

PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

JULY 13, 2004



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Marketing Matters

Rick VanVranken, Atlantic County Agricultural Agent

Last week's newsletter announced the availability of a new USDA grant program to help farmers develop ideas for value-added products or enterprises. The term 'value-added' covers a broad range of products and services that transform the raw output of a farm and create something for which consumers are willing to pay higher prices. Typically, what comes to mind is making pies, or jellies and jams, from leftover fruit. And the fact is that many successful farm markets, like Delicious Orchards in Monmouth County, got started that very way.

Why does value-added seem so attractive? It almost seems like a case of $1+1=3$, where the farm produce costs \$1 and it costs another dollar to create the 'value-added' product. Looks great if the consumer is willing to spend \$3 on something that cost \$2 to produce. If you can turn cull apples into cider, the equation might be $0+1=3$, since the cull apples would have no value otherwise. The trick is making sure the equation works. The current estimates that the USDA's Economic Research Service uses is $\$0.18+\$0.82=\$1.00$. The equation is balanced (a basic rule in math) and the 82 cents includes all the expenses of creating value-added products, including the profits of the enterprise(s) adding that value.

So, who gets that \$0.82 now? A recent ad for an insurance company claims they have 'gotten rid of the middleman...next time you call, ask what they did with him[/her].' In a value-added enterprise, you become the middleperson. If you begin processing your farm products into pies, jams or bagged salads, you have taken on the role of the processor, one of those middle level enterprises. Similarly, if you begin delivering your farm products to local grocers or restaurants, you have become a jobber or broker, especially if you add even more value by picking up some of your neighbor's produce to supplement the variety you can offer. Ultimately, if you become the retailer, you receive the entire \$1 the consumer spends, but that has its own set of costs.

If you have an idea for a value-added enterprise, now is a great time to look at developing it. The role of the USDA grants and the Rutgers Food Innovation Research and Extension Center is to help you figure all the parts of the equation to be sure all the costs, excluding profit, are less than \$1. □

Strawberry Update

Pete Probasco, Agricultural Agent

Now is the time to order your strawberry tips for the fall planting season. In our variety trial this year in Salem County, Chandler was once again the best variety at 15,869 pounds/acre. We are still recommending the Ovation variety for a late season variety (about 2 weeks later than Chandler). Plants are hard to find of the Ovation variety. Another variety to try is strawberry festival. This is a Florida variety that is earlier than Camarosa and replacing a lot of the Camarosa acreage in Florida.

Tips should be propagated in a screen house for better air movement and to keep the plugs dryer. Last year our plugs got too wet and Phytophthora developed during the propagating season. If you can make a mix with better drainage by adding either vermiculite, perlite or pinebark, you will be better off. Setting the trays on pallets is another trick to use to keep the plugs from getting too wet. □

ReTain for Apple PYO and Summer Apple Considerations

Win Cowgill, Agricultural Agent

ReTain™ is a harvest management tool that slows the maturation process. It is an excellent stop drop material that can delay fruit maturity from 7-10 days and give growers a longer picking window on many cultivars. ReTain works by retarding the development of ethylene, the chemical that causes ripening. ReTain will increase fruit firmness, decreased watercore and allow for longer cold storage. ReTain may also indirectly enhance fruit size and color by allowing the fruit to remain on the tree longer.

The downside is that it will affect fruit quality in that it delays maturity and the onset of sugar development, which will affect eating quality. This is especially true in apple blocks that will be harvested for PYO and apple varieties harvested prior to Macintosh such as Paulared and Gala. A full rate of Retain on Gala cultivars may delay maturity too long on this cultivar to hit the normal marketing window.

New Jersey growers focus management strategies on harvesting a crop of optimum fruit quality. Consumer demand, market, storage requirements and labor availability all influence harvest decisions. One tool that allows for increased flexibility in management decisions is the ReTain Plant Growth Regulator from Valent BioSciences.

To obtain some of the stop drop benefits and fruit firmness enhancements on summer cultivars we have observed some growers using ReTain applied at 1/2 the label rate on JerseyMacs with good success. ReTain was applied at the normal 30 days before anticipated harvest following all other label directions. At the Rutgers Snyder Farm we have used Retain for three years at one half rate on Gala cv. Treeco#2 with out delaying the maturity excessively and gaining fruit firmness.

For PYO blocks growers may consider treating part of a block (cultivar) with ReTain and using NAA for stop drop on the other half.

If you have a specific question on use of Retain feel free to contact me directly at cowgill@aesop.rutgers.edu or 908-788-1339. □

Plum Pox Survey 2004

*Linda Schepers, Division of Plant Industry, NJ Department of Agriculture
linda.schepers@aphis.usda.gov*

Weekly Sampling Results, Week Ending: July 9, 2004

STATE: New Jersey

Date Sampling Began	Date Sampling Completed	Laboratory Doing The Analysis	Cumulative Total of Field Samples Collected*	Cumulative Total of Lab Samples Processed*	Sampling Results
5/10/04	7/9/04	NJDA	5,951	23,800	negative
			Fruit collected* 313	Fruit analyzed* 0	

* 1 quadrat field sample contains 4 lab samples per USDA sampling protocol.

Submitted by Jerome L. Frecon, Agricultural Agent. □

Wine Grape Information for the Region

Mark Chien, Wine Grape Agent, Penn State
University Cooperative Extension

*Reprinted from Electronic Newsletter, July 2004,
Penn State Cooperative Extension.*

What a difference a year can make! We are actually seeing some real sunshine and most growers report being 2-3 weeks ahead of this point last year. An early outbreak of **downy mildew** and some **fouler and cluster botrytis** were present earlier in the season, but now things appear to be in good shape as we head into bunch closure. I have had reports of worse **Japanese beetle** activity this year, although I haven't been able to find any exact recommendations on when to spray based on an economic threshold estimate. I guess it's when you just can't take it any more. But be careful about the use of insecticides. We are also seeing more **mite** problems in vineyards and this may be associated with the use of chemical insecticides and the harm they may have on beneficial insect populations. Yes, the mites, too, are out there and I would strongly suggest using a hand lens to scout for **European Red Mites** before you see leaf bronzing. Since we are at bunch closure, and intermittent rains persist, if you did not spray a botryticide at bloom or set, it might be worth considering putting one on now.

I think I may have made a goof when I opined to some that we might have a small crop this year because of the rotten weather we had around bloom and fruit set last year during bud initiation. The vines I am seeing are, for the most part, loaded, which makes me a little nervous about getting all those grapes ripe. Please try to do some kind of crop estimate and consider thinning. The more I hear from growers and "experts" in California and other great wine growing districts, the clearer it becomes that crop management is an essential component of any great wine. While we are past lag phase, it can't hurt to go out there and count and weigh clusters. Start building a data base, it will provide you with valuable information in future years.

With adequate rain fall, we have big and busy canopies, which caused many growers to fall behind in shoot positioning. If you are caught up, breathe a sigh of relief because the drier days are slowing growth. If you aren't, keep battling because a well managed canopy will pay big dividends down the road. Pulling leaves at this point would be a great help. It's a bit late and sunburn is an issue if we get some hot days, but pulling on the shade side, at least, will increase your cluster exposure and aeration. Getting more sun to the fruit will also help.

The hope is, of course, that we will remain in this weather pattern and even dry out a little more as we get to veraison. The vines look healthy and we should have a nice crop this year. So at this point, canopy management, crop adjustment and disease and insect control are the major tasks in the vineyard. Oh, there are those persistent weeds, also. If you got winter damage in some varieties, continue training and spraying. Retain as many shoots as possible and try to position for trunk and arm establishment this winter.

My sense is that there is a bit of a scramble going on for hybrid and vinifera grapes. Still, if you do not have your grapes sold or contracted yet, it's time to get out there. I continue to urge growers and wineries alike to use a contract and to create a real dialogue on quality expectations and practices which will evolve into a long term and mutual beneficial and gratifying relationship. It's much better to get the discussion going on now than to deal with things when harvest hits.

I recently had the pleasure and privilege to attend the national annual conference for the American Society for Enology and Viticulture in San Diego. The traditional pre-conference symposium was titled "Soil Environment and Vine Mineral Nutrition". It offered an international cast of great speakers on all manner of topics related to soils and vine nutrition. I found the information to be invaluable and much of it would apply to the Mid-Atlantic region (except for the problems with soil and water salinity). It represents the latest knowledge and research on the subterranean part of viticulture, something that everyone who is trying to make great wine is now paying close attention to. The meeting proceedings will be available this fall through ASEV. You can check them out at their web site www.asev.org/.

Submitted by Jerome L. Frecon, Agricultural Agent. □

Managing Thrips on Nectarine

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

I am seeing a **thrips** feeding on both nectarine and peach fruit in the various orchards I'm working in and visited earlier this week. Thrips levels can be attributed to the hot, dry weather we have had. Chemical controls have been effective where applied but they won't provide season-long control especially under these conditions. There are just too many thrips out there on the trees and in flowering ground cover and surrounding habitat. Thus, if you have problem blocks such as early ripening nectarines, it would be wise to check them for thrips activity.

Thrips can be found where 2 fruit touch each other, where fruit touches a leaf, on individual fruit, especially near the stem end, and on leaves. I'm seeing the traditional "silvering" damage now; earlier silvering has already turned into a brown russet.

Monitor for thrips in the tree by examining fruit collected from lower outside branches. Collect samples from at least 5 areas by picking 10 fruit per area (minimum of 50 fruit). Look for the presence of thrips and the characteristic "silvering" feeding damage. If feeding damage (silvering) and 5 thrips are found per 50 fruit, an insecticide may be warranted.

Chemical control options for thrips control on nectarines and peaches are limited. If thrips are present and control is warranted, New Jersey growers can use Lannate 90SP (0.5-1 lb/acre) under a Special Local Need 24(C) label or Spintor 2SC (6-8 oz/acre). Lannate SP has a 1 day pre-harvest interval (PHI) for nectarine and a 4 day PHI for peach. A copy of this special label must be in the possession of the user at the time of application. Spintor 2SC has a 3 day PHI on nectarine and 14 day PHI on peaches. Remember, always read and follow the label. □

Fruit IPM

Dean Polk, Fruit IPM Agent

Peach

✓ **Oriental Fruit Moth (OFM):** While trap counts indicate low pest pressure on an average farm, the degree day model predicts that larvae are just starting to emerge from newly laid eggs in southern counties. The first treatments for the 3rd brood will be due in southern counties between 7/14 to 7/17. If growers are using Intrepid, then the timing should be moved up a little earlier to 7/12 to 7/14. The first treatment for the 3rd brood will be due in central counties a few days later (see table). OFM is near the end of the 2nd 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 st spray for 3 rd gen. 7/14-17	1 st spray for 3 rd gen. 7/12-14
Central	1 st spray for 3 rd gen. 7/16-19	1 st spray for 3 rd gen. 7/15-16
Northern	Between generations, 3 rd gen. sprays start about 7/25-26	Between generations, 3 rd gen. sprays start about 7/24-25

✓ **Thrips:** New activity was seen this past week in Eastern glo nectarines. This is a reminder that the last insecticides applied to nectarines and any peaches sensitive to thrips should have Spintor as part of the spray program. Do not rely on Spintor to control OFM (2 or more weeks from harvest on peaches).

Apple

✓ **Codling Moth (CM):** CM larvae are about 20% hatched in southern counties, and about 1% hatched in northern counties. The second of 2 (full) sprays will be due in southern counties by the end of the week, and by the middle of next week in central counties. Assail, Calypso and Intrepid timings are slightly earlier than standard OP's, Carbamates and Pyrethroids. The following chart updates timings outlined in last week's newsletter.

County Area	Application and Insecticide Type - 2 nd Generation	
	OP's, Carbamates, Pyrethroids, Avaunt	Assail, Calypso and Intrepid
Southern	1 st spray 2 nd gen. 7/5-6, 2 nd spray 7/17-19	1 st spray 2 nd gen. 7/3-4, 2 nd spray 7/13-15
Central	1 st spray 2 nd gen. 7/8-9, 2 nd spray 7/20-22	1 st spray 2 nd gen. 7/6-7, 2 nd spray 7/17-19
Northern	1 st spray 2 nd gen. about 7/18	1 st spray 2 nd gen. about 7/16

✓ **Aphids (Apple Aphid and Spirea Aphid complex):** Aphid counts are going down as the new growth starts to harden off. Aphids are now secondary (as they should be), and no further treatments should be needed.

SEE IPM ON PAGE 5

IPM FROM PAGE 4

✓ **Bitter Rot (Anthracnose):** New infections were seen on apples this past week. Where bitter rot is a problem, we have few alternatives. Effective materials include Captan, mancozeb/polyram (EBDCs), Ferbam, and Ziram. The EBDCs are out, and Ferbam leaves too much residue for most growers. Therefore we are left with Captan or Captan/Ziram combinations. Those growers using Captan with Topsin should be cautious, since the half rate of Captan alone is weak for bitter rot control, and Topsin is ineffective for bitter rot.

Blueberry

✓ **Leafrollers and Other External Worms:** Leafroller and other “worms” are at very low levels. Larvae are showing up in about 14% of beating tray samples. The maximum level being found is .3 larvae per 100 fruit clusters. Any feeding injury that is being seen on the fruit is about 96% old injury, with very little fresh feeding being seen.

✓ **Aphids:** Counts have stayed close to the same levels as seen last week. Aphids are being found in about

81% of field samples. About 50% of the samples being taken show levels over the 10% terminals infested mark.

✓ **Blueberry Maggot:** Trap counts have decreased slightly since last week, but are still present at low numbers on some farms. Treatments should still be targeted on Elliott and other late varieties. No treatments are needed if maggot flies are not being found, unless you are on the calendar based Canadian export program.

✓ **Japanese Beetle:** Adult beetle injury has increased from an average of 5% of samples with feeding, to about 10% of samples with injury. Actual percent fruit injury remains low, but feeding incidence has still doubled. Please see last newsletter for materials labeled for Japanese beetle control.

✓ **Anthracnose:** While anthracnose was found in 3% of fruit samples last week, its presence increased to 8% of fruit samples this week. Actual field levels remain low, with a max. level of 2 infected berries per 1000 fruit. Late season treatments are still advised, especially on the last of the Bluecrop.

Insect Trap Captures

Tree Fruit – Southern Counties

WeekEnd	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM-P	LPTB	PTB
18-Jun	1042	15	3		4	25	8	14	30	5
25-Jun	1729	4	3		3	30	14	4	62	7
2-July	732	1	1		3	25	8	2	43	4
9-July	879	1	1		4	30	5	3	25	3

Tree Fruit – Northern Counties

WeekEnd	STLM	TABM-A	CM	AM	OFM-A	DWB	OFM-P	TABM- P	LPTB	PTB
18-Jun	541.8	35.1	8.1		0.0	12.3	19.1	46.0	4.1	0.5
25-Jun	520.0	20.2	3.9		0.0	3.0	21.2	24.3	2.4	0.1
2-July	420.8	10.3	2.0		0.0	0.8	14.7	8.1	4.6	0.6
9-July	533.5	3.3	2.5		0.0	1.8	15.1	3.4	7.2	0.7

Blueberry – Atlantic County

Week End	CBFW	RBLR	OBLR	SNLH	OR BEET	BBM
18-Jun	0.1	148.3	3.4	0.3	2826.5	0.05
25-Jun	0.1	69.0	2.9	0.3	2943.3	0.03
2-July	0.1	31.1	0.2	0.1	2128.2	.04
9-July	0.0	14.0	0.1	0.0	1669.1	0.03

Blueberry – Burlington County

Week End	CBFW	RBLR	OBLR	SNLH	OR BEET	BBM
18-Jun	1.5	40.2	5.0	3.5	395.5	0.1
25-Jun	1.4	60.1	6.0	1.8	1166.7	0.05
2-July	0.0	23.4	1.4	0.7	1141.3	0.19
9-July	0.1	6.1	0.0	0.4	1297.6	0.11

New Web Page for New Jersey Peach Festival

The New Jersey Peach Festival has a new web page for all desiring information on the schedule of event or entering any of the competitions. The site is conveniently linked to Rutgers Cooperative Extension at <http://gloucester.rce.rutgers.edu/fairfest/>.

In addition to the schedule and all applications, the site provides directions to the Festival and Fair and also information on where and how to park and where all peach events are located.

Come on and join us at the festival on Jul 22-25, 2004 at the 4-H Fairgrounds in Mullica Hill, south on Rt. 77.

Submitted by Jerome L. Frecon, Agricultural Agent. □

Calendar of Events

July 22, 23, 24, 25, 2004 - Thursday thru Sunday – New Jersey Peach Festival and Gloucester County 4-H Fair will be held at the 4-H Fairgrounds, Rte. 77, Mullica Hill, NJ. Program information forthcoming on website <http://gloucester.rce.rutgers.edu/>.

Winemaking Seminars in Virginia in August 2004

Seminars will be held at Linden Vineyards in Linden, Virginia from 10:30 a.m. to 4:00 p.m. The cost is \$85 per person, per day. Seating is limited, please reserve in advanced. Bread, cheese and sausage are available for purchase at Linden for lunch.

Winemaking Basics, Saturday August 7, 2004

The nuts and bolts of both red and white winemaking, this seminar is geared towards the novice, but moves quickly with classroom, cellar and tasting sessions. Both hobbyist and commercial winemaking scales are addressed.

Advanced Winemaking, Sunday, August 8, 2004

The finer points of winemaking are covered in this seminar with time spent in the vineyard, cellar, classroom and tasting. Style and quality issues are the focus. Participants should have some winemaking experience or have taken the Winemaking Basics Seminar.

To register by phone call 540-364-1997. MasterCharge and Visa are accepted. Register by phone at least one week in advance. Space is limited.

Linden Vineyards

3708 Harrels Corner Rd., Linden, Virginia 22642
(540) 364-1997 FAX (540) 364-3894 * E-MAIL
linden@crosslink.net

Submitted by Jerome L. Frecon, Agricultural Agent. □

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