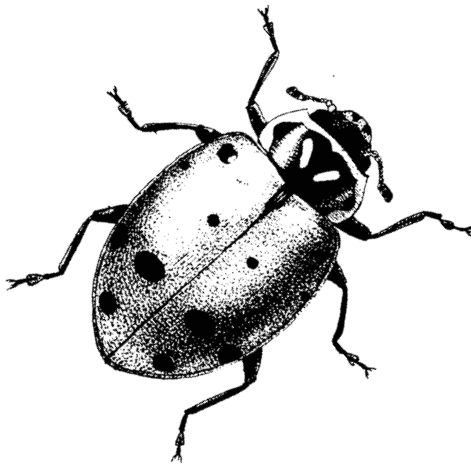


PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

MAY 22, 2001



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Fruit IPM

Dean Polk, Fruit IPM Agent

Peach

✓ **Green Peach Aphids (GPA):** Aphid populations have not increased much since last week. Most blocks that had aphid populations just under treatment level still have similar populations. Only a few locations have been noted where populations are above treatment level. Therefore, while Provado works well against aphids, the automatic use of it is discouraged.

✓ **Oriental Fruit Moth (OFM):** The second application for OFM will be due in northern counties on about 5/22 (Hunterdon Co.). All trap counts have decreased this past week, with trap captures at low levels. This indicates that we are at the end of the first generation flight. Adults from this brood will start to emerge during the next couple of weeks. Therefore, any grower who is using mating disruption dispensers to control OFM should have those dispensers placed in the trees as soon as possible, prior to any second-generation emergence.

✓ **Catfacing Insects (CFI):** Pressure from these insects remains low. Only sporadic numbers of adults are being found in ground cover sampling with a sweep net.

Apple

✓ **Spotted Tentiform Leafminer (STLM):** STLM mines can be found in various stages throughout the state. Sap feeders are just starting to appear in northern counties. While we have not seen high populations thus far, treatment may be targeted against sap feeding mines when average levels exceed .5 to 1 mine per leaf.

✓ **Apple Scab:** Scab is the primary target at this time. While recent heat and prolonged dry weather may have reduced some overwintering inoculum levels, this should still be a significant infection period. Any trees not protected even on one side should receive immediate fungicide on the opposite middle with sufficient back action to get back to Sunday evening, or the start of the infection period.

✓ **Codling Moth (CM):** The first treatment for codling moth should go on at 250 DD after biofix. This will occur by the end of the week or the first part of next week in southern counties, and about a week later in northern counties.

SEE FRUIT IPM ON PAGE 2

Blueberry

✓ **Leafrollers, green fruitworms, and spanworms:** Some larvae are present, but only in about 25% of samples. No samples were seen which required treatment. While most of the larvae seen are green fruitworm, slightly more gypsy moth larvae are being seen compared to last year.

✓ **Aphids:** Aphid populations have increased since last week. Most aphids are still being found as single insects or small colonies in the new growth near the bottoms of the plants.

✓ **Plum Curculio (PC):** PC adults are still being found in beating tray samples, although at lower levels than last week. Injury has been very low, and concentrated in just a few areas. The highest level of injury seen was close to .7% of blossom clusters infested with some level of injury.

Attn: Fax Subscribers

This season we are using a new fax broadcast system. Unfortunately, there are a few kinks in the system, and not all fax subscribers are receiving their faxes. Until we have the problem fixed, we are temporarily suspending the fax broadcasts.

To receive the newsletter on issue day, you can call our fax back system at 732-932-4535 and request fax document 8000. The updated newsletters are placed on the system around 5:00 pm on Tuesdays.

If you are a fax subscriber and have not been receiving previous weeks' issues, please contact Cindy Rovins at 732-932-4539 or by fax at 732-932-9838, or e-mail rovins@aesop.rutgers.edu. We can send you back issues of the newsletter. Also, please provide the following: your name and fax number, whether your fax line has an answering/switch device, the age of your fax machine, and if you can retrieve the newsletters through our fax back system.

We apologize for the inconvenience and hope to reinstate the fax broadcasts shortly. Thank you for your patience. □

Insect Trap Counts

Tree Fruit - Southern Counties

Week Ending	AM	CM	LPTB	OFM	PTB	STLM	TABM-A	TABM-P	OFM-A
1-Apr				0.00					
8-Apr				0.00					
13-Apr				0.20		725.00			6.00
19-Apr				2.02		1040.00			43.00
27-Apr				63.82		1466.67	0.00	0.00	132.00
4-May		0.29		64.79		1213.33	0.29	0.27	117.50
11-May		2.88	1.00	43.69		1280.00	7.56	6.53	123.00
18-May		5.50	51.50	25.52		405.00	10.94	13.75	46.50

Tree Fruit - Northern Counties

Week Ending	AM	CM	LPTB	OFM	PTB	STLM	TABM-A	TABM-P	OFM-A
11-May		3.02		58.27		1213.33			
18-May		6.77		28.49		252.00	1.88	4.62	16.5

Atlantic Co. Blueberry Trap Averages

WEEK END	CBFW	RBLR	OBLR	SNLH	OR BEET	BBM
8-Apr		133.00				
15-Apr		197.50				
22-Apr		195.75				
29-Apr		215.60				
6-May		188.80				
13-May		108.67				
20-May	4.79	16.63	0.00			

Burlington Co. Blueberry Trap Averages

WEEK END	CBFW	RBLR	OBLR	SNLH	OR BEET	BBM
8-Apr		—				
15-Apr		—				
22-Apr		25.00				
29-Apr		107.00				
6-May		125.50				
13-May		41.43				
20-May	4.30	4.14				

Wine Grape Growers Educational Program

Rutgers Cooperative Extension of Gloucester County will be holding a demonstration meeting for established and new wine grape growers on June 5, 2001. Speakers from Pennsylvania State University Cooperative Extension and Rutgers Cooperative Extension will discuss a wide variety of subjects on wine grape growing at the Heritage Tree Fruit LLC, on Rt. 609 (Elmer-Richwood Road) in Richwood, just west of the Rt. 55 exit off Rt. 322.

The program will begin at 6:15 p.m. at the Heritage Building Complex on Rt. 609. Bill and Penni Heritage, owners, are in the process of building a new winery. Attendees will have a chance to visit their wine room and view the construction of their pressing operation.

A riding tour will go through their tree fruit planting and new grape plantings. Dr. Mark Chien, Southeastern Pennsylvania wine grape agent, with Penn State Cooperative Extension will discuss vineyard establishment plus pruning and training of various wine grape types. The Heritages are growing European wine grapes with 4 acres of Cabernet French, Chardonnay, Merlot, and Cabernet Sauvignon.

Dr. Joe Fiola, Rutgers specialist in Small Fruits and Viticulture, will discuss varieties and varietal trends. Dr. Fiola will also discuss upcoming programs and provide educational information on starting a winery.

Rutgers specialists, Dr. Sridhar Polavarapu and Dr. Brad Majek, will also discuss insect and weed management respectively. Dr. George Hamilton will present up-to-date information on Worker Protection Standards and changes for growers. Attendees will receive New Jersey Pesticide Applicator units and Core credits.

A complete copy of the program is available by contacting Jerome L. Frecon at Rutgers Cooperative Extension of Gloucester County at 856-307-6450, fax: 856-881-4191 or email at Gloucester@aesop.rutgers.edu. □

Calendar of Events

June 5, 2001, 6:15 PM - Twilight Grape And Enology Meeting, Heritage Tree Fruit LLC. Rt. 609 Richwood-Elmer Rd., Richwood, NJ. Contact: Jerry Frecon at Rutgers Cooperative Extension of Gloucester Co. at 856-307-6450.

June 26, 2001, 6:15 PM - Twilight Fruit Research Meeting, Rutgers Agricultural Research and Extension Center, Northville Rd., Upper Deerfield Township, Bridgeton, NJ. Contact: Jerry Frecon at Rutgers Cooperative Extension of Gloucester Co. (Registration required) This meeting will be part of the State Horticultural Association of Pennsylvania Fruit Tour of southern NJ.

Strawberry Root Rot

Pete Probasco, Agricultural Agent

Strawberry Root Rot can attack strawberry plants on plastic right when fruiting begins. The problem has been observed this year in New Jersey and is caused by too much water on the plugs. Strips of plants die on one side of the bed from the plug plant trays that were over watered. The fungus disease causing this has not been isolated yet, but it looks like **phytophthora** or **rhizoctonia**. Growers should propagate their tip cuttings under a mist timer that shuts off every 5-10 minutes so that the cuttings are not lying in water.

Placing pallets under the trays also helps keep the bottom of the trays out of water. After 10 days the plugs should be rooted and you can water them like vegetable transplants. Plugs should be kept on the dry side the week before transplanting and watered lightly once they are transplanted in the field. This disease is not apparent at transplanting and remains latent until the plant goes under stress during the fruiting period. This sudden collapse of the plants can also show up in the fall about a month after transplanting. Raising a healthy plug plant in full sunlight without too much water should eliminate this root rot problem. □

Chemical Thinning and Return Bloom on 'Fuji' Apple

Win Cowgill, Agricultural Agent

Fuji apple is one of the most widely planted new apple cultivars in New Jersey. It is estimated that by the year 2005 it will capture 10-11% of the world apple market. It is also notoriously hard to thin and has a tendency to be biennial. An article in the *Journal of American Pomological Society* by Dr. David Ferree, Ohio State University, summarized six years of thinning and return bloom experiments with Fuji apple. Ohio has very similar (humid) growing conditions as we have in New Jersey.

A summary of results is as follows:

- Neither NAA and NAD alone should be used. They did not adequately thin and they did increase the number of pygmy fruit on Fuji.
- Sevin or Accel alone will not generally thin adequately.
- The combination of Sevin and Accel at 10-12MM fruit size gave the most consistent thinning program.
- The combination of Sevin and Accel was also one of the most successful treatments in breaking the biennial tendency of Fuji.
- Multiple sprays of ethephon and scoring did increase return bloom.
- Endothall (Thinrite) shows promise as a bloom thinner for Fuji (note that a label for Thinrite on apple has been put off for several years and will not be available in the near future).

Ethephon can still be applied to assist in return bloom of Fuji and thin in the last thinning window if needed 15-25 MM. See the article "Techniques to Enhance Return Bloom" in the next issue of the Fruit edition of the *Plant and Pest Advisory*.

A complete research report on thinning apple with endothal is available on-line in the New Jersey Fruit Focus Web Site under North Jersey Tree Fruit Research Reports at:
<http://virtualorchard.net/rce/default.html>. □

Tick Warnings

Deborah Smith-Fiola, Ocean County Agricultural Agent,
and Steven Rettke, Program Associate in IPM

Excerpted from *Landscape IPM Notes, Rutgers Cooperative Extension of Ocean County, May 2001*.¹ During the weeks ahead, the peak activity for the immature stage of the **deer tick** (now called the **black legged tick**) will commence. This stage is the vector of 70% of all cases of Lyme Disease. The nymph is very small, about the size of a poppy seed. The tick is picked up by brushing against low (4"-6") vegetation. Since ticks don't fly or drop from trees, they crawl up and wait on vegetation for a person to walk by, and then grasp onto clothing, and crawl up. Tucking your pants into your socks (so they don't crawl up your leg unaware), wearing high rubber boots (too slippery to crawl up – but in the summer?), and wearing a repellent (to kill them upon clothing contact) are thus all precautionary recommendations to prevent a tick bite. The nymph stage will feed for 3 to 5 days, swelling with blood to the size of a sesame seed before it drops off.

The nymph prefers to live in the woods, or in adjacent vegetation, *not* in properly mowed lawns. A lawn is simply too hot and dry for nymphs to survive. Research shows that 84% of nymphs are found in the woods, 13% along wood-edge vegetation, and only 3% in the lawn.

Reliable control of deer tick nymphs currently involves one application of a granular insecticide (Sevin G or Dursban G) broadcast 8-12 feet into the woods. Shaded turf adjacent to the woods is also treated. One application during late May or the first week of June has given > 95% control of nymphs. Liquid insecticides are also labeled, but *thorough coverage*, by drenching foliage until runoff, must be performed. Only one pesticide application is necessary, because nymphs rarely move more than 10 feet from where they molted from a larva. Once they are killed within an area, they won't re-infest again until the adult moves in via animal activity during the fall season. □

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