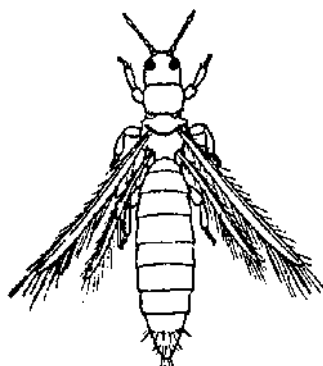


PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

JUNE 21, 2005



Fruit IPM

Dean Polk, Fruit IPM Agent and David Schmitt and Eugene Rizio, Program Associates in Tree Fruit IPM

Peach

✓ **Bacterial Spot (BS):** Fruit and leaf injury from bacterial spot infections continue to appear in new locations in southern counties. One block of snow giant had up to 40% fruit injury. No symptoms have been observed in northern counties to date. The symptoms that are appearing now are from infections that occurred 2 or more weeks ago. The period in which large scale epidemics occur is passing. Even so, coppers should be kept in the mix and antibiotics should be applied any time severe weather occurs.

✓ **Oriental Fruit Moth (OFM):** The second brood larvae are now beginning to hatch in southern counties, and first brood adults are just starting to emerge in northern counties. Degree day spray timings are as follows for the second generation:

County Area	Application and Insecticide Type	
	Standard Insecticides	Intrepid
Southern	1 st trt 6/21-23, 2 nd trt 7/1-3	1 st trt 6/20-22, 2 nd trt 6/30-7/1
Central	1 st trt 6/22-24, 2 nd trt 7/1-3	1 st trt 6/20-22, 2 nd trt 6/30-7/1
Northern	1 st trt 6/25-27	1 st trt 6/24-25

✓ **Tufted Apple Budmoth (TABM):** Timings for TABM control are in the following table, updated since last week. Larvae are 70% hatched in southern counties, and about 40% hatched in northern counties. Injury from first generation larvae was found between clustered fruit in one orchard in a southern county. Injury from first generation larvae is more likely to occur in blocks, which have not been thinned. Treatments for TABM first brood should now be completed in southern and central counties.

County Area	Spray Type		
	AM	EM	Intrepid - EM
Southern	4 th trt 6/21	2 nd trt 6/19-21	2 nd trt 6/19-21
Central	4 th trt 6/23-24	2 nd trt 6/20-22	2 nd trt 6/20-22
Northern	3 rd trt 6/20-21, 4 th trt 6/25-26	2 nd trt 6/22-24	2 nd trt 6/22-24

✓ **Thrips:** Thrips populations are building in clover and other blooming groundcovers. Susceptible varieties like Easternglo, PF-5, and Sentry should be scheduled to receive a thrips treatment. Spintor @ 6-8

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oz. is suggested for control at 2 weeks prior to harvest on peaches, and 1 to 2 weeks prior to harvest on nectarines (PHI 14 days on peach and 1 day on nectarines). Spintor will also control TABM if applied at the above timings. When significant populations are present on nectarines, a second application may be needed.

✓ **European Red Mites (ERM):** The first mite populations were seen on peaches in southern counties last week. Overall populations are very low. Make sure to evaluate your own situation before deciding to use a miticide.

Apple

✓ **Codling Moth (CM):** Degree day based spray timings are now past throughout all areas of the state. However, if trap counts exceed 5 moths per trap after 7 – 10 days since the last spray, then an additional application is justified. Some farms in northern counties continue to have trap counts in excess of 5 males per trap. The following chart updates timings outlined in last week’s newsletter.

County Area	Application and Insecticide Type	
	Standard Insecticides	New Insecticides
Southern	Complete	Complete
Central	Complete	Complete
Northern	Complete	Complete

✓ **Tufted Apple Budmoth (TABM):** See peach section.

✓ **Aphids: Spirea and Apple (green) Aphids:** Populations continue to build, and are below or at treatment levels in many orchards statewide. Our treatment threshold is set at 50% of the terminals infested with healthy colonies. Predation by midges and lady beetles is occurring in many blocks. In most cases biological control is possible if 20% or more of the infested terminals have beneficial insects actively feeding. Midge larvae are small orange maggots and can be found feeding amidst aphid colonies.

✓ **Woolly Apple Aphid (WAA):** Woolly aphid colonies are now appearing in many apple blocks in southern counties. This secondary pest has become more of a problem in recent years. Woolly aphids will feed on pruning wounds, one year old wood, and suckers. They cause injury by secreting honeydew onto developing fruit. Sooty mold eventually grows on the honeydew making the fruit unmarketable. Beneficial insects will usually control WAA in orchards that are on “soft” insecticide programs. Treatable populations often develop in orchards relying on pyrethroids. Where control is needed, Thiodan 50W applied at 3#/ac will provide control if good coverage is achieved. Thiodan applied at this time may also suppress GAA.

✓ **European Red Mite (ERM):** Mites are present in a few apple blocks statewide. Most are below the treatment threshold of 5 mites/leaf for late June through mid-July. See the New Jersey Tree Fruit Production Guide for

treatment suggestions.

✓ Leafhoppers and Leafhoppers and Fire Blight:

Leafhoppers (both white apple - WALH, and potato leafhoppers - PLH) have been present in apple orchards for several weeks. Whereas we can normally tolerate up to 3 leafhoppers per leaf (combined species), we cannot tolerate PLH in young orchards or in orchards where fire blight is present.

Scouting Calendar

The following table is intended as an aid for orchard scouting. It should *not* be used to time pesticide applications. Median dates for pest events and crop phenology are displayed. These dates are compiled from observations made over the past 5-10 years in Gloucester County. Events in northern New Jersey should occur 7-10 days later.

Pest Event or Growth Stage	Approximate Date	2005 Observed Date
Peach – Pit Hardening	June 16 +/- 8 days	Not yet complete

Blueberry

✓ **Sharpnosed Leafhopper (SNLH):** Leafhoppers are present in a number of fields. Since SNLH is the vector for blueberry stunt disease, they should be controlled. This insect should be targeted through early July where stunt disease is a problem. As a general rule, growers in Burlington County will have higher populations of SNLH than growers in Atlantic County.

✓ **Obliquebanded Leafroller (OBLR):** Adults are now starting to emerge and are being caught in pheromone traps. OBLR is not a primary insect target at this time, and no insecticides are needed.

✓ **Aphids:** Populations are present in a number of fields. Where Provado has been applied for control, or Admire has been applied for Oriental Beetle, about 2-3 weeks of control can be expected. When using any aphicide, remember that ground applications are significantly better than aerial applications.

✓ **Oriental Beetle:** Trap catches continue to increase. Where present in significant numbers, or where there is a known history, controls should be initiated. Please see last newsletter for suggestions for Admire use.

✓ **Blueberry Maggot:** Maggot flies are present at several locations. If you are on the Canadian export calendar spray program, then insecticides should be started this week. If you are on the IPM version of the Canadian export program, then treatment should be initiated only after at least one fly is caught in a yellow sticky trap for that production area. Remember that if Provado is being used for aphid control, along with the proper timing for maggot, then additional insecticides are not required.

SEE INSECT TRAP COUNTS ON PAGE 3

New Jersey Wholesale Peach Buyers Guide

Jerome L. Frecon, Agricultural Agent

The 2005 Wholesale Peach Buyers Guide is now available from the New Jersey Peach Promotion Council or Rutgers Cooperative Research and Extension of Gloucester County. It contains 76 pages of information for prospective wholesale buyers on where and how to buy and handle New Jersey peaches and nectarines. The guide lists in alphabetical order all known growers and shippers of New Jersey peaches including their brands, and general information on what and how they ship. It also contains information on quantities normally available and whether they ship wholesales peaches, nectarines, or white peaches.

This is the 21st year the Buyers Guide has been published. The early guide just contained information on each grower and packer including all the cooperatives that sold peaches. Over the years the guide has been expanded as an important source of information for the media because it provides details and statistics on the

peach industry. Color pictures of some of the most important varieties are highlighted along with details on when they are available for buyers. A multi color availability chart explains this in detail.

Information is included on the Jersey Fresh promotional program for peaches and the Premium label farm certification program run by the New Jersey Department of Agriculture. Details on officers and directors of the New Jersey Peach Promotion Council are listed along with an outline of plans for the 2005 promotional program on peaches.

The publication of the guide also serves as a source of income for the New Jersey Peach Promotion Council. Originally these ads were sold for the Northeast Peach Buyers Dinner Program but when the dinner was discontinued in 1989 the program was combined with the guide as one publication. Sales of ads were down this year so only \$11,000 was raised for peach promotion.

For merchandisers the guide contains information on how to store and handle New Jersey peaches along with detailed information on peach varieties and our web site at www.jerseypeaches.com. □

Note: the Blueberry Trap Counts for this week are not available.

Insect Trap Counts

Tree Fruit Southern Counties

Week ending	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM-P	LPTB	PTB
5/27/05	1	4	4		13	0	1	8	58	0
6/05/05	18	11	2		6	6	2	15	80	2
6/11/05	25	22	2		3	5	1	29	60	2
6/17/05	585	31	4		2	25	2	32	93	8

Northern Counties

Week ending	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM-P	LPTB	PTB
5/27/05	6	9	1		0		14	7		
6/05/05	13	16	2		0		7	15		
6/11/05	13	21	6		0		14	21		
6/17/05	134	39	5		0		11	41		

Key: STLM = Spotted Tentiform Leafminer, TABM = Tufted Apple Budmoth (A – apple, P – Peach), CM = Codling Moth, AM = Apple Maggot, OFM = Oriental Fruit Moth (A – apple, P – Peach), LPTB = Lesser Peachtree Borer, PTB = Peachtree Borer

Blueberry Trap Counts – Atlantic County

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
5/27	1.3	3.6				
6/4	7.6	0.7	0.3			
6/11	8.8	1.2	28	0.0	1.8	0.0

Blueberry Trap Counts – Burlington County

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
5/27	1.3	2.2				
6/4	2.6	0	0			
6/11	5.9	0.0	50	3.2	3.1	0.0

Key: CBFW = Cranberry Fruitworm, RBLR = Redbanded Leafroller, OBLR = Obliquebanded Leafroller, SNLH = Sharpnosed Leafhopper, OB = Oriental Beetle, BBM = Blueberry Maggot

Fruit Research on Display at RAREC Meeting and Tour

Jerome L. Frecon, Agricultural Agent

Since opening in 1967, the Rutgers Agricultural Research and Extension Center (RAREC) in Upper Deerfield Township has strived to improve the production and profitability of high quality food and ornamental crops for New Jersey's agricultural industry. Currently encompassing 305 acres, 150 research projects are conducted on 32 different agricultural crops. The home of 8 Rutgers Cooperative Research and Extension (RCRE) faculty, the center employs another 20 staff people and many summer and seasonal employees. It has also been the hub of outreach education and research for many county RCRE faculty as well as non-resident and visiting faculty and scholars from Rutgers and other institutions.

With the appropriation of new funding from the State of New Jersey in 1995 for fruit research and extension, 3 new resident faculty members were hired. Dr Bradley Majek, Specialist in Weed Science who had arrived at the Center in 1981 had conducted a small amount fruit research, but with the expansion of the station to include 65 acres of orchard and vines over the past 10 years, the Center has become a conduit for fruit research focusing on peaches and nectarines. Dr. Peter Shearer, Specialist in Fruit Entomology was hired in 1995 and shortly after, Dr. Norman Lalancette, Specialist in Tree Fruit Pathology. All three specialists are nationally and internationally recognized for their peach and other tree fruit research and extension programs. Dr. Bill Nicholson, Director of the Center, is currently leading the establishment of wine grape research. A new fruit and viticulture specialist is being hired, hopefully to be in residence at the Center by the end of 2005.

Each June a meeting, tour, and picnic is held at the Center for the fruit industry. This year's event will be held on Wednesday, June 29 beginning at 5:00 p.m. and ending at 9 p.m. The objective of the meeting is to bring the industry up to date on current research on tree fruit at the station. Prior to a riding tour of the acreage in fruit demonstrations, a poster display will be visited in the Post harvest building. Dr. David Rosenberger, Professor of Plant Pathology at Cornell University's Fruit Laboratory will also be on hand to discuss his research on summer apple diseases.

RAREC is also an IR-4 Northeast Regional Research Center conducting pesticide residue trails to gain registrations for many minor crops like fruit. Melissa Zimmerman, David Kunkle and Larry Rossell will lead a discussion of their trials.

Pesticide applicator training units will be given at the conclusion of the meeting prior to a chicken and ribs barbecue. A full copy of the program is available at the RCRE website <http://glooucester.rce.rutgers.edu>. Pre registration is required and available by calling Jerry Frecon at 856 307-6450 Ext 1 or e-mailing glooucester@aesop.rutgers.edu. Directions to the center are available on the web site or can be faxed and mailed. □

Calendar of Events

June 26 - 28, 2005 - IDFTA 2005 Summer Tour - NJ, Princeton, NJ. Contact: Susan Pheasant at the IDFTA office Phone: 509.665.3812; Fax 509.665.4912; Email: business@idfta.org.

June 29, 2005 - 5:00 p.m. Fruit Research and Picnic, Rutgers Agricultural Research and Extension Center, Centerton, NJ. For information contact: Jerry Frecon at 856-307-6450 Ext 1 or frecon@rcre.rutgers.edu. Pre-registration is requested.

July 28, 29, 30, & 31, 2005 - New Jersey Peach Festival at the Gloucester County 4-H Fairgrounds, Rte. 77, Mullica Hill, NJ. For information contact: Jerry Frecon 856-307-6450 Ext 1 or frecon@rcre.rutgers.edu.

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

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