

# PLANT & PEST ADVISORY

CRANBERRY EDITION \$1.50

MAY 24, 2007



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### Insect Update

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

In the last newsletter, we advised growers to scout for gypsy moth larvae. Since then, growers continued to experience higher than usual numbers of **gypsy moth** larvae in their cranberry beds, in most cases exceeding the threshold of 4.5 larvae/25 sweeps, and required treatment for this pest. At this time, most larvae have reached 3<sup>rd</sup> instar and we do not expect more larvae being blown from wooded areas. In addition to gypsy moth, we have also seen terminals damaged by **spotted fireworm** larvae. Spotted fireworm overwinters as larvae. Larvae feed between uprights they have webbed together (see picture on page 2). First-generation larvae injure the foliage causing it to turn brown as if burned. In New Jersey, first generation adult moths emerge the first week of June, followed by a second-generation of adult emergence in early August. Larvae from second-generation adults emerge in mid-August, and may feed on fruit.

Growers need to start scouting for **cranberry blossom worm**. Daytime sweeping samples can greatly underestimate populations of this insect. Because mature larvae become nocturnal, we recommend growers start sweeping at night to better assess larval populations. We expect that treatment for gypsy moth might have controlled for some early-instars blossom worm. However, monitoring for this insect even in previously treated beds will identify larvae that might have escaped this earlier treatment.

We recommend growers use a selective insecticide (Confirm 2F or Intrepid 2F) for the control of these lepidopteran pests in beds that reach numbers above threshold. Confirm and Intrepid are Insect Growth Regulators (IGRs), very effective against lepidopteran pests. These products **MUST BE EATEN** to be effective, so coverage should be made thoroughly. Confirm mimics the action of the insect molting hormone, ecdysone, and thus disrupts the molting process. Feeding should stop in 24 hours, but actual larval death may take several days. SpinTor 2SC is another selective, reduced-risk product effective against lepidopterans.

Another insect that we recommend scouting for is **blunt-nosed leafhoppers**. Populations of blunt-nosed leafhoppers are low in most cranberry beds; however, this insect is a problem because they can transmit **false blossom disease**. There is no known cure for false blossom. The only recommended method to stop spread of the disease within a bog

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is to control leafhoppers. Leafhoppers can carry false blossom disease from plant to plant. If you have large populations of leafhoppers, we recommend treatment with Actara 25WG or a broad-spectrum insecticide (e.g., Diazinon, Lorsban). Actara is a neonicotinoid insecticide. This class of insecticide acts systemically, potentially accumulating in flowers, and there are recent claims that they can negatively affect honeybees. Actara should be used with caution if applied pre-bloom (this year we will analyze residues in cranberry flowers after a pre-bloom application with Actara). If growers use Actara against leafhoppers, we recommend using Actara after bloom to reduce any effects on bees.

Other insects common in our sweep net samplings are **springtails** (Collembola) and **thrips**. Springtails are very small, black, round, and very active insects. These insects are not damaging to cranberries. They are detritivores (they feed on fallen plant material). Thrips are very small insects; they are hard to see with the naked eye but easily detected with the aid of a microscope. Last year the two dominant thrips species in New Jersey cranberries were identified by the USDA-ARS Systematic Entomology Laboratory (Beltsville, MD) as the tobacco thrips, *Frankliniella fusca*, and *Scirtothrips* sp. The economic importance of thrips in cranberries remains unknown and, at this time, we are unable to provide any treatment recommendations. We will provide more information as we learn more about this insect.

There have been only a few changes in insecticide use for New Jersey cranberries for this year. These include:

1. **Guthion** is no longer registered for use in cranberries. All use of Guthion in cranberries has been cancelled.
2. There are new Restricted Entry Intervals (REI) for **Imidan** (24 hrs to 3 days) and **Diazinon AG600** (5 days).
3. New formulations of **Pyganic** have been added this year: Pyganic EC 1.4 and Pyganic EC 5.0.
4. Labels for **Orthene 75S** allow for a 75-day Pre-Harvest Interval (PHI). See label for more information.
5. **Admire Pro** is new this year. This is a different formulation, so please note the new rates and other label information for this product.



*Webbing of a cranberry upright caused by spotted fireworm*

## Cranberry Twilight Meeting

Thursday, May 31<sup>st</sup>, 2007

6:00 pm

**Joe Darlington's Cranberry Farm  
Whitesbog, NJ**

**Please mark this important  
event on your calendars.**

# Weekly Weather Summary

Keith Arnesen, Ph.D., Agricultural Meteorologist

Temperatures averaged near normal, averaging 60 degrees north, 62 degrees central and 62 degrees south. Extremes were 88 degrees at Freehold and Toms River on the 17th, and 36 degrees at Newton on the 15th. Weekly rainfall averaged 0.71 inches north, 0.69 inches central, and 0.78 inches south. The heaviest 24 hour total reported was 1.14 inches at Seabrook on the 16th to 17th. Estimated soil moisture, in percent of field capacity, this past week averaged 87 percent north, 87 percent central and 84 percent south. Four inch soil temperatures averaged 61 degrees north, 62 degrees central and 63 degrees south.

Weather Summary for the Week Ending 8 am Monday 5/21/ 7										
WEATHER STATIONS	RAINFALL			TEMPERATURE				GDD BASE50		MON %FC
	WEEK	TOTAL	DEP	MX	MN	AVG	DEP	TOT	DEP	
CANOE BROOK	.92	19.68	8.39	87	42	61.	0	336	152	94
CHARLOTTEBURG	.83	14.98	3.86	84	46	60.	2	288	174	85
FLEMINGTON	.66	18.62	7.91	85	43	60.	-1	316	119	87
NEWTON	.43	10.95	1.06	84	36	58.	-1	261	117	82
FREEHOLD	.47	14.07	3.40	88	46	63.	1	448	201	78
LONG BRANCH	.85	14.56	3.54	86	43	61.	0	300	90	94
NEW BRUNSWICK	.90	18.80	8.35	85	48	63.	0	365	91	89
TOMS RIVER	.60	11.68	1.00	88	40	60.	-2	347	115	74
TRENTON	.64	15.83	6.17	84	42	61.	-3	392	85	85
CAPE MAY COURT HOUSE	.48	7.80	-1.56	82	42	60.	-2	337	66	77
DOWNSTOWN	.77	13.01	3.39	86	39	61.	-3	407	88	82
GLASSBORO	1.12	12.30	2.09	85	49	63.	-1	479	174	85
HAMMONTON	.56	11.94	2.00	87	41	62.	-1	420	123	71
POMONA	.63	10.11	.80	85	40	61.	-1	385	136	80
SEABROOK	1.14	13.29	4.52	85	46	64.	0	500	176	84
SOUTH HARRISON	.85	14.58	5.13	84	46	63	NA	459	NA	NA
WES KLINE -- GDD BASE 40 PINEY HOLLOW										
LAST WEEK 163 (Ending 5/14/07)										
THIS WEEK 149 (Ending 5/21/07)										

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**Pesticide User Responsibility:** Use pesticides safely and follow instructions on labels. The pesticide user is responsible for proper use, storage and disposal, residues on crops, and damage caused by drift. For specific labels, special local-needs label 24(c) registration, or section 18 exemption, contact RCE in your County.

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