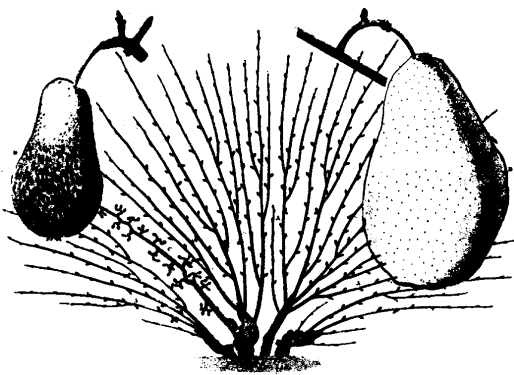


PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

JULY 29, 1997



INSIDE

ReTain for Apples and Pears	1
Early Peach Varieties or SNJ	2
Peach Marketing	3
Weekly Weather Summary	4
Marketing - Getting Your Name Out to Buyers	5
Fruit Meeting Calendar	5
Miticide Stewardship	5
Fruit IPM	6

ReTain™ Harvest Management Tool for Apples and Pears

Winfred P. Cowgill, Jr., Agricultural Agent

ReTain is a new harvest management tool labeled for both apples and pears. It has received a full federal label for use in 1997. In 1996 growers applied and evaluated ReTain on nearly 4,000 acres of apples in 18 states. Half of the acreage was in the Pacific Northwest, while the rest was used in the Great Lakes region and eastern U.S. It was used on many varieties including Red Delicious, McIntosh, Gala, Golden Delicious, Empire, Jonagold, Jonathan and Rome.

I have had two years experience working with ReTain in New Jersey under and an EPA-approved experimental use program on seven different apple cultivars with excellent results. ReTain was evaluated on six grower orchards and at the Rutgers Snyder Research and Extension Farm on McIntosh, Cortland, Liberty, MaCoun, Stayman, Mutsu, Empire.

ReTain works by retarding the development of ethylene, the chemical that causes ripening. The active ingredient is a naturally occurring product, aminoethoxyvinylglycine(AVG), which is produced by fermentation.

ReTain is a true harvest management tool with multiple benefits. It works as a stop drop material, as good as or better than NAA, holding drop-prone varieties on the tree. It delays maturity on average from 7-10 days. Fruit treated with ReTain can be picked during the normal harvest period for enhanced retention of firmness in CA or regular cold storage, or harvest may be delayed, allowing the fruit to continue to grow and develop red color for an extended time.

Our experience in New Jersey is that ReTain reduces preharvest drop on McIntosh from 10-20%. Dr. Ed Stover, formally with Cornell University, Hudson Valley Lab, says "McIntosh apples typically grow about 1% per day during the few weeks around harvest. If we can delay harvest, we can take advantage of additional fruit growth to produce a significantly higher proportion of 100 count fruit."

For varieties with narrow harvest windows like the scab-resistant variety Liberty, ReTain allows growers to delay harvest up to two weeks and pick larger, more highly colored, firmer fruit.

Research in 1996 showed ReTain was also effective in reducing stem cracking in Gala. This may be an added benefit. It will be interesting to see if ReTain can help prevent cracking on Stayman as well.

SEE RETAIN ON PAGE 2

In Washington State growers are excited about ReTain because of its ability to enhance the storage quality of Red Delicious. In a 4000 bin pooled experiment, 2000 treated with ReTain and 2000 untreated, ReTain treated fruit was 2 lbs firmer allowing it to make export grade. New Jersey grown apples in regular cold storage will see the same firmness enhancement with ReTain treated fruit.

ReTain is a natural product which is very expensive to manufacture. Because of this, ReTain should only be used in blocks with large crops of unblemished fruit.

There are some important considerations to follow with ReTain applications in New Jersey this year:

- Use the full rate of ReTain, 1 pouch or 333 grams/Acre of formulated product with an organosilicone surfactant at 0.10% (v/v)
- Only use one of the following organosilicone surfactants:
Silwet L77 at 13 fluid ounces per 100 gallons
Sylgard 309 at 13 fluid ounces per 100 gallons
- Apply 4 weeks before anticipated harvest (28 day PHI); it is better to apply slightly earlier rather than later
- Water Volume- ReTain should be applied with a sufficient amount of water to ensure thorough wetting of the fruit while avoiding spray run-off. Adjust water volume based on tree size and spacing
- For optimum results apply during periods of slow drying weather conditions
- No rainfall or irrigation should occur within six hours of ReTain application
- Do Not tank mix ReTain with other agricultural products
- Do not apply NAA or ethephon products to ReTain treated blocks

For Pears: Contact your local Abbot Lab Ag Specialist or call 1-800 323-9597 for specific information regarding the use of ReTain on pears.

ReTain is an exciting new harvest management tool for New Jersey growers. Supply of this product is limited in 1997. Order your product now if you hope to get some this season.

If you have specific questions regarding the use of ReTain please feel free to contact me at (908) 788-1338. □

Very Early and Early Peach Varieties For Southern New Jersey

Jerome L. Frecon, Agricultural Agent

Strong early season prices have again encouraged growers to plant more early peaches. Supplementing small fruit, vegetable and cherry sales with early fruit for on-farm retailing has also heightened interest.

Rich May ripening on June 20th is not a bad peach for its season. Although the pit is soft, the fruit is firm, yellow fleshed, and has an attractive red skin color over 80-90% of the surface. Unfortunately like so many varieties originating in California, it is susceptible to bacterial spot and doesn't crop heavily. However, for a small amount of very early season fruit, this peach plus **Mayfire nectarine** are worth the gamble. The white fleshed peach variety **25R214** from Zaiger Genetics ripens about July 1, before **Candor** and **Derby**, yellow fleshed peaches. This is probably the best early white peach, lots of red color and firm fleshed. It does get spot and has not been tested on enough sites for a realistic evaluation on winter hardiness. The other promising white fleshed varieties **Scarlet Pearl** and **Sugar May** ripen later. **Scarlet Pearl** ripens on July 14 and **Sugar May** a few days later. **Scarlet Pearl** is the best cropper of these three white peaches, and has more tolerance to bacterial spot. It does not have as much red skin color nor is it as firm. It sizes like **24R215** but not quite as well as **Sugar May**.

A yellow fleshed peach ripening before **Candor** is **Flaming Fury #1**. The fruit was again small but of excellent quality and color. **Flaming Fury #5 B** is a week later with **Candor** and **Derby**. **5B** has better size than either of these varieties and doesn't have as many split pits. Both of these early Flaming Fury varieties were not as firm at full maturity as previous years. I still like the old variety **Royal May** in Candor season but it is hard for growers to find trees. I also replanted **Spring Lady** on another site to give it a second look. This was always a very nice variety but the tree was short lived and susceptible to bacterial spot. I have a number of beautiful peaches for the USDA program at Byron, Georgia with yellow flesh and very high color. One was recently named **Ruby Prince**. They have no bacterial spot but are all young trees.

We are now well into **Garnet Beauty**. **Sentry** has a heavy crop, good size in spite of the drought, good color and flavor with little bacterial spot. The fruit does have more pronounced sutures, some of which were soft. My crop of **Summer Serenade** was light on a few weak trees so it was not exciting this year. New trees have been planted on other sites. GW115 was recently patented and named **Glenglo**. It is a nice yellow fleshed peach in **Garnet Beauty** season, that like **Summer Serenade**, may have a place with growers who can't crop **Sentry**. **Harrow Dawn** and **Summerprince** are also ripening now but on very young trees are not comparable to these other yellow fleshed varieties. **Summerprince** does have beautiful color but is small because it didn't have irrigation.

The drought has been hard on my test plantings of nectarines. **Articglo** ripening now is beautiful, but size is smaller than past season. **Easternglo** yellow fleshed nectarine is better sized. The crop is not as heavy as **Articglo**. Both varieties have quite a bit of bacterial spot.

I have a number of interesting varieties ripening now including **Gala** and **Harblaze** nectarine. The flavor on all varieties has been excellent to date. □

Peach Marketing

Jerome L. Frecon, Agricultural Agent

◆ Peach Crop

The southern New Jersey Peach crop, on average, is running 3-4 days later than normal. While we have been picking Redhaven since July 25, 1997, many of the type 4 cultivars that are marketed as Redhaven will not be in abundance until the week of August 4, 1997.

◆ Merchandising

According to New Jersey Peach Marketing Council consultants John Repko and Charles Walker, chain store merchandisers are gearing up for big promotions the week of August 10, 1997. John covers New Jersey and the Philadelphia area while Charles was in New England and New York. Each potential buyer received a New Jersey Wholesale Peach Buyer's Guide (available by contacting me at 609-863-0110). Each of these guides contains advertising slicks on "Jersey Fresh" peaches.

Charles and John also distributed additional point of sale material to buyers and merchandisers on their visits. These included hats, price & handling cards, and recipe leaflets. For price & handling cards and glossy peach advertising slicks call me at 609-863-0110. Of course the "Jersey Fresh" promotional program has some material available by calling 609-292-8853.

Charles Walker reports that supplies from Georgia have and will continue to diminish. South Carolina is coming up light particularly in the Piedmont area due to frost and hail.

Both report that buyers are concerned with fruit quality and the keeping availability of peaches from the Southeast. While the current market is relatively strong for New Jersey peaches both consultants see strong competition from California. Market prices for 25 pound boxes are hanging at \$4.92 box for 2 1/2" and up fruit.

Many retailers are handling "tree ripened" or "well matured" peaches from California and pricing these at premium levels for \$1.49 to \$2.49 per pound. These are being supplemented by regular California fruit or Eastern fruit priced at less than \$1.00 per pound. Buyers look at New Jersey peaches for merchandising in this latter price range. They're asking for a "tree ripe" pack and have been told New Jersey peaches are "well mature" but are washed and have the fuzz removed and are only 2-3 days from the produce markets. Most California peaches and some from the Southeast have price look up (PLU) stickers so buyers expect them. Most peaches in the market are arriving in 25 pound boxes or less.

◆ Grading and Packing

I have only noticed two grower packers using the "Jersey Fresh" label for peaches with the "Quality Grading Program". Information on this program is available by contacting Pat Mullen 609-292-5575 or

Larry Hardwick at 609-453-3870, both with the NJDA.

A new centralized packing facility in Glassboro had its grand opening on July 25, 1997. Called "Eastern ProPak", it is operated by nine growers, all members of the Jersey Fruit Marketing Cooperative. All Jersey Fruit growers will market under the "Jersey Fruit" label without grower identification on the box. The new packing house and storage facility will also feature computerized sizing, sorting and automatic stickering.

A number of packing houses have updated their grading and storage facilities including Larchmont Farms, Fralinger Farms, Sunny Slope Farms, Tri Star Farms, Circle M Farms, and Sun Valley Orchards. This is a sign of a healthy industry focused on improved handling and quality.

◆ Market News

Peach prices, Shipping Point Reports are again available from Joe Tarpine, Market News and Cooperative Section, NJDA. A seasonal subscription of both reports can be faxed for \$30.00. Subscribers can call 609-453-3870 for information. Joe also has his daily tape recording at 609-453-3959.

Market news prices are available from many sources on the internet. One of the most complete price services I have found is called "Today's Market": http://www.todaymarket.com/tmp_info.htm

◆ Public Relations

I have worked with New Jersey Peach Festival and New Jersey Peach Promotion Council consultants Wendy DeCou and Linda Vorsa, on writing peach press releases, newspaper and magazine articles, television and radio shows. Approximately 22 have been published and shown. This will continue throughout the season.

The New Jersey Peach Festival was held on July 24, 25, & 26th with approximately 20,000 attending and learning about peaches. Educational displays were made on *Peach IPM, Peach Promotion, Peach Utilization, Peach Breeding, Peach Varieties & Testing, Peach Cultivar, Insect & Disease Research, Preserving Orchard and Farmland and Conservation Practices on Farms & Orchards. A Little Miss Peach & Peach Queen contest was held.* The New Jersey Peach Queen will represent growers in various merchandising & promotional activities and is available by contacting Marsha Gaventa at 609-467-8028. Peach ice cream, peach food, peach merchandise and peaches were sold. The giant peach balloon flew over the peach tent, and for the first time the "Jersey Peach" 1923 C Wagon, customized and painted peach color was available for display.

The commercial peach pack competition was held. The winners were:

Commercial Category - Boxes of yellow fleshed peaches as they are packed by commercial grower/packers.

Class - 2 1/4 inches in Diameter Peaches

1st Place - Mt Pleasant Orchards - Milton Reuter, Sr. Family, Richwood, NJ was also Best of Show and Best of Category

SEE WINNERS ON PAGE 4

Weekly Weather Summary

Keith Arnesen, Agricultural Meteorologist

Temperatures averaged much below normal. Extremes were 93 degrees at Pemberton and Woodstown on the 28th and 52 degrees at Charlotteburg and Newton on the 26th. Weekly rainfall averaged 4.43 inches North, 5.03 inches Central, and 3.59 inches South. The heaviest 24 hour total was 6.24 inches at New Brunswick on the 24th to 25th. Estimated soil moisture, in percent of field capacity, this past week averaged 92 percent North, 86 percent Central and 74 percent South. Four inch soil temperatures averaged 71 degrees North, 73 degrees Central and 74 degrees South.

Weather Summary for the Week Ending 8 a.m. Monday 7/28/97

WEATHER STATIONS	RAINFALL			TEMPERATURE				GDD BASE50		MON
	WEEK	TOTAL	DEP	MX	MN	AVG	DEP	TOT	DEP	%FC
BELVIDERE BRIDGE	4.01	18.06	-1.09	87	55	70.	-4	1362	-120	94
CANOE BROOK	7.18	20.54	.30	92	56	72.	-3	1645	173	97
CHARLOTTEBURG	2.45	18.61	-1.79	88	52	69.	-4	1278	157	89
FLEMINGTON	5.84	19.62	.03	91	53	70.	-4	1410	-110	92
LONG VALLEY	4.93	20.62	-.35	86	53	68.	-5	1252	-47	100
NEWTON	2.15	16.08	-2.61	86	52	68.	-6	1155	-176	91
FREEHOLD	5.12	19.65	.65	90	57	72.	-4	1614	-19	89
LONG BRANCH	4.66	18.78	-1.10	83	60	71.	-4	1539	-16	82
NEW BRUNSWICK	8.33	26.03	7.09	90	57	71.	-5	1576	-145	92
PEMBERTON	4.00	18.41	-.57	93	58	73.	-3	1791	119	73
TOMS RIVER	4.41	18.23	-1.22	90	55	72.	-3	1589	27	81
TRENTON	3.68	20.97	2.86	90	57	70.	-7	1563	-226	78
CAPE MAY CRT HSE	.82	15.23	-1.55	86	59	72.	-5	1641	-23	39
DOWNSTOWN	3.16	16.80	-.89	90	56	71.	-6	1660	-141	85
GLASSBORO	4.38	20.19	1.51	92	58	71.	-6	1793	16	81
HAMMONTON	2.50	16.68	-2.03	90	57	71.	-6	1648	-127	81
POMONA	4.17	20.20	3.36	88	60	72.	-4	1662	8	79
SEABROOK	3.46	18.72	1.61	90	57	72.	-5	1777	-31	78
ATLANTIC CTY MRNA	6.62	18.01	1.88	80	60	71.	-4	1634	67	84
WOODSTOWN	3.65	17.81	-1.09	93	58	73	NA	1812	NA	NA
WES KLINE — GDD BASE 40 PINEY HOLLOW				Last Week 286 (Ending 07/21/97)			This Week 218 (Ending 07/28/97)			

WINNERS FROM PAGE 3

2nd Place -Haynicz Bros. Orchard, Monroeville, NJ
3rd Place - Damminger Farms, Jersey Fruit, Sewell, NJ

Class - 2 1/2 inches in Diameter Peaches

1st Place - Damminger Farms, Jersey Fruit, Sewell, NJ
2nd Place - Mt Pleasant Orchards - Milton Reuter, Sr. family, Richwood, NJ
3rd Place - Circle M Farms - Santo John Maccherone, Mullica Hill, NJ

Class - 2 3/4 inches in Diameter Peaches

1st Place - Summit City Farms, Jersey Fruit, Glassboro, NJ
2nd Place - Zee Orchards - Doug Zee, Glassboro, NJ
3rd Place - Tri Star Farms - Michael & Anthony Curcio, Hammonton, NJ

Specialty Category - Boxes of white fleshed peaches and yellow fleshed peaches and nectarines, hand selected by growers and shippers. Also includes largest peaches.

Class - Nectarines (fuzzless peaches)

1st Place - Circle M Farms - Santo John Maccherone, Mullica Hill, NJ
2nd Place - Tri Star Farms - Michael & Anthony Curcio, Hammonton, NJ
3rd Place - DeCou Hilltop Orchards, Jersey Fruit, Shiloh, NJ

Class - White Fleshed Peaches

1st Place - DeCou Hilltop Orchards, Jersey Fruit, Shiloh, NJ
2nd Place - Larchmont Farms, Jersey Fruit, Elmer, NJ
3rd Place - Damminger Farms, Jersey Fruit, Sewell, NJ

Class - Largest Peaches

1st Place - (Tie) Moods Orchards Farm Market - Richard & Joyce Mood, Mullica Hill, NJ and Zee Orchards - Michael Zee, Glassboro, NJ (375 grams)

2nd Place - (Tie) DeCou Hilltop Orchards, Jersey Fruit, Shiloh, NJ and Tri Star Farms - Michael & Anthony Curcio, Hammonton, NJ (355 grams)

3rd Place - Damminger Farms, Jersey Fruit, Sewell, NJ

Select Category - Boxes of yellow fleshed peaches hand selected by commercial growers for competition.

Class - 2 1/4 inches in Diameter Peaches

1st Place - Zee Orchards - Doug Zee, Glassboro, NJ
2nd Place - DeCou Hilltop Orchards, Jersey Fruit, Shiloh, NJ
3rd Place - Mt. Pleasant Orchards - Milton Reuter, Sr. family, Richwood, NJ

Class - 2 1/2 inches in Diameter Peaches

1st Place - Damminger Farms, Jersey Fruit, Sewell, NJ
2nd Place - A.L. Gaventa & Sons, Jersey Fruit, Swedesboro, NJ
3rd Place - Circle M Farms - Santo John Maccherone, Mullica Hill, NJ

Class - 2 3/4 inches in Diameter Peaches

1st Place - Donio Farms, Top Crop, Hammonton, NJ (Also Best of Category)
2nd Place - Mt Pleasant Orchards - Milton Reuter family, Richwood, NJ
3rd Place - Zee Orchards - Doug Zee, Glassboro, NJ

Marketing — Getting Your Name Out to Buyers

Rick Van Vranken, Agricultural Agent

Making sure potential buyers know who you are and what you produce is an essential step in marketing, whether you're just starting or trying to expand. Though word-of-mouth and direct calls are probably necessary to start the ball rolling, you shouldn't miss any opportunity for free publicity. Such is the case with Farm Bureau's statewide Directory of New Jersey Produce Growers.

At a twilight meeting last week, I was asked how to get a farm listed in the directory. This publication was last updated in 1995 by New Jersey Farm Bureau. Their staff indicated to me that they plan to update it again someday, but they're not sure when. In the meantime, I found they have a Produce Directory Information Form on their Fax Network system. If you call 609-393-7070 and ask for document 3026, you will receive a copy through your fax machine. If enough growers submit new information, Farm Bureau will be inclined to publish the update sooner than later.

While the Produce Growers Directory lists mostly wholesale growers for volume sales, retail growers should likewise take advantage of a couple of opportunities. Each year, a New Jersey U-pick Guide is published with a no/low-cost listing of PYO operations across the state by county. I know this is one of the more popular publications distributed by our office. Most recently, this has been published by the New Jersey Dept. of Agriculture with support from the New Jersey Farmers' Direct Marketing Association. Contact your county Rutgers Cooperative Extension office, the NJDA or your NJFDMA representative if you need to update information or get listed in this pamphlet.

The NJDA and NJFDMA also publish membership directories listing Farm and Farmers' Markets across the state. Retail marketers who aren't members should consider joining. The nominal membership fee is more than offset by the value of a free listing in the directory.

Whichever way you sell, making buyers familiar with you and your products is essential. Do take advantage of any opportunities to get your name out to them. □

Fruit Meeting Calendar

July 31, 1997 - Pennsylvania Tree Fruit Growers Field Day, Penn State Fruit Research and Extension Center, Biglerville, PA
Contact: Dr. George Greene 717-677-6116

Sept. 11, 1997 - Variety Showcase and Open House, Rutgers Fruit Research and Extension Center, 283 Route 539, Cream Ridge, NJ
Contact: Dr. Joseph Goffreda 609-758-731, Ext. 10.

Miticide Stewardship

Peter W. Shearer, Specialist in Tree Fruit Entomology

This is a gentle reminder to practice miticide resistance management. Most of us have been through cycles of watching miticides lose their effectiveness over time. What used to work doesn't any more. Then, all of a sudden, a new miticide gets registered and everyone is happy because now mites are easily controlled. That is, until resistance develops and the product no longer works. Let's not let this happen with our new miticides.

We have several recently registered miticides available for mite control on apples including Apollo, Savey, Agri-mek, and Pyramite. I know that many apple growers have used these in their orchards. What impresses me is the number of New Jersey growers who practice resistance management by rotating the use of these and other miticides, in addition to using lower rates and practicing Integrated Mite Management. If done correctly, I expect that these growers will prolong the effective life of these products in their orchards.

Other growers should follow their example. This is especially important when using Pyramite. A recent search of the literature revealed an alarming note: mites are resistant to pyridaben (the active ingredient of Pyramite) in parts of Asia where it has been used in tree fruit for several years. Let's not let that happen here! Remember, spray only when you have to, avoid disruptive materials that flair mite populations, rotate miticides, and provide adequate coverage when spraying. Save a miticide: practice resistance management. □

Fruit IPM

Dean Polk, Agricultural Agent

◆ Peach

✓ **Oriental Fruit Moth (OFM):** Trap captures of adult moths increased since last week, showing treatment levels on most farms. All OP insecticides, Lannate and the pyrethroids applied at this time will control both OFM and catfacing insects.

✓ **Tufted Apple Budmoth (TABM):** Adult activity is increasing. As many as 116 adults per trap were seen in the Richwood area this past week. While trap counts are starting to show increased adult activity, an examination of leaf shelters in apples revealed that the vast majority of insects are still in the late larval stages. These will be pupating and emerging as adults in the near future. This observation agrees with the degree day model, and can be used to predict an approximate first spray for TABM at the end of next week, or about August 10 to 11. We have accumulated just over 2,000 DD since first catch in southern counties. We need 2,228 DD for the first spray to be applied. Treatments are applied to target newly emerging larvae as they hatch from egg masses. Treatments applied too early will only suppress the few adults that are emerged near the time of application. In addition, mite populations should have been dealt with prior to making TABM applications. The reason for this is that the best materials that can be used for TABM control, also kill mite predators and flair red mite populations. Treatment recommendations (reprinted from the last newsletter) are as follows: Lannate LV @2-3pt/A or 90SP @.75-1 lb/A (1.5 pt of LV roughly equals the same amount of active ingredient as .5 lb of 90SP), or the synthetic pyrethroids (after mites are controlled): Ambush @6.4 - 10 oz/A (7 day PHI), or Asana @4.8 - 8 oz/A (14 day PHI). All sprays should be applied in *at least 100 gal.* of water per acre.

✓ **European red mites (ERM):** Mite pressure subsided briefly following last week's rain. Predators are present in most blocks where mites are still present. Predators must be conserved at this time. Killing predators will increase the chances that picking will be in irritating, high red mite conditions.

✓ **Bacterial spot:** The rains of last week created very favorable conditions for bacterial spot infection. Bacterial spot is present in almost every block being sampled, on every variety, including those varieties normally listed as tolerant. Consider-

able levels are already present on Jerseyqueen, Rio, and Autumnnglo. We can expect to see even more by the time these varieties are harvested. Each overhead irrigation set, and almost every extended rainfall will produce an additional infection. Copper or Mycoshield (21 PHI) should be applied within 24 hrs. of these events if possible. Tennocop has very little weathering ability. Bacterial spot is being seen in all counties throughout the state.

✓ **Brown rot:** The increased levels of **bacterial spot** also serve to predispose fruit to brown rot infections. Captan alone or Captan mixed with sulfur are *not advised* during the final swell period.

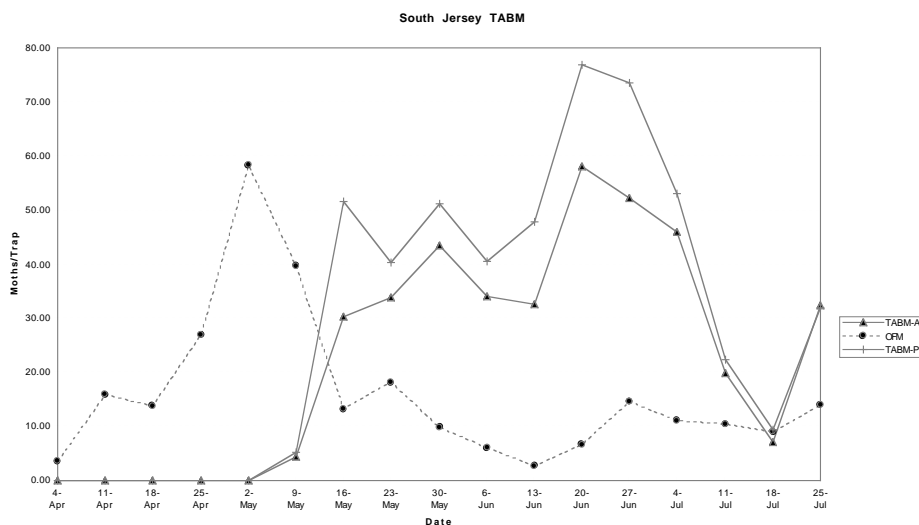
◆ Apple

✓ **Tufted apple budmoth (TABM):** Mites are still present in many apple blocks. Mites are usually more of a problem on apples than on peaches. Therefore, disrupting predators is even more of an issue than it is in peach plantings. Under these conditions, the use of Confirm is the preferred IPM option. It does not harm mite predators, and at the lower rate is cost competitive with Lannate applications. The first treatment of Confirm will not be due until about mid-August.

✓ **Codling moth (CM):** According to degree day counts, second generation codling moth sprays are due in northern counties now, or during the past few days. High trap counts are being reported in the far northern end of the state. Two full sprays are suggested for control. Since TABM is not a problem in northern counties, growers should concentrate on codling moth.

✓ **Spotted Tentiform leafminer (STLM):** Treatments are not suggested at this time. Most larvae are in the tissue feeding stage throughout the state.

Tree Fruit Pheromone Trap Graph - Southern Counties: Note the initial increase in TABM captures for the start of the second adult flight.



SEE IPM ON PAGE 6

Tree Fruit Pest Degree Day Accumulations Since 1st Catch - 7/28/97

Site	Biofix/1 st Catch Date & DD - TABM		Biofix/1 st Catch Date & DD - CM	
Hammonton - At. Co.	5/2	1974	5/9	1500
Hardingville - Glou. Co.	4/30	2033	4/30	1567
Bridgeton - Cumb. Co.	5/1	2012	5/2	1562
Princeton - Mercer Co.	5/12	1819	5/5	1462
Oldwick - Hunt. Co.	5/17	1705	5/16	1345
Hackettstown - War. Co.	5/22	1613	5/9	1367
Spray target after biofix/1st catch	Alt Mid Appl. at 490, 625, 763, 898 (1 st brood), and 2228, 2415, 2605, 2795 (2 nd brood)		250 DD plus 2 weeks later (1 st generation), 1250-1300 DD plus 2-3 weeks later (2 nd generation)	

IPM FROM PAGE 6

◆ **Blueberry**

✓ **Aphids:** Aphid populations have decreased, and are not at treatable levels in most sites. Only 22% of samples showed aphid activity, and these were at a density of only 1 to 2 single aphids on a terminal.

✓ **Blueberry maggot:** We recently placed almost 40 additional yellow sticky board traps for a pilot blueberry maggot/Canadian export certification program. These counts are not included below. Berries are also being boiled to extract any maggot larvae present. To date, there have been no maggot larvae found in any samples taken from cultivated fields.

◆ **Trap Averages**

South Jersey Tree Fruit

Week Ending

	RBLR	STLM	TBM-A	CM	AM	OFM	TBM-P	LPTB	PTB
6/6	0.0	96	34.1	1.9	—	5.8	40.0	30.2	0.2
6/13	0.1	390	32.6	2.2	—	2.6	44.4	21.4	0.04
6/20	3.1	1036	58.0	4.9	—	5.4	74.3	19.9	0.5
6/27	26.9	1169	52.2	3.7	—	13.8	69.9	31.1	0.4
7/4	47.4	1517	45.9	1.9	.11	11.1	53.1	32.7	1.5
7/11	37.4	1507	19.8	1.4	.04	9.9	21.4	24.7	3.3
7/18	27.0	1108	7.1	2.0	.08	7.0	7.5	21.1	5.9
7/25	6.9	985	32.3	6.3	0.52	14.0	31.9	14.1	3.4

North Jersey Tree Fruit

Week Ending

	RBLR	STLM	TBM-A	CM	AM	OFM	TBM-P	LPTB	PTB
6/6	0.3	26	3.0	3.1	—	4.8	2.3	5.3	0.6
6/13	0.05	268	8.4	3.5	—	4.2	6.8	21.6	1.5
6/20	0.1	374	21.1	5.5	0.0	2.5	19.2	22.3	1.5
6/27	5.2	658	19.1	5.1	0.0	2.1	14.5	17.4	1.0
7/4	1187	552	43.5	5.3	0.0	2.1	6.4	2.0	12.2
7/11	16.9	1330	13.9	1.9	0.0	3.0	5.8	0.8	1.0
7/18	7.2	528	5.8	0.9	0.0	1.9	1.8	2.8	0.7
7/25	3.5	480	0.2	0.8	.03	0.6	1.3	1.9	0.1

Blueberry

Atlantic Co.

Week Ending

	RBLR	OBLR	CBFW	SNLH	BBM
6/6	0	3.1	8.1	—	—
6/13	0.2	8.3	2.2	0.0	0.0
6/20	35.1	14.0	0.6	0.5	0.0
6/27	105	13.4	0.6	1.8	.02
7/4	97	3.4	0	1.5	.04
7/11	95	1.6	.04	0.8	0.2
7/18	39.1	0.6	0.0	0.3	.14
7/25	15.5	0.4	.07	0.4	.03

Burlington Co.

Week Ending

	RBLR	OBLR	CBFW	SNLH	BBM
6/6	0	0.4	2.9	—	—
6/13	0.8	6.1	2.2	1.5	0.0
6/20	4.0	12.8	0.8	2.6	0.0
6/27	36	6.5	1.1	2.9	0.3
7/4	47	1.8	.06	1.2	0.0
7/11	71	2.1	0.4	1.4	0.0
7/18	31.3	0.4	0.0	0.7	0.0
7/25	6.6	0.3	0.0	.13	0.0

Wild Sites

Week Ending

	At.Co. SNLH	Burl.Co. SNLH	At.Co. BBM	Burl.Co. BBM
6/27	—	8.7	—	0.0
7/4	13	14.7	0.0	11.0
7/11	8.0	9.6	0.0	4.6
7/18	6.0	11.2	0.0	27.0
7/25	0.0	4.0	0.0	20.4

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