

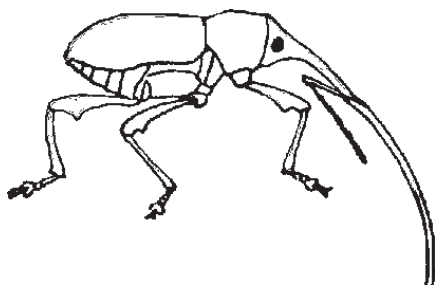
# PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

MAY 26, 1998

## Fruit IPM

*Dean Polk, Agricultural Agent*



### Peach

**Aphids:** While many older colonies of green peach aphids have died out, younger colonies are still present on fresh growth, particularly on young trees. Green peach aphids usually move on to alternate hosts by the end of May to early June. Therefore, additional sprays should not be needed unless counts are extremely high.

**Tufted Apple Budmoth (TABM):** First generation sprays are due in most southern areas for this pest. While TABM has not been a specific problem in many areas, it can be troublesome in Gloucester through Burlington, and sometimes Cumberland Counties. Four alternate middle treatments may be applied starting at 490 DD<sub>45</sub> and again at 625, 763, and 848 DD<sub>45</sub>. The first of these treatments fell on 5/23 in Gloucester County. Compared to apples, we have a limited number of materials that are available to us. While combinations that include Lannate give control, use of Lannate is likely to build mite populations when used at this time of year. In past years, adequate control has been seen with a weekly schedule of Guthion, applied every other middle during the entire first generation period. After mite populations have been controlled, or are on their way down during August, Lannate or even a pyrethroid may be used for the second brood. Where TABM has been a problem, it is important not to stretch insecticide applications beyond 7 days.

**European Red Mite (ERM):** Mite populations of over 20 mites per leaf are common in many peach blocks. While peach trees can tolerate more mites than apples, growers may find that farm labor doesn't tolerate them at all. There are 3 materials that may be used: Carzol, Vendex, and Apollo. Carzol should not be used during hot weather, and both Carzol and Vendex should be used only on early season, low density populations. Apollo has a 21 day PHI, but is also better used as an early season miticide.

**Tarnished Plant Bug (TPB) and Other Catfacing Insects:** Sweep samples are showing the presence of immature tarnished plant bugs. These nymphs represent the majority of the sample in many cases. There are no treatment threshold levels for sweep sampling. The likelihood of insect injury depends on several factors, including the type of ground cover present, operations being performed in the ground cover, the proximity of hedgerows, woods and other host sites, and drought conditions. Given the sampling that we have done over

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the years, we can say that when more than 4 – 6 TPB and stink bugs are found per 50 sweeps, it represents a higher than normal level.

**Rusty Spot:** New rusty spot lesions continue to be visible. New spots are about 1/8 to 1/2" in dia. as were seen over the past 2 weeks. The inclusion of Nova is still advised where new lesions continue to show up in large numbers.

**Apple**

**Aphids:** Rosy aphids are present in most sampled blocks. Apple/spirea aphid (green apple aphids) populations have increased, but in most blocks are under the threshold of 50% terminals infested.

**Codling Moth (CM):** The first treatment for CM was due over much of the State last week. The first treatment will be due in Warren County around 5/26-27. Either 4 alternate middle, or 2 complete sprays are needed. The later sprays (if OP and Carbamate) intended for TABM will also cover CM.

**Tufted Apple Budmoth (TABM):** As outlined under the peach section, the timing for TABM treatments is now. When treating for TABM, keep in mind that the OPs are NOT the MOST effective materials, since TABM has a certain amount of resistance to them. The most effective combination includes both Lorsban 50W @ 1.5 lb/A and Lannate. Use of low rates of Lannate @ .5lb or LV @ 1 – 1.5 pt, every other middle will suppress mite predators, but not wipe them out. A more predator friendly program would drop the Lannate and increase the amount of Lorsban or use Guthion plus Lorsban. Penncap is also effective, but will cause bee kill if flowering weeds are present that attract bees into the orchard. Confirm® 2F does not harm predators, and is the most effective material for TABM control. Timing is slightly different than for OPs and carbamates. The first application is made at 600 to 650 degree days (20-30% egg hatch). This should be about 5/30-31 for most of the southern counties. One application (full cover) is suggested for the first generation. The section 18 Confirm label limits applications to Atlantic, Burlington, Camden, Cumberland, Gloucester and Salem counties. The use rate range for Confirm 2F Insecticide is 12-18 ounces of product. The higher rate is recommended for apples

grown for fresh fruit or large trees or in orchards with heavy TABM pressure.

**Fire Blight:** Several blocks of Rome and Jersey Red were seen this past week with new fire blight strikes. Leaves were starting to wilt, and the bacterial ooze was present at the base of leaf petioles. These strikes should be pruned out, followed by copper applications (Tennocop 5E @ 16 oz/A). DO NOT apply calcium with this spray. See the compatibility chart in back of the Tree Fruit Production Guide for other cautions.

**Apple Scab:** Spore tower counts done on May 1 yielded 238 spores, May 8 – 142 spores, May 16 – 95 , and May 21 – 60 spores per 30 minutes. The primary infection period is almost over, but some primary spores are still available for infection.

**Blueberry**

**Leafrollers and Leps. (Redbanded leafrollers - RBLR, Obliquebanded Leafroller - OBLR, Green Fruitworm - GFW):** No fields were scouted which showed economic levels of leafroller larvae. This is probably due in part to the applications that have been applied for aphid control.

**Aphids:** Most growers have been treating aphid populations with Diazinon or Lannate. Typical results show 50 to 90+% reductions in aphid populations. Aerial applications have not shown as good a control as seen with ground applications. New growth in the bottom 12" of the plant frequently has small aphid populations remaining after aerial applications. Aphids reproduce rapidly, and reinfestation has been seen starting about 10 days after application.

**Plum Curculio (PC):** An additional 3 to 4 sites were seen this week with PC egg scars. In most cases, levels are under .5%. However, in those areas where PC was first seen, larvae are now established in the fruit. Particular attention should be paid to early variety fields that border the woods.

**Cranberry Fruitworm (CBFW):** Low numbers of adult moths continue to be captured in pheromone traps, with trap counts increasing slightly this past week. We should see an increase in flight activity this week, with a flight peak coming with the next 7 to possibly 14 days. Treatments are applied just after the flight peak.

SEE TRAP CAPTURES ON PAGE 3

Degree Day Accumulations Since Biofix and Spray Targets								
May 25								
Insect	Hammonton	Bridgeton	Hardingville	Cream Ridge	Princeton	Oldwick	Pittstown	Hackettstown
OFM	856	682	839	735	653	626	552	472
TABM	512	478	522	433	435	430		
CM	330	344	371	325	313	308		217
Spray Targets:								
OFM	200 & 400 DD <sub>45</sub> after biofix (1 <sup>st</sup> generation).							
TABM	490, 625, 763, 898 DD <sub>45</sub> after biofix (1 <sup>st</sup> generation).				2228, 2415, 2605, 2795 DD <sub>45</sub> after biofix (2 <sup>nd</sup> generation).			
CM	250 DD <sub>50</sub> after biofix plus 14 days later (1 <sup>st</sup> generation).				1250-1300 DD <sub>50</sub> after biofix plus 14 days later (2 <sup>nd</sup> generation).			

### Trap Captures

#### Tree Fruit – South Jersey

WEEK END:	RBLR	STLM	TABM-A	CM	AM	OFM	TABM-PLPTB	PTB
10-Apr	4.00	704	0.00			17.55	0.00	
17-Apr	1.67	1127	0.00	0.00		58.48	0.00	
24-Apr	1.25	1248	0.00	0.45		33.09	0.06	
1-May	0.75	1057	1.38	2.23		15.43	7.08	
8-May	0.33	953	19.58	5.31		14.54	23.58	
15-May	0.20	108	23.44	6.59		8.05	23.58	
22-May	0.80	119	41.20	5.39		8.57	59.55	52.83

#### Tree Fruit – North Jersey

WEEK END:	RBLR	STLM	TABM-A	CM	AM	OFM	TABM-PLPTB	PTB
10-Apr	37.18	945	0.00	0.00		1.11	0.00	0.00
17-Apr	37.96	621	0.00	0.00		2.96	0.00	0.00
24-Apr	35.83	871	0.00	0.03		14.30	0.00	0.00
1-May	23.53	803	0.11	0.11		11.27	0.04	0.00
8-May	14.02	346	0.91	1.56		7.04	0.63	2.00
15-May	3.20	79	2.66	1.69		2.46	1.98	5.72
22-May	1.64	71	11.87	7.52		11.94	11.07	46.47

#### Blueberry - Atlantic Co.

WEEK END:	RBLR	OBLR	CBFW	SNLH	BBM HIGH	BBM LOW
4/3	105.8					
4/10	144.7					
4/17	66.3					
4/24	11.9					
5/1	6.4	0.08				
5/8	2.2	0	0.2			
5/15	0.04	0.05	0.57			
5/22	0	4.05	0.61			

#### Blueberry - Burlington Co.

WEEK END:	RBLR	OBLR	CBFW	SNLH	BBM HIGH	BBM LOW
4/3	18.3					
4/10	21.6					
4/17	13.6					
4/24	6.7					
5/1	2.5	0				
5/8	1.1	0.05	0			
5/15	1.06	0.06	0.00			
5/22	0	0.5	0.22			

## Correction to Reduced Peach Crop Article

In the May 19, 1998 issue of the Plant Pest Advisory - Fruit Edition in the article entitled "Why Has Our Peach Crop Been Reduced In Southern New Jersey" by Jerome L. Frecon, two tables were published rating peach varieties in the Jake Reuter Memorial Block in Richwood, NJ and the Fruit Valley Orchard block near Swedesboro, NJ. Unfortunately the footnotes defining the ratings were not listed with each table. The article was done with Word Perfect 6.1 for Windows but when the article was typeset with Pagemaker the footnotes were lost.

The following were definitions for the footnotes:

Date of Bloom - Average Date of Full Bloom;

Flower Type - L=Large, M=Medium, S = Small or Showy, NS=Non Showy;

Flower Load Rating - 1= Hardly any flowers, 2= a few flowers, 3=medium crop of flowers, 4=heavy crop of flowers, 5 very heavy crop of flowers;

Crop Load Rating - 1= Hardly any fruit, 2=a few fruit, 3=a medium crop but not enough for a full crop, 4=a full crop if none thinned off the tree, 5=a heavy crop with lots of thinning. □

## Confirm 2F Section 18 for Apples

*Peter W. Shearer, Ph.D., Tree Fruit Entomology*

Confirm 2F insecticide has again been issued a Section 18 that allows its use against **tufted apple bud moth (TABM)** on apples in 6 southern New Jersey apple producing counties. These counties are: Atlantic, Burlington, Camden, Cumberland, Gloucester, and Salem.

Confirm 2F is a very selective, effective material when timed and applied properly. Apply 1 spray for the first generation of **TABM** using 12-18 oz of Confirm/Acre in at least 100 gallons of water as a complete coverage spray. Time this first generation spray at 20-30% egg hatch (between 600-650 Degree Days after biofix). Current degree day information for this pest and your growing area are mentioned in Dean Polk's Fruit IPM notes elsewhere in this newsletter.

To control the second generation of **TABM**, make an application at 20-30% egg hatch (2350-2450 DD after biofix) followed by a second application at 60-70% egg hatch (2670-2740 DD). Do not apply more than 72 oz of Confirm 2F per season. Allow at least 14 days to elapse between the final application and harvest.

While Confirm 2F is very effective against **codling moth (CM)**, it is not registered for this pest. In addition, growers expecting to control **CM** while treating **TABM** with Confirm may be disappointed because timings for controlling these pests often don't overlap. If you wait for the right **TABM** timing, you may be too late to control **CM** and end up with damage from this pest. As always, read and follow label directions. □

## Small Trees from Nurserymen for SNJ Growers

*Jerome L. Frecon, Agricultural Agent*

Many peach growers received small trees from nurserymen for spring 1998 planting. These small trees can be defined as those less than 3 feet in height, or less than 7/16 inch in diameter. This presented a problem for some growers because the trees did not break or grow well, or were not what the grower ordered. Small trees are disappointing for growers who order a larger size months before receiving the final order of nursery stock. Some growers also feel the prices paid for these small trees are not proportionately reduced enough.

Why were there so many small trees? With every crop of trees of a particular variety and rootstock combination there are always some small trees as well as other sizes. If the variety and rootstock combination is in great demand the large sizes are sold first and small trees are used to fill the balance of the orders. In years when not in demand, which was not the case in 1998, only the largest sizes are sold and delivered.

Environmental factors have the most profound affect on trees size. Drought reduces tree size. Cloudy and rainy weather can reduce tree size. This was the case with some trees grown by Tennessee Nurseries delivered to New Jersey growers. Heavy stands of germinating seedlings can result in a heavy seedling density in the nursery row. Trees budded to these seedlings are thus very close together and do not always attain good size.

Fruit trees are sometimes sold months before the trees are even budded so sizes are sold based on a history of estimating what the size they will be at harvest. Unfortunately sometimes the estimates for larger trees are inaccurate and more trees show up of the small sizes.

In all cases the nurserymen has the unpleasant task of notifying growers late in the sales season of the small trees. Because the grower needs the tree he will accept the size and then later be disappointed when he examines the trees when they arrive.

Some lots of small trees can do very well. If they are dug and properly handled from the nursery they will do well if they are promptly planted. Small trees do not do well if they are stored extensively, or planted after they are leafed out. These small trees do not have the extensive root or top systems of be handled in this manner.

Sometimes small trees are simply weak trees, particularly if they are from a nursery dormant budding its stock. These trees always have more problems. Small trees are often more abundant from nurseries June budding trees. These trees are frequently very nice with small feathered branches and good fibrous root systems.

Small trees should not be exposed to drought stress or other management practices that will magnify tree stress. □

# Fruit Meeting Calendar

**May 27, 1998** - Twilight Fruit Meeting and Strawberry Showcase and Open house, 4:00 p.m. Rutgers Fruit Research and Extension Center, 283 Route 539, Cream Ridge, NJ. Contact RFREC at 609-758-7311.

**May 28, 1998** - South Jersey Woodlot Management Program and Demonstration 6:30 p.m., Fries Mill Road, Monroe Township, Gloucester County. Contact RCE of Gloucester County, 609-863-0110 to register and receive directions.

**June 3, 1998** - SE PA Twilight Small Fruit Growers Meeting 6:30 p.m., Rodichok Farm, Tower City, PA. Call Joe Fiola at Rutgers Fruit Research & Extension Center, Cream Ridge, NJ, (609) 758-7311.

**June 3, 1998** - South Jersey Christmas Tree Growers Meeting, Dean's Evergreens Christmas Tree Plantation, Route 609 Elmer-Richwood Road, Monroeville, NJ. Call RCE of Gloucester County, 609-863-0110 for details and information.

**June 11, 1998** - Cider Labeling & HACCP Discussion Workshop at the Rutgers Fruit Research and Extension Center, Cream Ridge, NJ. Contact Ron Good, of the New Jersey Apple Industry Council at 609-292-8853 for information. More details to follow later.

**June 16, 1998**, 6:30 p.m. - Direct Marketing Twilight Meeting, Passaic County, Farms View Roadstand, 945 Black Oak Ridge Road (Rt. 202), Wayne, NJ

This third-generation farm, located in the middle of suburbia, has steadily grown over the years and has recently undergone a major expansion. They have also diversified the business by developing a successful leaf recycling business, thereby creating a source of organic matter for use in their fields. For further information, please contact Ramu Govindasamy at (732) 932-9171 ext. 25.

**June 29-30, 1998** - International Dwarf Fruit Tree Association Summer (Peach & Apple Tour of Virginia). Pre-registration is required. Contact Charles Ax at 717-837-1551 before May 15 to register. Details are available from Jerry Frecon at 609-863-0110.

**July 23 through July 26, 1998** - New Jersey Peach Festival at the Gloucester County 4-H Fair, 4-H Fairgrounds, Mullica Hill, NJ. Contact Chris Smith at 609-881-1411 or Marsha Gaventa at 609-467-8028.

**August 18, 1998**, 6:30 p.m. - Direct Marketing Twilight Meeting, Monmouth County, Atlantic Farms, 1506 Atlantic Avenue, Wall Township (Rt. 524), NJ 08736

Located in suburbia, John Tobia and family have carved out a wonderful market, serving consumers with Jersey produce, plants, farm entertainment and agriculture education tours. A steadily growing wholesale produce business serving restaurants and other marketers has been established, further diversifying the operation. For further information, please contact Ramu Govindasamy at (732) 932-9171 ext. 25.

## Southeast Pennsylvania Twilight Small Fruit Growers Meeting

**Wednesday, June 3, 1998**

**6:30 p.m.**

**James Rodichok Farm  
200 Wiconiso Avenue  
Tower City, PA**

### Agenda:

Guest Speakers: Dr. Joseph Fiola, Specialist in Small Fruit and Viticulture, Rutgers Cooperative Extension  
Scott Walker, Jersey Asparagus Farms, Inc.

### Strawberries:

Chandler is the primary cultivar. Planted on raised beds. Plastic culture for 3 years, 2 years, and 1 year will be observed.

This is the fifth year Jersey Asparagus Farms, Inc. has used this system.

### Sprayers:

Sprayers used for herbicide, insect and disease control will be demonstrated by Jim Rodichok.

For more information and directions, call Joseph Fiola at Rutgers Fruit Research & Extension Center, Cream Ridge, NJ, (609) 758-7311.

Rutgers Cooperative Extension - NJAES  
U.S. DEPARTMENT OF AGRICULTURE  
Rutgers - The State University of New Jersey  
88 Lipman Drive  
Cook College  
New Brunswick, N.J. 08901-8525

## **PLANT & PEST ADVISORY**

### **FRUIT EDITION - CONTRIBUTORS**

#### Rutgers Cooperative Extension Specialists

Robert Belding, Ph.D., Pomology  
Joseph A. Fiola, Ph.D., Small Fruit & Viticulture  
George Hamilton, Ph.D., Pest Management  
Norman Lalancette, Ph.D., Plant Pathology  
Bradley A. Majek, Ph.D., Weed Science  
Peter Oudemans, Ph.D., Plant Pathology  
Sridhar Polavarapu, Ph.D., Entomology  
Peter W. Shearer, Ph.D., Entomology  
Craig A. Storlie, Ph.D. Agricultural Engineering

#### NJAES/Cook College

Joseph Goffreda, Ph.D., Breeding  
Edward Durner, Ph.D., Plant Physiology  
Rutgers Cooperative Extension Agricultural Agents  
and Program Associates

Gloucester County, Jerome L. Frecon (609-863-0110)  
Hunterdon County, Winfred P. Cowgill, Jr. (908-788-1338)  
Morris County, Peter J. Nitzsche (973-285-8300)  
Warren County, William H. Tietjen (908-475-6505)  
Fruit IPM, Dean Polk (609-758-7311)  
Meredith Peters, Program Associate (908-788-1338)  
Gene Rizio, Program Associate (609-566-2900)  
David Schmitt, Program Associate (609-863-0110)

#### Newsletter Production

Jack Rabin, Assistant Director, NJAES  
Cindy Rovins, Editor and Designer

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