

PLANT & PEST ADVISORY

FRUIT EDITION \$1.50

MAY 20, 2003



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Foliar Calcium Benefits in Apple

Win Cowgill, Agricultural Agent and Jeremy Compton, North Jersey Tree Fruit Technician

It is time to consider adding foliar calcium to your apple cover sprays in fruiting blocks. With the light apple crop in many blocks, remaining fruit is more susceptible to calcium deficiencies.

Calcium related disorders such as **cork**; **bitter pit** and **senescent (internal) breakdown** are common in New Jersey. These disorders cut into grower returns by making the affected fruit unsaleable. Some cultivars, such as Jonagold, Cortland, Enterprise and most early season varieties can be highly sensitive to calcium deficiencies in the fruit.

Correction of calcium deficiencies begins with maintaining adequate soil calcium levels through regular liming with high calcium lime only. However, soil applied calcium does not easily translocate within the tree, and many factors, such as nutrient imbalance, soil moisture, pH, crop load and pruning may all effect how well the tree utilizes the calcium that is available in the soil. The quickest and most effective short-term corrective treatment for the control of these calcium-related disorders is the implementation of a foliar calcium spray program.

Calcium sprays have been a hot research topic over the past three decades. And, although major advancements have been made in the reduction of calcium related disorders, no universal "cure" has been found. The most important aspect of a foliar calcium program is the total amount of calcium that ends up in the orchard. Pennsylvania recommends 4 to 14 pounds of total calcium per acre per season, while Massachusetts recommends their growers apply between 21 and 22.5 pounds of actual calcium per season, with up to 10 lb/spray of calcium chloride (CaCl₂) later in the season.

The cooler climate of the New England states allows them to apply such an intensive spray schedule without any significant leaf burn. In work conducted at the Rutgers Snyder Research Farm over the past 7 years on Enterprise, we have sprayed over 11 pounds of actual calcium per acre per season without any significant leaf burn. Our standard recommendations in New Jersey are to apply 2-3 lb/100 of CaCl₂ per spray before August 1st and 3-5 lb/100 of CaCl₂ per spray after August 1st. This will allow for sufficient absorption of calcium by the fruit with minimal leaf burn on most cultivars. Research has shown that late season foliar applications of calcium are more effective in reducing calcium related disorders than early season sprays, but total applied calcium by harvest is the most significant factor. Reduced rates of CaCl₂

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CALCIUM FROM PAGE 1

should be applied if there was no rain between applications, or if we are experiencing hot and humid conditions.

Care should be taken when applications are occurring in temperatures above 80°F. Since foliar applications of calcium do not translocate through the leaves readily, it is important to get thorough spray coverage to allow for calcium to contact the fruit directly. Increased water volume or the addition of a surfactant may provide better coverage and increased absorption while reducing the chance of any leaf injury.

Form of Calcium for Foliar Sprays

There are many calcium products promoted by industry as substitutes for Calcium Chloride (CaCl₂). However, extensive research and comparison of these products has yet to show an advantage over Calcium chloride because it is one of the richest forms of calcium at the cheapest price. Calcium nitrate (CaNO₃) can be substituted for CaCl₂, but only on trees that do not contain low nitrogen levels as measured by leaf analysis. Vigorous trees should not receive Calcium nitrate. Growers opting to use CaNO₃ as their calcium source should be aware that CaNO₃ does not contain as much available calcium as CaCl₂, so they should adjust their rates accordingly. □

Pinch Apple Shoots to Control Growth

Jon Clements, Ph.D., Specialist in Pomology, UMass and Win Cowgill, Agricultural Agent

'Pinching' shoots is a young tree training technique used on mostly first-, and second -leaf apple trees to promote fruiting and manage growth in the top of the trees of vertical-axis, slender-spindle, or super-spindle orchards. Rapidly growing shoots that are six to eight inches long, that are in the top one-fourth of the tree, and that originate from the leader, are candidates for pinching. Pinch-back the shoot two inches using your thumb and finger(s) or pruners. See the pictures to the right. To view a short web video of the technique, go to the UMass Fruit Advisor, <http://www.umass.edu/fruitadvisor/>.

Pinching will do two things: weaken the growth of the developing shoot so it is not as likely to compete with the leader, and promote the development of a fruit bud in the vicinity of the pinch if done now into early July. This technique will keep the tree from becoming top-heavy tree, which will eventually mandate a less desirable dormant pruning cut.

Strip Apple Leaders Now

Win Cowgill, Agricultural Agent and Jon Clements, Ph.D., Specialist in Pomology, UMass

'Stripping' is a young tree training procedure used to isolate and protect the 'central-leader' of an apple tree. The three to four buds directly below heading cut on newly planted apple trees developing vigorous upright shoots. Choose the single most vigorous upright shoot to remain as the leader, and then strip (with a downward pull) or pinch out the few (usually 2 or 3) competing shoots directly below the leader shoot you want to maintain. These should be removed as soon as possible to focus the growth into the central-leader and prevent a multi-leader tree from developing. Hand pruners may be used. These competing shoots are easiest to identify and remove when 3-4" long. For pictures of the 'stripping' technique, visit the UMass Fruit Advisor, <http://www.umass.edu/fruitadvisor>. Next week: using clothespins to form desirable branch crotch angles. □



Grape Disease Update

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

Dr. Jim Travis, Penn State Plant Pathologist, whose research emphasis recently has been on compost and vineyard soils, continues to provide very valuable extension support in the area of grapevine diseases. Bryan Hed is Jim's research assistant at the Northeast Lab in Erie County and does valuable research for the grape industry. Jim, Bryan and I have agreed to send out reports on the disease situation in Pennsylvania including recommendations for control. Jim will focus mainly on chemical strategies and I will address the cultural options. We hope these regular reports will be helpful and they should supplement the 2003 NY/PA Pest Management Recommendations for Grapes Guide as well as information you can retrieve from the internet. The following is the first edition of these updates. Your comments are welcome.

Grape Disease Newsletter, May 1, 2003

Early Season Grape Disease Management (May 1 through May 15). It is important to recognize which grape diseases are a potential problem early in the season and which will not build-up until later in the season. Most vineyards I have seen in Pennsylvania do not have a history of all the grape diseases. Growers should focus their disease control strategy on the diseases they know are a problem for them. For example, some growers focus mainly on **powdery mildew** and control other important diseases on grapes by using broad spectrum fungicides that have some activity on the other grape diseases. Some growers battle **downy mildew** every year and others have never seen the disease in their vineyard. Weather conditions and variety susceptibility play a big role in the development of grape disease epidemics. Additionally, if a grape disease was a problem last year it will begin to build-up earlier in the vineyard the following year.

New Shoots 3 to 5 inches long. Shoot length is variable in a vineyard especially early in the season. For disease management purposes, it is best to time sprays for a given stage when 50% of the buds are at the most advanced stage. In general, it does not normally cause a problem if the spray is timed a little early but spraying too late for a problem disease can result in disease outbreaks. Growth stage development of shoots becomes more uniform as the season progresses.

At the 3 to 5 inch stage of growth, **Phomopsis cane and leaf spot** is the primary disease of concern. **Black rot** and **powdery mildew** can also begin to infect the vines and initiate spread where these diseases have been a severe problem in past years.

Phomopsis & Black Rot - We recommend that all growers apply a fungicide to control Phomopsis. It is

widespread across the state in wild grape vines and can cause significant crop loss if early season infections occur. Clusters and shoots are vulnerable as soon as they become exposed and Phomopsis management trials have indicated that the 3-5 inch stage is a critical time for controlling cluster stem (rachis) and shoot infections. Last year, in a trial with Chancellor Grape at the Erie County research station, nearly all of the control of Phomopsis shoot and rachis infections came from fungicide applications made before and during this period. Phomopsis lesion development on the first 3-6 internodes and on rachises was common and often severe where fungicide applications commenced after the 3-5 inch shoot stage. The fungicides that are most effective in controlling Phomopsis are also effective in controlling early season black rot. Wet weather conditions during this period of rapid shoot elongation are ideal conditions for the infection and spread of Phomopsis and black rot. The broad spectrum fungicides, captan, mancozeb (Dithane, Manzate, Penncozeb and Manex) are the most effective materials for controlling Phomopsis and black rot early in the season. Applications should be made 10 days to 2 weeks apart depending on weather conditions. If there are frequent rain events (several per week, with rain fall totals greater than one inch since the last spray) then the spray interval should be 10 days. These materials will protect the shoots and leaves for 2 weeks if rain events occur weekly with rain fall totals less than one inch since the last fungicide application.

Although Nova and Elite are effective in controlling black rot, we recommend that growers save the use of these very effective fungicides until later in the season when they are needed for powdery mildew and/or black rot control. Both of these materials have a risk of resistance development so are best used at critical disease control periods. Black rot disease does not normally become a problem until later in the season.

Powdery mildew infections are favored by warmer weather conditions than normally occur during the early season. However, where there has been a history of severe powdery mildew problems or on highly susceptible varieties, control measures may be warranted at the 3 to 5 inch stage. Fungicides to control powdery mildew can be delayed in most vineyards until the 10 to 12 inch shoot stage. Sulfur can be used at this time of the year to control powdery mildew. Some grape varieties are severely affected by sulfur causing extensive leaf and shoot burning. Check Table 2 in the 2003 NY and PA Pest Management Guidelines for varieties that are sensitive to sulfur. Sulfur is generally more effective at higher temperatures but should give adequate control of powdery mildew in the early season. Sulfur is washed off by rain so frequent applications made be required in rainy weather.

JMS Stylet Oil should be applied at 10 day intervals in a 1% solution or at 14 day intervals in a 1.5 to 2%

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GRAPE DISEASES FROM PAGE 3

solution. Thorough spray coverage is critical. Nova, Procure, Rubigan and Elite are all highly effective in controlling powdery mildew. However, we would not recommend growers use them at this time of the season. The risk of resistance development to these materials is great and they are best saved for later in the season when there is the greatest potential for powdery mildew infection.

10 to 12 inch shoot stage (begins at 5 to 6 leaves per shoot). This is the time of the season when the disease pressure really begins to build. There is an abundance of succulent tissue that is highly susceptible to disease infection. In addition the clusters are also exposed to infection at this stage. It is important to remember that most grape diseases are favored by wet conditions. In general, if the leaves and shoots are wet for 8 hours for longer, disease infection is possible if not protected by a fungicide. If the frequent rain events continue this season, the risk for grape disease infection is higher than it has been in the last several years.

Phomopsis and black rot are primary concerns at the 10 to 12 inch stage of growth. Extended periods of wet weather are very favorable to infection of new shoots, leaves and clusters. Review the discussion of these diseases presented in the 3 to 5 inch section of this newsletter. Abound and Sovran are labeled for control of these diseases at this time but are less effective than captan and mancozeb (Dithane, Manzate, Penncozeb and Manex).

Powdery mildew control should not be delayed in vinifera and susceptible French hybrid vineyards past this growth stage. The fungus that causes powdery mildew over-winters in the bark. Spores are released during rain events in the spring from bud break until after bloom. The spores are wind blown to new growth (leaves, clusters) and infect when temperatures are above 50°F. Wet or dry tissue is infected. Once powdery mildew has started in a vineyard, secondary spread occurs when spores are wind blown from the white powdery patches on the leaves and clusters to new growth. High humidity favors disease development. Under favorable conditions (high humidity and temperatures from 60 to 85°F), new spores are available to spread the disease every 5 to 7 days. Early season (before immediate prebloom) control of powdery mildew is required on highly susceptible varieties and in vineyards where the disease was a serious problem the previous year.

There have been multiple rain showers in the early growth stages of grapes so far this season. This provides the conditions needed to initiate the spread of the powdery mildew fungus from overwintering sites in the bark to the newly developing leaves and clusters. At the 10 to 12 inch stage of growth, plan on including effective fungicides for powdery mildew in vinifera and susceptible French hybrid vineyards and where powdery mildew was a problem last season.

Resistance to strobilurin fungicides for powdery mildew control was observed in PA vineyards in 2002. We recommend that you only use the strobilurin fungicides (Sovran, Abound and Flint) during the most critical times for disease control (prebloom to second post-bloom). The label restricts the use of these materials to 4 applications per season with no more than 3 applications in a row regardless of which of the materials in the group is used. Resistance to the sterol inhibiting fungicides (Nova, Elite, Procure and Rubigan) is also a concern. It is recommended that you do not use these materials more than 3 times per season regardless of the material. Rotating these two fungicide groups can help delay the development of resistance. JMS Stylet Oil or sulfur may also be used to control powdery mildew at this time of the season. Resistance to these materials is not a concern, but there are some compatibility restrictions with Stylet Oil and other spray materials. Read the label for details. Do not apply sulfur to sensitive varieties.

Downy Mildew first becomes active at about 10 inch shoot growth, about when shoots average 5-6 leaves per shoot. The severity of downy mildew is often related to the level of downy mildew occurring in the vineyard the previous season. Hard, driving rain storms will stimulate downy mildew to begin to spread at this time. This fungus overwinters in the soil and is rain-splashed to the lower leaves to initiate infections in the vine. Look for the first downy mildew lesions on the leaves closest to the ground. Abound is the most effective strobilurin fungicide in controlling downy mildew. Captan and mancozeb (Dithane, Manzate, Penncozeb and Manex) are also effective in controlling downy mildew. Phosphoric acid materials (ProPhyt) have proven effective in controlling downy mildew but there is limited vineyard experience in their use.

Questions or comments may be sent to:

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Submitted by Jerome L. Frecon, Agricultural Agent. □

Grapevine Disease and Disease Control Information on the Web

Mark Chien, Wine Grape Agent, Penn State University

Dr. Tim Weigle of Cornell Cooperative Extension in Fredonia, NY has excellent information about disease control on his web site. He cautions that as we approach the beginning of the growing season, growers need to be developing their strategies for disease and pest control. You can start by looking at the web sites listed below, and supplement that information by reading the 2003 NY/PA Pest Management Guidelines for Grapes.

NY State IPM Programs for Grapes - <http://www.nysipm.cornell.edu/publications/grapeman/dormant.html#Vineyard%20Mapping>

This site will give you access to information on:

- Vineyard Mapping
- Pruning to Reduce Overwintering Disease Inoculum
- Phomopsis
- Crown Gall
- Eutypa
- Black Rot
- Grape Berry Moth Risk Assessment Protocol
- Weed Management

Other Web Sites with Disease Control Information:

Ministry of Agriculture, Ontario - <http://www.gov.on.ca/OMAFRA/english/crops/hort/grape.html>

UC Davis - <http://www.ipm.ucdavis.edu/PMG/selectnewpest.grapes.html>

Oregon State University -

<http://plant-disease.ippc.orst.edu/index.cfm>

Virginia Tech - <HTTP://www.ext.vt.edu/pubs/pmg/hf3.pdf>

North Carolina State University -

<http://ipm.ncsu.edu/agchem/chptr7/706.pdf>

Lake Erie Regional Grape Program Vineyard IPM -

<http://www.nysipm.cornell.edu/publications/grapeman/index.html>

Pesticide Record Keeping Documents -

http://lenewa.netsync.net/public/IPM/Record_Keeping.ht

Submitted by Jerome L. Frecon, Agricultural Agent. □

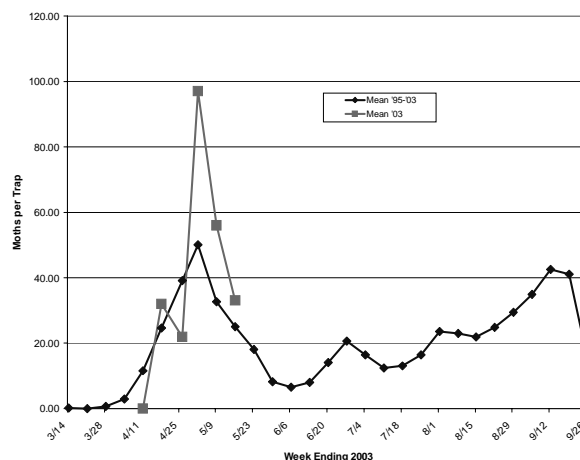
Fruit IPM

Dean Polk, Fruit IPM Agent

Peach

✓ **Oriental Fruit Moth (OFM):** Trap captures of adult moths have decreased, indicating that the first generation flight has peaked. In southern counties, first generation egg hatch has reached about 94%, about 75% in central counties, and about 30% in northern counties. In comparison to recent years, many pest events seem to be behind this season. However, when compared to an average of the last 8 years, the OFM flight is not really that much off in terms of seasonal timing. The enclosed graph shows a flight peak for southern counties as an average for all seasons since 1995, compared to the start of this season. The flight peak is very close to historical averages. Therefore, we can probably expect the 1st generation to 'bottom out' over the next couple of weeks.

Oriental Fruit Moth Historical Averages - Peaches



✓ **Tarnished Plant Bug (TPB):** Very little activity has been seen, mostly due to the cool weather. Since this insect overwinters as an adult, only that stage has been present. As populations increase, adults are the most problematic life stage, since they are the most motile and are able to fly into the trees. Most TPB feeding and reproduction goes on in weedy orchard ground cover and in surrounding weeds. Immature nymphs do not have wings, and take about a month to mature. Given the rapid growth of orchard grass, most orchards have already been mowed at least once. Frequent mowing can suppress population growth, but if orchards are mowed after the nymphs mature into adults, then adults are 'pushed' into the trees. Of course, one of the best controls is to prevent weed growth in orchard aisles and tree rows.

✓ **Green Peach Aphid (GPA):** While a few blocks have been seen where populations were over treatment levels, populations have not been a problem in most orchards. The first winged forms were seen this past week.

SEE IPM ON PAGE 6

As more winged forms appear, aphids start to move out to alternate hosts. This will occur over the next several weeks.

✓ **Rusty Spot and Peach Scab:** These are still two critical diseases of concern. See last newsletters for treatment suggestions.

Apple

✓ **Rosy Apple Aphids (RAA):** Aphid populations have increased and have needed treatment in several blocks in southern counties. The best controls are the neonicotinoid insecticides – Assail, Actara, Provado. However, some of these products can be rough on mite predators, especially *Stethorus punctum*. If these materials are used for RAA, they will also control **leafhoppers** and **leafminers**.

✓ **Codling Moth (CM):** Just over 100 degree days have accumulated since first catch (5/7) in southern counties. The first treatment should be applied around 5/30-31 in those counties. In central counties the first catch for codling moth was about a week later, so treatments will be roughly a week later in those counties (more next week).

✓ **Green and Spirea Aphids (GAA, SA):** The GAA/SA complex is now being seen in some orchards in southern counties. Aphids multiply on tender growing shoots, so with the recent rains, we should see plenty of activity over the next month.

✓ **Apple Scab:** Continuous wetting periods are expected the remainder of this week. Additional infection periods are also expected continuously through 5/29. Growers should be prepared to make additional fungicide applications between rains if only protectants are being used. If SI's and/or Flint and Sovran are also being used, then applications should still hold for a week to ten days as long as applications are being made to both sides of the tree (full cover). Do not use alternate middle applications in the present weather pattern.

✓ **Blister Spot:** The summary below is reprinted from SCAFFOLDS Fruit Journal (Vol. 12, No. 10), Geneva, NY, by Bill Turechek, Plant Pathology.

“Blister spot, caused by the bacterium *Pseudomonas syringae* pv. *populans*, is an important and difficult to control disease of apple fruit on ‘Mutsu’ (or ‘Crispin’), ‘Fuji’ and a few less popular varieties. The disease can also infect apple foliage, leaf petioles, and shoot tips on a number of varieties, but these infections are considered important only in nursery production. The disease is generally most severe when temperatures are warm and rain and high relative humidity are prevalent during bloom and throughout the period of peak susceptibility (see below). However, infection can also occur under dry conditions. After this period, the level of susceptibility sharply declines. Most of the variability in disease is associated with weather conditions that affect growth rates of the apple.

Fruit are most susceptible to infection beginning two weeks after petal fall and become increasingly suscep-

tible for another two to four weeks afterwards. The fruit are infected through the stomata and it is assumed that the leaves are infected in a similar manner. Most infections occur on the lower half of the apple. The first infections are observed as small darkened water-soaked areas, generally around stomata (eventually turning into lenticels). From there, small raised blisters are formed. The blisters at first start with a light color but eventually become purplish-black as they expand towards the end of the growing season. The epidermal layer covering the blister dies and will often flake off the surface. This stage is the most obvious sign of blister spot and can be mistaken for tiny lesions caused by apple scab. The lesions, which are generally circular although they can sometimes be lobed, rarely become larger than 4-5 mm in diameter. The infections are shallow, not extending more than 1-4 mm into the fruit flesh.

On leaves and shoots, lesions are a light tan to rust color, occurring on the under-surface of the leaves of shoots and spurs, and causing puckering and curling, generally misshaping them. Leaf symptoms can normally be found before those on the fruit.

Disease management: Applications of streptomycin (e.g., Agri-mycin 17 @ 8 oz/100gal) starting 2-2.5 weeks after petal fall and continuing for another 2 to 4 weeks is the standard program for control of blister spot. This program worked fairly well in New York until 1986, when resistant strains of the bacteria became prominent. Unlike **fire blight**, however, resistance is not a stable trait in the blister spot bacteria. In other words, resistance to streptomycin declines sharply in the absence of streptomycin. Therefore, growers can opt not to use streptomycin for a season when faced with loss of efficacy and then return to its use the following season and expect appreciable control. Fosetyl-AI (Aliette 80WDG @ 0.5-1 lb/100gal) is another option for managing blister spot. Like streptomycin, fosetyl-AI should be applied 10 to 14 days after petal fall, followed by two additional sprays at weekly intervals.

Currently, streptomycin and fosetyl-AI are the two best materials we have for managing blister spot. Both products will give about the same level of control when applied alone -and at the appropriate timings. Slightly better control can be achieved if the two products are tank-mixed; this mixture may also be useful for resistance management. Unfortunately, the level of control can be quite variable. In years when disease pressure is high, you should expect less than 50% control with the most effective treatment. Alternative control options are somewhat limited. Two newer products with the potential for blister spot control are NutriPhyte Magnum and Oxidate. With NutriPhyte, you should expect about the same level of control as fosetyl-AI. My experience with Oxidate is limited and I have no feelings about what to expect from this product. Both products are currently being tested in trials here at Geneva.”

SEE BLUEBERRY ON PAGE 7

Blueberry

✓ **Redbanded Leafroller and Other Lep.s.:** Leafroller larvae are present in 18% of samples with a maximum level of .2 larvae per 100 blossom clusters. Therefore, no fields were seen where leafroller larvae were a problem.

✓ **Cranberry Fruitworm (CBFW):** The first adults were captured last week on May 14. Only a few are currently being found in pheromone traps, and those are in Atlantic County. Since plant and insect phenology is usually further advanced in Atlantic County compared to Burlington, we should start to see captures increase in both areas over the next week to 10 days. Treatments are usually timed for just after the flight peak, which may be a bit later this year than last year.

✓ **Plum Curculio (PC):** No additional spread or hot spots have been seen for PC damage. Damage was seen in a total of 2% of samples taken, with a maximum of 1% injury seen in Bluetta.

✓ **Aphids:** Aphid populations have increased over the last week. Aphids are being seen in 18% of samples being taken, but are above 10% of terminals infested in only a few samples. One sample was seen which had up to 62% of growing shoots infested.

✓ **Mummy Berry:** We are seeing more mummy berry strikes this season than are usually seen. Frequent infection and wetting periods have provided good disease conditions. The disease is present in 26% of our samples, averaging close to 1 strike per bush. Maximum levels are between 5 to 6 strikes per bush. If using protectants, these fungicides must often be reapplied during frequent rains. Systemic materials will weather more effectively. Keep in mind that any additional controls are really only good for the roughly 30% of bloom that is still not set.

Insect Trap Captures

Tree Fruit - Southern Counties

Week Ending	LPTB	PTB	OFM	TABM-PAM	CM	DWB	OFM-A	STLM	TABM
4/11							0	15	
4/18			32				32	600	
4/25			22				54	1084	
5/2			97				96	795	
5/9			56				129	137	
5/16			33	8			60	181	10

Blueberry - Atlantic County

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
4/25		101				
5/2		89.7				
5/9		83.6				
5/16		21.2				

Burlington County

Week Ending	CBFW	RBLR	OBLR	SNLH	OB	BBM
4/25		25				
5/2		28.2				
5/9		11.4				
5/16	0	6.4				

Calendar of Events

May 22, 2003 – Blueberry Twilight Meeting – 6:30 p.m. Atlantic Blueberry Company Inc., 7201 Weymouth Road, Hammonton, NJ. Contact: Gary Pavlis at 609 625-0056 or pavlis@aesop.rutgers.edu.

May 28, 2003 - North Jersey Fruit and Direct Marketing Twilight Meeting, Sun High Orchard, Randolph, NJ. Contact: Win Cowgill at RCE of HUnterdon County at 908-788-1339 or cowgill@aesop.rutgers.edu.

June 4, 2003 - Blueberry Field Day and Open House - 8:30 am - 3:30 pm. Marucci Center for Blueberry and Cranberry Res. & Exten., Chatsworth, NJ. Contact the Center at 609-726-1590.

June 4, 2003 – Twilight Wine Grape Meeting – 6:15 p.m. Cape May Winery, Toby Craig, 709 Town Bank Road, Cape May, NJ. Contact: Jerome L. Frecon, 856-307-6450 ext. 1 or Russ Blair at Rutgers Cooperative Extension of Cape May at 609 465-5115.

June 25, 2003 – Twilight Fruit Research Meeting – 5 p.m. Rutgers Agricultural Research and Extension Center (RAREC), 121 Northville Road, Bridgeton, NJ. Contact: Jerome L. Frecon 856-307-6450 ext 1.

September 3, 2003 – Fruit Variety Showcase, Gloucester County. Contact Jerome L. Frecon 856-307-6450 ext. 1.

NJ Pesticide Applicator Units to be provided at each of the evening and twilight tree fruit and grape meetings.

North Jersey Fruit and Direct Marketing Twilight Meeting

May 28, 2003
6pm-9pm
Sun High Orchard
Randolph, NJ

Sponsored by Rutgers Cooperative Extension
In cooperation with
The New Jersey Farmers' Direct Marketing
Association

6pm - Tour with Kevin Torster and Don Bostrum. View the 25 acre apple and peach orchard and unique new farm market built with modern materials and filled with farm country antiques to give it the warmth and comfort of "the years gone by". An authentic Bee Hive Oven that was from an 1820 House in Randolph, NJ has been preserved, restored and is one of the many highlights of market.

Preventing Pesticide Exposures
George Hamilton, Specialist in Pest Management, RCE

Tree Fruit Entomology Update
Peter Shearer, Specialist in Tree Fruit Entomology, RCE

Tree Row Volume and IPM Update
Dean Polk, Fruit IPM Agent, RCE

Biostimulants: Witches Brew or PGRs
Robert Belding, Specialist in Pomology, RCE

Weed Control Update
Brad Majek, Specialist in Weed Science, RCE

Update on Chemical Thinning and Secrets on Getting Return Bloom for Apples
Win Cowgill, County Agricultural Agent, RCE

Pesticide recertification credits – CORE = 1 unit, 1A = 3 units, PP2 = 3 units, 3A = 3 units

For further information and directions, call Win Cowgill at RCE of Hunterdon County at 908-788-1339 or e-mail cowgill@aesop.rutgers.edu. □

Wine Grape Twilight Meeting

Jerome L. Frecon and Russ Blair, Agricultural Agents

A wine grape growers' meeting will be held on Wednesday, June 4, 2003 at 6:15 p.m. at Cape May Winery, 709 Townbank Road, Cape May, NJ 08514. The Cape May Winery and Vineyard was established by Bill and Joan Hayes on Townbank Road in Lower Township. Toby Craig, local businessman and restaurateur from Cape May, acquired the operation in 2002. The farm is the first commercial winery in Cape May County. The winery and vineyard have won many awards including the Governor's Cup for best grape wine in New Jersey in 2000 for their "1999 Cabernet Sauvignon" (80% Cabernet Sauvignon, 10% Cabernet Franc and 10% Merlot). In 2001, Forbes Magazine listed one of their vintages among the top five wines produced in the country.

Bill Hayes worked closely with Dr. Joe Fiola, former Extension Specialist in Viticulture at Rutgers, when developing the vineyard. Some of the varieties grown in the vineyard include Cabernet Sauvignon, Cabernet Franc, Merlot, Reising, Chardonnay, Sauvignon Blanc, Pinot Grigio, Viognier, and some Nebbiolo. There are approximately 9 acres of wine grapes in production and the vines are trained using the Scott Henry trellis system. The vines are irrigated using drip, and scheduling is performed using evapo-transpiration data from the South Jersey Resource Conservation & Development Council (SJRCDC).

The vineyards are the most southerly located in the state, and benefit from the close proximity to water. Because Lower Township lies between the Delaware Bay and the Atlantic Ocean, the water extends the growing season in the fall and moderates the freezing temperatures in winter. The winery also benefits from the close proximity to the \$2.5 billion dollar tourism industry in Cape May County. The Cape May Winery & Vineyard has shown the world that excellent wine can be made in Southern New Jersey, particularly in Lower Cape May County.

A walking tour of the vineyards and winery will be conducted with a program featuring Mark Chien, Grape Agent for Penn State University Cooperative Extension in Lancaster, PA. Mr. Chien will discuss a number of horticultural practices for producing quality wines. Other specialists and agents will speak on weed disease and insect management. Mary Beth Sorretino of the USDA Natural Resources Conservation Service will speak on soil moisture monitoring in grape vineyards. NJ Pesticide applicator units will be presented.

Pre-registration is appreciated. The full program and additional information is available by contacting Jerome L. Frecon (856) 307-6450 Ext. 1, or Russ Blair (609) 465-5115. Copies of the program and registration form are available on the following web sites and calendars: www.rce.rutgers.edu and <http://gloucester.rce.rutgers.edu>. □

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