

PLANT & PEST ADVISORY

CRANBERRY EDITION \$1.50

JUNE 5, 2007



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Insect Update

Cesar Rodriguez-Saona, Ph.D., Specialist in Entomology

We are close to bloom. The insect pest of concern at this time is **Cranberry Blossom Worm**. Most growers should have treated for this pest where populations exceeded the recommended threshold of 4.5 larvae per sweep set of 25 sweeps. Blossom worm larvae should be quite large now and capable of doing severe damage by nipping off the buds and flowers. According to Dr. Henry Franklin, a blossom worm larva is capable of destroying as many as a hundred blossoms during the course of larval development. Larvae are now entirely nocturnal and, at this point, night sweeping is the only accurate way of sampling for this pest. During this nocturnal phase, peak blossom worm activity is around 11:00 PM to midnight. If populations exceed threshold and you haven't applied chemical treatment, we recommend doing so as soon as possible (before the onset of bloom).

Life history

– Cranberry blossom worm moths lay eggs in October on debris or dead vines in cranberry beds. This insect overwinters as eggs; eggs hatch in early May. Cranberry blossom worm has a total of 6 instars. Currently, larvae should be near the



Cranberry Blossomworm: Late Instar Larva

final instar. In the first few instars larvae feed during the day. However, in the later instars larvae become entirely nocturnal. As a result, day sweeping no longer provides an adequate estimate of the larvae present.

Control – We recommend use of the insect growth regulators (IGRs) Confirm 2F and Intrepid 2F, or SpinTor 2SC. These products work well on caterpillar pests.

We do not recommend insecticide sprays during bloom. If growers are required to use insecticides when honeybees are present, your choices of insecticides are reduced to IGRs or products containing

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the bacteria *Bacillus thuringiensis*, such as Dipel (Dipel does not work well on later instars). SpinTor can be used during bloom but only at dusk because this product is toxic to honeybees. □

Weekly Weather Summary

Keith Arnesen, Ph.D., Agricultural Meteorologist

Temperatures averaged much above normal, averaging 72 degrees north, 72 degrees central and 73 degrees south. Extremes were 93 degrees at Canoe Brook, Flemington, and Freehold on the 1st, and 48 degrees at Flemington and Charlotteburg on the 30th. Weekly rainfall averaged 1.45 inches north, 1.50 inches central, and 1.28 inches south. The heaviest 24 hour total reported was 1.74 inches at Glassboro on the 3rd to 4th. Estimated soil moisture, in percent of field capacity, this past week averaged 76 percent north, 72 percent central and 61 percent south. Four inch soil temperatures averaged 70 degrees north, 71 degrees central and 72 degrees south.

Weather Summary for the Week Ending 8 am Monday 6/4/07										
WEATHER STATIONS	RAINFALL			TEMPERATURE				GDD BASE50		MON
	WEEK	TOTAL	DEP	MX	MN	AVG	DEP	TOT	DEP	%FC
CANOE BROOK	2.05	21.78	8.69	93	53	74.	9	638	273	100
CHARLOTTEBURG	1.55	16.53	3.58	88	48	71.	9	548	290	94
FLEMINGTON	1.44	20.35	7.95	93	48	72.	7	594	211	93
NEWTON	.76	11.71	.17	90	49	71.	8	514	210	77
FREEHOLD	1.75	16.10	3.76	93	51	72.	6	759	308	98
LONG BRANCH	1.36	15.97	3.29	87	50	70.	5	558	158	97
NEW BRUNSWICK	1.72	20.89	8.75	92	51	73.	6	655	171	99
TOMS RIVER	1.29	13.78	1.49	89	51	71.	7	615	199	100
TRENTON	1.39	17.41	6.24	91	54	73.	5	681	150	94
CAPE MAY COURT HOUSE	.96	8.76	-2.07	87	52	70.	4	593	120	79
DOWNSTOWN	1.02	14.09	3.00	91	51	73.	5	693	148	77
GLASSBORO	1.74	14.88	3.03	91	56	75.	7	796	271	100
HAMMONTON	.86	12.82	1.28	92	50	73.	5	716	199	71
POMONA	1.67	11.78	1.10	91	52	73.	7	673	225	100
SEABROOK	1.41	14.87	4.60	90	56	74.	6	805	255	96
SOUTH HARRISON	1.12	15.87	3.43	90	55	74	NA	758	NA	NA
WES KLINE -- GDD BASE 40 PINEY HOLLOW										
LAST WEEK 194	(Ending 5/28/07)									
THIS WEEK 232	(Ending 6/4/07)									

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