

# PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

JULY 19, 2005



## INSIDE

**Fruit IPM**..... 1  
**Rainy Daze** ..... 2  
**Calendar of Events** ..... 2

## Fruit IPM

### Peach

✓ **Oriental Fruit Moth (OFM):** Trap counts indicate a continued low pressure on the average farm. However, the 3<sup>rd</sup> brood will begin to hatch by mid-week. The first treatments for the 3<sup>rd</sup> brood will be due in southern counties on or about 7/22. If growers are using Intrepid, then the timing should be moved up a little earlier to 7/20. OFM is near the end of the 2<sup>nd</sup> brood in northern counties. Therefore, we are between generations at this time, and no treatments are needed in northern counties until the end of the month (see table). Degree-day spray timings are as follows, updated since last week:

County Area	Application and Insecticide Type	
	Standard Insecticides	Intrepid
Southern	1 <sup>st</sup> spray for 3 <sup>rd</sup> gen. 7/22-24, 2 <sup>nd</sup> spray – 7/29-7/31	1 <sup>st</sup> spray for 3 <sup>rd</sup> gen. 7/20-22, 2 <sup>nd</sup> spray – 7/27-7/29
Central	1 <sup>st</sup> spray for 3 <sup>rd</sup> gen. 7/22-24, 2 <sup>nd</sup> spray – 7/29-7/31	1 <sup>st</sup> spray for 3 <sup>rd</sup> gen. 7/22-24, 2 <sup>nd</sup> spray – 7/29-7/31
Northern	1 <sup>st</sup> spray for 3 <sup>rd</sup> gen. 7/27-29, 2 <sup>nd</sup> spray – 8/1-8/3	1 <sup>st</sup> spray for 3 <sup>rd</sup> gen. 7/25-27, 2 <sup>nd</sup> spray – 7/30-8/1

✓ **Anthraxnose and Brown Rot:** Conditions are very favorable for brown rot and anthracnose infections. Use a full rate of Captan in place of sulfur on Anthracnose prone varieties such as Sugar Giant, Harrow Beauty, and Klondike. Begin using highly effective brown rot materials two to three weeks prior to harvest.

✓ **Catfacing Insects:** The number of Tarnished Plant Bugs and Stink Bugs found in the groundcover increased last week. In addition, fresh injury was found on several farms in southern and northern counties. Imidan has been less effective than other materials for catfacing insect control in the past. Guthion and Diazinon may be more effective but be aware of the limitations on the total amount that can be used and the longer PHI's. More frequent mowing or disking will help suppress populations. However, mowing after seed heads are formed, and/or after populations increase is self-defeating, since it serves to move the insects into the trees.

### Apple

✓ **Codling Moth (CM):** CM larvae are about 20% hatched in southern counties, and are about 5% hatched in northern counties. Assail, Calypso and Intrepid timings are slightly earlier than standard

*SEE IPM ON PAGE 2*

# Rainy Daze

Peter W. Shearer, Ph.D., Specialist in Tree Fruit Entomology

Several farms have been hit by torrential bouts of rain this summer. One of the big unknowns is what these rain events can do to recently applied pesticides. This can lead to uncertainty as to whether to reapply a spray or not.

There is very little data available from field tests to determine the effects of rain on insecticide persistence during rain because no two storms are alike. There are several variables to consider when deciding on whether to re-apply a spray or not including what product was used, how much time the product had to dry before the rain, the amount of rainfall, and the intensity of rainfall.

If the spray has had a chance to dry completely, say 2-3 hours, then the product is more likely to weather better than a spray that did not dry properly before a rain. Also, some products, like Provado, Actara, and Avaunt, get absorbed into the plant tissue so they are not readily lost during rain. Some products, such as Intrepid, weather better and are more persistent on the plant than other compounds.

The amount and intensity of the rain must also be considered. An inch of gentle rain over a day's time probably won't wash off as much residue as an inch of hard rain falling in 15 minutes. Despite the lack of information on pesticide weathering, there are a couple of guidelines to consider. If the spray has dried properly, then 1-1.5 inches of gentle rain won't remove enough residue to justify an immediate re-application. If the spray was followed by more than 1.5 inches of heavy rain, then sprays should be re-applied. □

## Calendar of Events

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@rcrc.rutgers.edu.

### IPM FROM PAGE 1

OP's, Carbamates and Pyrethroids. The following chart updates timings outlined in last week's newsletter.

County Area	Application and Insecticide Type - 2 <sup>nd</sup> Generation	
	OP's, Carbamates, Pyrethroids, Avaunt	Assail, Calypso and Intrepid
Southern	Past; 2 <sup>nd</sup> application due about 7/24	Past; 2 <sup>nd</sup> application due 7/22
Central	Past; 2 <sup>nd</sup> application due about 7/26	Past; 2 <sup>nd</sup> application due about 7/24
Northern	Past; 2 <sup>nd</sup> application due about 7/28	Past; 2 <sup>nd</sup> application due about 7/27

✓ **Sooty Blotch and Flyspeck; Bitter Rot (Anthracnose):** Sooty blotch and flyspeck, as well as the summer rots are all concerns, especially with the recent wet weather pattern (one which shows no signs of abating). Sooty blotch and flyspeck treatments may be stretched (see Dr. Rosenberger's article in the July 5<sup>th</sup> edition of the Plant and Pest Advisory) under normal conditions. However, wetting for this time of the year has been more frequent than usual, so disease pressure is greatly increased. Alternate middle and/or low volume sprays will not be adequate in orchards with thick canopies or a history of summer disease problems. Increasing the rate and frequency of Captan applications may help improve rot control under frequent wetting conditions. Remember, Sovran and Topsin have no efficacy against bitter rot and Flint is rated as fair only, so an effective protectant such as Captan must be included in any summer disease program. All of these products have limited residual activity for summer diseases and may be removed from fruit after 2" of rainfall.

### 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
CM – 2 <sup>nd</sup> generation 1250 DD target	July 15 +/- 10 Days	7/13
TABM – 2 <sup>nd</sup> generation 2210 DD target	August 8 +/- 5 Days	

### Blueberry

✓ **Leafroller Larvae and Fruit Injury:** The number of worms seen in the field is similar to last week with 7% of our samples showing low levels. Incidence of fruit injury, however, has increased with 51% of samples showing some feeding damage. A portion of this injury is fresh and in 2 cases larvae were seen feeding on fruit. The extent of this activity does not appear widespread and should not require treatment at this time. This injury is consistent with previous seasons in that worm activity will often increase as the second brood of redbanded leafroller, and summer brood obliquebanded leafroller are present in the field.

✓ **Aphids:** Incidence and levels are lower this week with 71% of samples being positive and 29% above the 10% infestation level.

✓ **Japanese Beetle and Oriental Beetle:** There has not been much change in activity this week. About 17% of our fruit samples show low levels of fruit feeding and/or presence of (mostly) Japanese Beetles on foliage or fruit. In at least 2 cases Oriental Beetle was seen feeding on

SEE THE BEETLES ON PAGE 3

**THE BEETLES FROM PAGE 2**

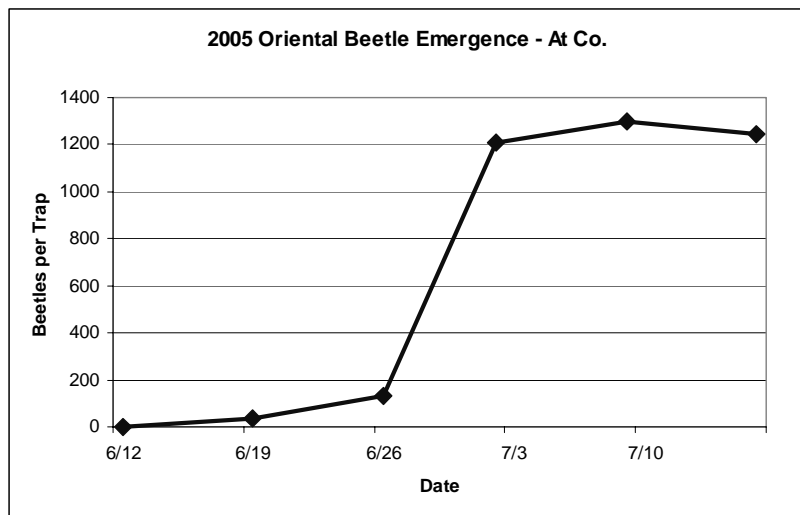
fruit. This is uncommon since most feeding is usually associated with Japanese Beetle. No fields were seen that require specific treatments for Japanese Beetle. Oriental Beetle populations are in the middle of a strong flight peak, with a sustained strong emergence. Please see enclosed graph. The numbers that we continue to see only reinforce the recommendation that where high numbers are present, growers should be treating with Admire. We are coming into the last window of opportunity. If Admire is not applied within the next 10 days (end of the month), it will not control OB larvae.

✓ **Blueberry Tip Borer:** Shoot dieback has been seen in a few locations, and larvae have been extracted from several of our samples. This is an occasional pest, and does not merit treatment.

✓ **Anthracnose:** Infected fruit is being seen in a number of locations. About 14% of our fruit samples have been positive for Anthracnose. An unusual situation was seen in a Duke field at 3% infection. This is very high as field samples are concerned, but it is interesting to note that this block had only 1 early season fungicide application close to petal fall. The main factors that are influencing the levels being seen are: 1) The

extremely humid and wet weather, making very favorable disease conditions, and 2) The fact that some fields have too much ripe fruit. Delaying a hand picking can increase the amount of disease seen. Abound and Captan remain the 2 best choices for control, but do not apply Abound more than 2 consecutive times.

✓ **Stem Blight:** This does not seem to be widespread but infection is being seen more frequently. Prompt removal of infected canes will reduce chances of further infection. Wood should be cut as close to the crown as possible.



**Insect Trap Counts**

**Tree Fruit Southern Counties**

Week ending	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM-P	LPTB	PTB
7/1/05	1236	10	1		2	4	2	10	81	4
7/8/05	1201	4	1		9	34	6	3	74	23
7/15/05	235	1	0		9	31	3	1	54	4

**Northern Counties**

Week ending	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM-P	LPTB	PTB
7/1/05	121	11	2		0		5	13	0	0
7/8/05	100	4	1	0	0	16	3	5	0	0
7/15/05	90	3	0.5			19	3	3		

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
7/1	0.00	120.46	9.67	0.02	1260.05	0.08
7/8	0.15	63.67	9.00	0.00	1295.91	0.04
7/15	0.00	30.75	0.40	0.01	1244.19	0.19

**Blueberry Trap Counts – Burlington County**

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
7/1	0.49	46.80	12.75	1.67	1142.22	0.42
7/8	0.11	35.80	1.25	0.61	908.75	0.16
7/15	0.00	10.70	0.50	0.38	1150.00	0.05

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

FIRST CLASS  
POSTAGE PAID  
PERMIT #576  
MILLTOWN, NJ 08850

NEW BRUNSWICK, N.J. 08901-8551  
18 College Farm Road  
Rutgers' Cook College  
Plant & Pest Advisory  
Rutgers Cooperative Research & Extension



## PLANT & PEST ADVISORY FRUIT EDITION - CONTRIBUTORS

### Rutgers Cooperative Extension Specialists and Program Associate

George Hamilton, Ph.D., Pest Management  
Norman Lalancette, Ph.D., Plant Pathology  
Bradley A. Majek, Ph.D., Weed Science  
Peter W. Shearer, Ph.D., Entomology  
Gail Lokaj, Program Associate in Pomology

### NJAES/Cook College

Joseph Goffreda, Ph.D., Breeding

### Rutgers Cooperative Extension Agricultural Agents and Program Associates

Atlantic County, Gary C. Pavlis, Ph.D. (609-625-0056)  
Gloucester County, Jerome L. Frecon (856-307-6450)  
Hunterdon County, Winfred P. Cowgill, Jr. (908-788-1338)  
Morris County, Peter J. Nitzsche (973-285-8300)  
Passaic, Elaine F. Barbour, Agric. Assistant (973-305-5740)  
Warren County, William H. Tietjen (908-475-6505)  
Fruit IPM, Dean Polk (609-758-7311)  
Meredith Compton, Program Associate (908-788-1338)  
Gene Rizio, Program Associate (856-566-2900)  
David Schmitt, Program Associate (856-307-6450)

### Newsletter Production

Jack Rabin, Associate Director for Farm Services, NJAES  
Cindy Rovins, Agricultural Communications Editor

For back issues, visit our web site at: [www.rce.rutgers.edu/pubs/plantandpestadvisory](http://www.rce.rutgers.edu/pubs/plantandpestadvisory).

**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 RCRE in your County.

**Use of Trade Names:** No discrimination or endorsement is intended in the use of trade names in this publication. In some instances a compound may be sold under different trade names and may vary as to label clearances.

**Reproduction of Articles:** RCRE invites reproduction of individual articles, source cited with complete article name, author name, followed by Rutgers Cooperative Research & Extension, Plant & Pest Advisory Newsletter.