMMENTS:
		ONE	TWO	
Standard Growing Degree Day Model:				
GROWING DEGREE DAYS (DD base 5)	434.6	not applicable	not applicable	
Insect Degree Day Models:				
CARROT RUST FLY (DD base 3)	569.1	329-395 DD	1399-1711 DD	Past the 1st generation emergence
ONION MAGGOT (DD base 4)	501.6	210 DD 1 st Gen	1025 DD 2 nd Gen	Past the 1st generation emergence
CARROT WEEVIL (DD base 7)	307.8	138-156 DD	455 DD 90% oviposition	Reached the DD threshold for oviposition
LEAF HOPPER (DD base 9)	203.6	128 DD	390 DD adult emerge	Reached the DD threshold for overwintering eggs to hatch
TARNISHED PLANT BUG (DD base 12)	85.6	40 DD		Reached emergence threshold

DATE	TEMPERATURE (°C)		ACCUMULATED RAINFALL (mm)
	MAX	MIN	
12 June	24.3	9.8	0.3
13 June	22.4	9.8	0
14 June	24.8	5.2	1.0
15 June	24.2	9.2	0.3

Soil Temperatures

June 15: 5 cm =16.7°C; 20 cm =14.5°C

Disease Forecast

BOTCAST which is used to predict botrytis on onions still has a cumulative disease severity index (CDSI) of 6. According to BOTCAST we should expect to see lesions when the CDSI reaches 20 but historically we usually begin to see botrytis lesions on onions when the CDSI is around 16 depending on the weather. Risk of developing botrytis on onions at this time is very low.

BREMCAST, a forecasting system developed to predict risk levels of downy mildew of lettuce, predicted no sporulation infection period for the last 4 days. Risk of downy mildew on lettuce is low today, but risk will increase if it rains, gets cooler and leaves remain wet for longer periods.

