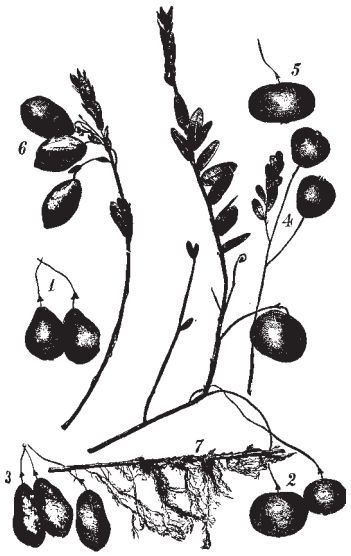
RUTGERS COOPERATIVE RESEARCH & EXTENSION AT THE NEW JERSEY AGRICULTURAL EXPERIMENT STATION

PLANT & PEST ADVISORY

CRANBERRY EDITION $1.50 MAY 25, 2006



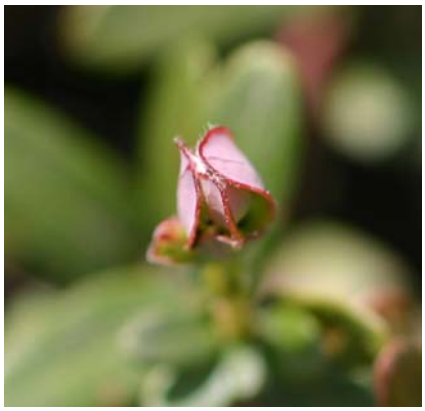
INSIDE

Insect Update

Cesar Rodriguez-Saona, Ph.D., Specialist in Entomology and Dan Schiffhauer, Agricultural Specialist, Ocean Spray Cranberries

Insect populations in most cranberry beds still remain relatively low; however, we expect populations to increase during the next weeks. Our sweep net samples have detected the presence of: cranberry blossom worm, blackheaded fireworm, spotted fireworm, false armyworm, spanworm, and gypsy moth larvae and blunt-nosed leafhopper nymphs, as the most common insects. Most insect counts have remained below threshold; therefore, only few beds required spraying for insect pests.

✔ **Cranberry blossom worm** is becoming common in several beds, although so far numbers still remain low. 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.



First instar BHFW webbing

✔ **Blackheaded fireworm** (BHFW) has been found in few beds. BHFW is a sporadic pest in New Jersey. It overwinters on cranberry leaves as eggs. The first-generation larvae are foliar feeders, while the second-generation larvae feed on blossoms and fruit. Growers need to be careful when monitoring for this particular pest during the first generation because, if left untreated, the second generation can cause serious damage. First-generation larvae feed on terminal foliage, webbing them together. Feeding can cause vines to appear as if burned. This insect can be detected by looking for webbing in the upright tips.

Methods used to monitor BHFW include: sweep net sampling, visual sampling, and pheromone traps. Visual sampling might be a better method than sweep net sampling when larvae are small. Also, infestations are often patchy and larvae do not fall off from the webbed up-

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rights easily, which makes sweep net sampling less accurate and reliable. Monitoring for BHFW moths using pheromone traps should begin the first week of June. At least one trap should be used per 10 acres. Insecticide applications should be timed 10 days after peak moth flight, which often coincides with bloom. Monitoring for larvae after males are caught in traps is still necessary because presence of males in traps may not always mean presence of larvae on the bog later on.

If bogs had BHFW infestations in previous years and 2 or more larvae are found in a set of 25 sweeps with a sweep net, treatment application is recommended.

✔ **Spotted fireworm** overwinters as larvae. Larvae feed between uprights they have webbed together. 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.

If treatment is needed to control a lepidopteran (worm) pest, such as those described above, we recommend the use of Confirm 2F at 16 fl oz/acre or Intrepid 2F at 10 to 16 fl oz/acre. These compounds are very selective, interfering with the insect's normal growth. Thus, they are safe to the environment and also have less toxic effects to the natural enemies of the insect pests compared to broad-spectrum insecticides. In fact, conserving natural enemies, such as insect parasitoids, will keep spotted fireworm under control. Use of broad-spectrum insecticides will interfere with the role of natural enemies.

✔ **Thrips** have been found in several cranberry beds, some of which showed high thrips densities. The economic importance of thrips in cranberries remains unknown; thus, at this time, we are unable to provide any treatment recommendations. ❑

Deer Fencing Available - Deadline Next Week

New Jersey Secretary of Agriculture Charles M. Kuperus announced that a Deer Fencing program will be run cooperatively by the New Jersey Department of Agriculture (NJDA) and Rutgers Cooperative Research and Extension.

The cost-share program will provide fencing material, plus up to 30 percent of the line posts at no cost to qualified farmers who were not awarded fencing in the 2004/2005 program.

"The deer fencing program is part of our effort to partner with the agricultural community to ensure the viability of New Jersey's farms," said Secretary Kuperus. "The fencing is an effective tool in keeping deer from damaging crops and allows farmers to benefit from higher yields."

This is the second year of the Department's deer fencing program. In 2005, fence, accompanying wire and posts were distributed to 100 farmers throughout the state.

A Rutgers Cooperative Research and Extension survey of farmers who participated in previous deer fencing programs indicated that almost 70 percent of wildlife crop loss is attributable to deer. The New Jersey Agricultural Experiment Station estimates the economic loss to farmers to be between $5 million and $10 million annually.

To participate in the program, farmers must meet these eligibility criteria:

- Farmers who were awarded fencing and materials in the 2004/2005 program are not eligible to participate
- Be a New Jersey farmer having documented proof of a minimum of $40,000 in sales of agricultural commodities produced by the applicant on a New Jersey farm or;
- Be a New Jersey certified organic farmer having documented proof of a minimum of $20,000 in sales of agricultural commodities produced by the applicant on a New Jersey farm
- Be the owner of the land or have documented proof of renting preserved farmland or farmland that is enrolled in an Eight-Year Farmland Preservation Program
- Complete a mandatory deer fence installation workshop sponsored by the NJDA and Rutgers Cooperative Research and Extension

Farmers who receive fencing and materials will be required to use the material solely for the purpose of keeping deer off their land and are prohibited from using the fence to contain equine, livestock, poultry, or other animals. Any unused fence will have to be returned to NJDA and cannot be sold.

Applications for deer fencing will be available to farmers through the New Jersey Department of Agriculture, Soil Conservation Districts and Rutgers Research and Extension offices. Applications must be postmarked by May 31, 2006. Farmers also can call (609) 292-5532 for more information or go to the NJDA website www.state.nj.us/agriculture and click on the Grants, Financial Assistance and Services page. ❑

Weekly Weather Summary

Keith Arnesen, Ph.D., Agricultural Meteorologist

Temperatures averaged much below normal, averaging 57 degrees north, 59 degrees central and 60 degrees south. Extremes were 78 degrees at Freehold on the 19th, and 40 degrees at Flemington on the 21st. Weekly rainfall averaged 1.74 inches north, 1.65 inches central, and 1.24 inches south. The heaviest 24 hour total reported was 1.17 inches at Hammonton on the 15th to 16th. Estimated soil moisture, in percent of field capacity, this past week averaged 99 percent north, 98 percent central and 94 percent south. Four inch soil temperatures averaged 59 degrees north, 60 degrees central and 61 degrees south.

Weather Summary for the Week Ending 8 am Monday 5/22/ 6

	RAINFALL			TEMPERATURE				GDD BASE50		MON
WEATHER STATIONS	WEEK	TOTAL	DEP	MX	MN	AVG	DEP	TOT	DEP	%FC
CANOE BROOK	1.95	7.77	-3.65	77	43	59.	-2	385	190	97
CHARLOTTEBURG	1.54	8.68	-2.56	73	41	55.	-3	266	144	95
FLEMINGTON	1.72	8.76	-2.07	73	40	58.	-3	367	159	97
NEWTON	missing									
FREEHOLD	1.84	8.50	-2.29	78	46	60.	-3	380	120	96
LONG BRANCH	1.77	8.90	-2.24	73	46	60.	-2	314	92	94
NEW BRUNSWICK	1.48	7.34	-3.24	76	44	59.	-4	418	131	97
TOMS RIVER	1.88	7.39	-3.40	76	41	59.	-3	358	114	92
TRENTON	1.29	7.22	-2.55	75	44	59.	-5	430	109	93
CAPE MAY COURT HOUSE	1.94	5.67	-3.80	73	44	60.	-3	390	106	91
DOWNSTOWN	.97	5.41	-4.32	76	41	59.	-5	415	82	88
GLASSBORO	.47	6.70	-3.63	75	47	59.	-5	494	175	81
HAMMONTON	1.56	6.39	-3.66	77	44	60.	-4	443	132	84
POMONA	2.06	7.40	-2.01	75	41	61.	-1	395	134	91
SEABROOK	.45	6.04	-2.83	76	46	61.	-3	552	214	80
SOUTH HARRISON	.93	5.70	-4.38	73	48	60.	NA	508	NA	NA

WES KLINE — GDD BASE 40 PINEY HOLLOW
LAST WEEK 139 (Ending 5/15/06)
THIS WEEK 132 (Ending 5/22/06)

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For back issues, visit our web site at:
www.rce.rutgers.edu/pubs/plantandpestadvisory

Pesticide User Responsibility: Use pesticides safely and follow instructions on labels. The pesticide user is reponsible 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 RCRE in your County.

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