FINGER LAKES VINEYARD NOTES

Newsletter #5
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PEST MANAGEMENT FIELD MEETING
Timothy E. Martinson

Come join us at Lance Fullager Vineyard Supplies on County Road 17, about 5 miles south of Penn Yan for our annual spring pesticide and pest management update. This meeting will be held on May 21, from 2:45 - 6:00. I guarantee better weather than last year. Those attending will be eligible for 3 pesticide recertification credits. The program will feature:

• Cornell updates on disease management (Wayne Wilcox), insect management (Greg English-Loeb), and post-emergent weed control programs (Tim Weigle).
• Update on Worker Protection Standard enforcement and other regulatory issues (Ed Hanback, New York DEC, Bath office).
• Airblast sprayer calibration and maintenance.
• Updates from industry representatives.
• Equipment display and demonstration (including sprayer, grape harvester)
• Fact sheets and publications on insect and disease identification and pest management will be available. Insect specimens, including European red mite eggs (under a microscope), banded grape bug, and other seasonal pests will be available.

The meeting will be followed immediately by a barbecue sponsored by industry participants, featuring juices and wines from area producers. The meeting is free to enrollees, but pre-registration is necessary so that we can order up the right amount of food. The fee for those not enrolled in the Finger Lakes Grape Program...
is $10. **Please pre-register by May 15, by filling out the enclosed enrollment form or contacting Katie at our office (315-536-5134).**

**DISEASE CONTROL PROGRAMS FOR GRAPES IN THE FINGER LAKES**

*Wayne Wilcox*

The 1997 season was certainly "kinder and gentler" than its predecessor with respect to disease development. While we continue to hope that Mother Nature will once again smile upon us, let’s review new developments on the disease-control front and reassess the various options.

**FUNGICIDE CHANGES**

1. Abound. Obviously, this is the big news. In late March, the NY State DEC approved the use of Abound in New York, except on Long Island. As a condition of this approval, cartons and jugs of the fungicide will contain a bright sticker indicating the Long Island exclusion, but upstate growers can use the product according to the normal label directions.

A lot has been written and spoken about Abound already. Just to reiterate a few of the major points:

- In our trials, it has been excellent against powdery and downy mildews, very good against black rot, good against Phomopsis.

- It is an excellent protectant with long residual activity that is relatively resistant to weathering. Postinfection activity is limited (24-48 hr?), not in the same league as SIs for black rot and powdery or Ridomil for downy. It is also an excellent anti-sporulant, that is, it suppresses spore production (hence, disease spread) from existing lesions. This DOES NOT mean that it "burns out" infections (it doesn’t). It DOES mean that the fungicide helps to control disease spread through more than one mechanism.

- Abound isn’t a wonder drug. If you mess up on the usual necessities (timing, rate, coverage), you’ll have the usual problems.

- In my opinion, its greatest advantage is that it’s not an SI. Integrating Abound into a disease control program will significantly reduce the pressure for further SI resistance development by the powdery mildew fungus, which should prolong the useful life of the Sis. In turn, maintaining the viability of the SIs will reduce pressure for the eventual development of resistance to Abound and similar materials that are in the pipeline from other companies. In the long run, we need both groups.

- Other advantages: Convenience (all major diseases except Botrytis), 14 day preharvest restriction (versus 66 days for mancozeb), 12 hour re-entry interval (versus 96 hr for Captan), no juice processor restrictions.

- Disadvantages: Expensive, extremely phytotoxic to some apple varieties. Spotting of apple leaves due to drift from an Abound spray has been documented at distances up to 1,000 feet away. Use the product if it fits your operation, but be aware of this potential and use some common sense to avoid drift.

Abound is labeled for use at a rate of 11.0 to 15.4 fl oz/A, at 10 to 14 day intervals. In repeated trials, with excellent spray coverage, we’ve gotten excellent results with the 11 fl oz rate at 14-day intervals. Also note that for resistance management purposes, the label allows no more than two sequential applications of Abound; you must then alternate with a different fungicide(s) in the following spray before resuming use of
Abound. This restriction should be kept in mind when planning a spray strategy.

There’s no "best" way to use the product, since this will depend on disease pressure from weather and inoculum availability, varietal susceptibility, and the availability and efficacy of alternative materials. A few considerations within this context:

• In our Geneva trial last year, Abound was not as effective for control of early (cane) Phomopsis infections. Thus, captan or mancozeb are not only cheaper but better in the very early season (e.g., 1- to 5-inch shoot growth).

• The immediate prebloom and first postbloom sprays are when you either get or fail to get control of powdery mildew on the grape berries. Anyone with highly susceptible cultivars who has been having trouble with the SIs should strongly consider plugging Abound into these two slots.

• The above-mentioned lack of processor restrictions and favorable preharvest and re-entry intervals may make Abound attractive if and when multiple diseases need to be controlled in the mid-summer, depending on disease pressure and crop economics.

2. Ziram. Last spring, the NY State DEC granted Ziram a "Special Local Needs" change to the label, allowing its use on a regular schedule to within 21 days of harvest in 1997 and 1998. Ziram is in the same chemical family as ferbam (Carbamate) and has a similar spectrum of activity: very good against black rot and Phomopsis, only fair against downy mildew, no activity against powdery. It’s essentially a cheaper substitute for Carbamate, with a limited "fit" in the Finger Lakes: juice blocks where mancozeb can’t be used postbloom and a combination of low disease pressure and prices don’t favor Abound.

A few reminders about the major diseases and what’s new with them:

POWDERY MILDEW (PM)

1. Most berry infection occurs between the immediate prebloom and early fruit set period. Disease that you see later in the season usually is caused by a combination of favorable weather and problems with the spray program during and shortly after bloom. Work led by David Gadoury has shown that (a) Concord fruit become immune to infection shortly after fruit set; and (b) berries from all vinifera varieties that have been tested (Chardonnay, Riesling, Pinot Noir, Gewürztraminer) maintain a slight degree of susceptibility until veraison, although their stage of extreme susceptibility is in this same prebloom through fruit set period. In a trial last year on the highly susceptible hybrid cultivar ‘Rosette’, sprays of Abound just before bloom and 2 weeks later gave almost as much control of berry (but not leaf) infection as a full season program.

Bottom line: The prebloom and first postbloom sprays are when you get most of your disease control on berries. Don’t cut corners on spray coverage or materials during this period!

2. Resistance to SI fungicides has reduced their margin for error.

This issue has been discussed ad nauseum. The take-home message is that the SIs still work for the most part (except Bayleton, which I don’t recommend), but you need to do everything “right”. Thus, a few simple rules of thumb, both to reduce further resistance development AND provide good disease control in the current year:

• Limit SI use, preferably a maximum of three sprays per year.
• Thorough spray coverage is CRITICAL for adequate performance. Poor coverage = low rate on certain tissues = development of resistant fungal individuals on those tissues = substandard disease control = proliferation of those resistant fungal individuals to cause future problems.

• The SIs will perform much better (and less resistance will develop) when they’re used to combat a small PM population rather than a large one. Previously that meant, use the SIs through early summer and finish with sulfur, rather than the other way around. However, the availability of Abound provides more opportunity to remain relatively "clean" later into the season, hence more options with the SIs. The basic principle remains: if there’s enough PM to be easily seen in more than a couple of spots, you’re better off using a non-SI.

In head-to-head tests, I’ve seen no difference in control among the various SIs other than Bayleton (i.e., Rubigan, Nova, Procure) at typical usage rates; buy according to price and other activities (e.g., black rot control). JMS Stylet Oil has done a very good job in our trials, particularly for pre-veraison control, but cost and single-disease activity limits its competitiveness to specific timings or uses (e.g., early season to eradicate the first infections, pre-veraison for prolonged control of leaf infections). Should also help with European red mite.

BLACK ROT (BR)

Most vineyards have been pretty free of black rot for the last couple of years. Remember that, in addition to weather conditions, the need for early season sprays is largely dependent on how much black rot you had last year. Generally, the less you had, the longer you can wait to start spraying (conversely, if you got into problems last year, start early this year).

In a set of pretty involved timing trials in the Finger Lakes over the last 3 years, we’ve gotten complete control of fruit infections in a high-inoculum ‘Aurore’ block with only three sprays of Nova: immediate prebloom and two additional applications at 14-day intervals. But until we repeat these results in a year that’s good and wet from bud break until bloom, I’d probably sleep better if I had some protection starting about 10-inch shoot growth if the weather was wet then, especially on a high-value, susceptible cultivar. That being said, last year we got excellent control with just two sprays of Nova applied immediate prebloom and first postbloom in a commercial ‘Concord’ block in the Lake Erie region, where it rained steadily from May through August.

We now have good data to confirm that berries of several native, hybrid, and vinifera cultivars are most susceptible from the prebloom through fruit set period, just as for powdery mildew. Furthermore, these berries appear to become highly resistant by 4 wk after bloom and almost completely resistant to infection by 6 wk after bloom.

Thus, in addition to inoculum carryover from the previous season, weather during the first 4 weeks after bloom starts is the biggest determinant of BR pressure. Be extra vigilant if conditions are warm and wet during this period; relax a bit if they’re dry like last year.

BR sprays are seldom needed beyond the pea-sized berry stage IF control has been thorough up to that point.

Nothing beats Nova for control, but mancozeb, ferbam, and ziram will do a good job under most conditions. Abound has been equivalent to mancozeb and ziram in our tests, might have a bit more lasting power under wet conditions. Copper is poor. Don't count on Rubigan or Procure.

DOWNY MILDEW (DM)
DM was pretty light last year, which means that primary (overwintering) inoculum will be relatively low region-wide, which is encouraging. However, don’t forget how fast this disease can build up from almost nothing when conditions favor it.

Recall that inoculum overwinters in last year's infected leaves on the vineyard floor. The first spores become mature about 2 to 3 weeks before bloom, and cause infection during rainy periods when temps are 50°F or higher. These primary infections can continue to occur until about 2 weeks after bloom.

The destructive phase of the disease is caused when spores that are produced from primary infections blow through the vineyard and cause repeated cycles of secondary infections if humid nights are followed by rainy days. At optimum temps of approximately 60 to 80°F, this cycle can repeat itself every 4 or 5 days, allowing an "explosive" disease epidemic when favorable weather conditions persist. Young fruit are highly susceptible to infection, as more than one grower probably remembers from 1996.

General control strategies are: (i) DM sprays should start on highly susceptible varieties at the 10-inch shoot growth stage (i.e., 2 to 3 weeks before bloom) unless the vineyard was very clean last year or you're sure it won't rain before the next spray. (ii) All but the most resistant vineyards should receive a DM fungicide in the immediate prebloom and first postbloom sprays unless the weather is bone dry. This is the critical time to protect against fruit infection. (iii) By the time the first postbloom spray wears off, primary inoculum is pretty well shot and the need for additional treatments should be based on the usual array of factors: presence or absence of established disease in the vineyard, weather, and variety. Generally speaking, DM usually "goes on vacation" during much of July (we don’t exactly know why), then reactivates as days get shorter and nights get dewier in August.

For several years, Ridomil was the "Cadillac" material, in both performance and cost. However, its lack of activity against other diseases and the new availability of Abound will probably relegate it to "rescue treatment" status even more so than before. In our trials, Abound has been excellent, better than mancozeb under some conditions (e.g., getting started a little bit late) and equivalent under others. Copper, mancozeb, and captan are old standards for a good reason: they're very effective if you can apply them when necessary.

BOTRYTIS BUNCH ROT

What a difference a year makes! This disease was almost absent from the region last year, but the fungus is ubiquitous and the disease will develop when conditions are right.

Roger Pearson developed reams of data showing that a spray of Rovral at 5° Brix and 2 weeks later did as good a job against Botrytis as did "classical" recommendations that also specify sprays at bloom and bunch closing. However, all of these data were from 'Aurore' vines, so there's at least some question as to how they might vary on later-maturing varieties like Riesling or super-susceptible ones like Pinot Noir.

The general recommendation to spray Rovral at 5° Brix and 2 weeks later has served many growers well, and shouldn't be fixed if it ain't broke. However, it looks like a couple of modifications might be appropriate in some instances:

(1) Spray timing trials (also on Aurore) in 1994 and 1996 showed some benefit from including Rovral at bloom and bunch closing in addition to the two later sprays. Both of these seasons were wet during this early period; however, there was no additional benefit from the bloom/bunch closing sprays in 1995 or 1997, which were dry. If you've been having Botrytis problems, consider a Rovral application at bloom and/or bunch closing if weather is very wet then. Of course, excessive use will hasten
resistance problems, so don't make these early sprays routinely even if cost isn't an issue.

Recent, independent conversations about this topic with colleagues from Canada, New Zealand, and Australia have left me with the impression that they regard the bunch closing period as an important time for Botrytis establishment under favorable conditions, although I haven’t seen any data. One pretty savvy consultant in Ontario has his growers apply a captan-like fungicide (which has never provided significant control in trials here) at very high gallonage at bunch close, in an effort to blow debris out of the clusters with the air blast sprayer. Again, no data, but food for thought.

(2) Many growers of late varieties have already figured out that making their last spray 2 weeks after 5° Brix leaves them vulnerable for a very long period before harvest (only two sprays are allowed after veraison). On these varieties, I'd play the weather, shooting to put the first spray on once it got wet after veraison, then save the second application until conditions really warrant it (e.g., very wet weather imminent or disease symptoms starting to show, but no sooner than 2 weeks after the previous spray).

Fungicide programs for Botrytis control are usually worth their cost on high value grapes, but don't forget: Botrytis control is greatly improved by leaf pulling and other canopy modifications that increase air flow around berry clusters. This is the first place to start if you're not doing it and aren't happy with the Botrytis control you've been getting. Leaf pulling is a hassle and costs money. So does Botrytis.

Several new Botrytis fungicides are out on the market, and it’s likely that one or two of them will receive U.S. (NY?) registration by next year. In the meanwhile, the only registered material that's consistently effective in NY is Rovral.

PHOMOPSIS (Ph)

There are some serious questions as to when it's most economically justifiable to spray for this disease. I (and several "experienced hands" that I've spoken with) have questioned the justification for sprays at the 1- to 5-inch shoot growth stages. These sprays do a good job of controlling leaf infections (not important) and infections of the basal nodes of the new shoots, but how important are they? Last year showed that they can be very important IF severe enough: many native grapes in the Lake Erie region (where it was considerably wetter than here) suffered significant loss when winds snapped off heavily-infected shoots at the basal nodes (breakage rates of 20 to 25% were recorded at the Vineyard Lab in Fredonia). This is probably a worse-case scenario--inoculum was high due to heavy disease the previous year, and no sprays had been applied prior to a 3-day rain at the 1-inch shoot stage--but it shows what the disease CAN do.

What does this mean for Finger Lakes growers? Although cane lesions were not so severe here, they were relatively numerous, forming a source of inoculum for this coming year where infected tissues were retained as canes, spurs, or pruning stubs. Since inoculum is spread from these sources by splashing rain, they are most significant in hedged or cordon-trained systems, where new shoots will develop beneath older infected wood. Individual block histories and current weather should be your guides regarding the need for early Phomopsis sprays, but be aware of high inoculum potential if cane lesions were plentiful last year.

More often, fruit and rachis infections are the economically important phases of Phomopsis. During the 1980's, Jay Pscheidt and Roger Pearson showed that fruit become infected by Phomopsis when frequent rainfall occurs during the bloom through pea-sized berry period, although these fruit do not show symptoms until near harvest (symptoms resemble those of black rot). The most important time for rachis infection appears to be from the early period of cluster emergence until several weeks after bloom.
Again, inoculum abundance, training system, and weather are the keys.

In a Geneva trial last year, mancozeb and captan were clearly the most effective materials for early season control; Abound was good; Nova did nothing.

PUTTING IT ALL TOGETHER

There are many good programs for controlling these diseases. Here are a few considerations. Just because it's not listed here doesn't mean it's not a good idea.

1-INCH SHOOT GROWTH. A Ph spray MAY be warranted IF very wet weather is forecast AND the training system or recent block history suggests high risk. Option A: Nothing. Option B: Captan or mancozeb.

3-5 INCH SHOOT GROWTH. Time to start control of PM in vinifera and some hybrid blocks. May be necessary to control Ph in high risk blocks, depending on the weather; early rachis infections are possible now. BR control should be necessary only if disease was significant last year AND weather's wet. Even less necessary to control BR now if Nova will be used used later. Option A: Nothing. Option B: Nova (PM, BR). Use the 3 oz rate (about $12/A). Option C: Rubigan (PM). At 2 fl oz/A, cost is only about $4/A. Cheaper than Nova but won’t control BR; doesn’t need to if tank-mixing with mancozeb. Option D: Sulfur (PM). Not very active at temps below 60°F. If you really need this spray, sulfur is a questionable choice unless it’s warm. Option E: Mancozeb (BR, Ph). Will also control angular leaf scorch (ALS) on susceptible varieties if very wet. Option F: (C or D) + E (PM, BR, Ph, ALS).

10-INCH SHOOT GROWTH. Traditionally, we've recommended not to wait any longer to control BR. This may be a bit conservative if BR was well-controlled last year and/or weather is dry. Don't wait any longer to control PM on susceptible cultivars. DM control will be needed on highly susceptible cultivars if disease was prevalent last year and rains of at least 0.1 inches at temps >50°F occur. Rachis infections by Ph are a possibility, particularly if weather is wet. Option A: Abound (PM, BR, DM, Ph). Label allows only two sequential sprays before alternation with other materials, thus spraying now will not allow use in both of the following two sprays, which are the most critical ones of the year. Option B: Mancozeb (BR, Ph, DM, ALS). A broad spectrum, economical choice if PM isn't a serious concern. Or add a PM material. Option C: Nova (PM, BR). Option D: Rubigan (PM). No BR but cheaper than Nova. Option E: JMS Stylet Oil (PM). If (and only if) coverage is thorough, this spray should eradicate early PM colonies that may be starting because previous PM sprays were omitted. At a retail cost of $11/gal, a use rate of 1% (1 gal oil /100 gal water), and 50 gal/A spray volume, cost is about $5.50/A. May also help with mites. Option F: Mancozeb (BR, Ph, DM, ALS) + a PM material (Nova, Rubigan, Procure, sulfur, JMS Stylet Oil). Choose PM material based on previously-discussed characteristics and cost.

IMMEDIATE PREBLOOM (OR VERY EARLY BLOOM). A critical time for PM, BR, and DM, and Ph (rachis and fruit infections). Also important for ALS on susceptible varieties. **This and the first postbloom spray are the most critical sprays of the season--DON'T CHEAT!** Option A: Abound (PM, BR, DM, Ph). The best choice if SIs seem to be slipping against PM and multiple disease control is needed. In any case, a good choice to take resistance-development pressure off the SIs for PM-susceptible cultivars. A bit cheaper than Option B at typical rates. Option B: Nova + mancozeb (PM, BR, Ph, DM). Nova is the big gun against BR, so probably the best choice if pressure is high and BR control is the most important consideration. Provides postinfection activity against BR if significant unprotected infection periods occurred withing the previous 4 days. Option C: Rubigan + mancozeb (PM, BR, Ph, DM). Cheaper than Options A and B. Mancozeb does a commercially acceptable job
of BR control under most circumstances. Option D: Mancozeb + sulfur (PM, BR, Ph, DM). Cheap and reasonably effective but not the strongest choice, at a time most appropriate for the strongest choice.

BLOOM. Rovral for Botrytis control may be needed infrequently, i.e., if warm and frequently or persistently wet. See previous discussion.

FIRST POSTBLOOM. Still the most critical period for PM, BR, DM, and Ph (rachis and fruit). Same options and considerations as detailed under IMMEDIATE PREBLOOM. Juice grape growers can substitute Ziram (very good BR and Ph, only fair DM) for mancozeb if necessary.

SECOND POSTBLOOM. BR control may still be needed if disease was present last year or is visible this year, especially if weather is wet. Fruit are less susceptible to PM now, but continued protection of rachises and leaves is usually needed, especially on susceptible varieties. Ph danger is mostly over unless very wet. Primary DM should be over, but continued protection may be needed on susceptible varieties if weather is wet, especially if disease already is established. Option A: Abound (PM, DM, BR, Ph). Not an option if used in the previous two sprays. Option B: Nova (BR, PM) + captan or mancozeb (if outside the 66-day preharvest restriction) if DM and Ph control are needed. Option C: Rubigan (PM) + either (a) mancozeb (if outside the 66-day preharvest restriction) for BR, DM, and Ph; (b) captan (DM, Ph, some BR); or (c) ziram (BR, Ph, some DM). Option C: Sulfur (PM). Option D: Mancozeb (if still allowed) + sulfur (PM, DM, BR). In most years, lessening disease pressure makes now a practical time for this economical option.

ADDITIONAL SUMMER SPRAYS. Check the vineyard regularly to see what’s needed. One goal is to minimize or eliminate SI use for the rest of the season, for resistance and bottom-line management (see earlier discussion). On vinifera and other cultivars requiring continued PM control, use sulfur or Stylet Oil. (NOTE: In 1995 through 1997, Stylet Oil applied at veraison and 2 weeks earlier gave superior residual control of leaf PM into early October; however, thorough coverage is a must for this material). SIs can be an option if they’ve been used minimally early

AND little disease is evident. Copper + lime will work for Conords. BR should not be an issue beyond this point, unless there's been a mess-up (even then, fruit lose susceptibility about 4 to 6 wk after bloom). Ph should not be an issue. For DM, there's copper/lime, captan, or mancozeb if still early enough. Abound is still an option if disease pressure is heavy and its advantages are worth the money, but cheaper substitutes should usually provide adequate control. See previous discussion for Botrytis at bunch closing, veraison, and preharvest.

**EARLY SEASON INSECT PESTS**

*Tim Weigle*

Growers should be prepared to spend a little extra time and effort in their insect management program during 1998. The mild winter we experienced may increase survival rates for all insect pests. The come and go warm weather we are seeing this spring has moved most varieties to the late bud swell stage where they are susceptible to feeding damage by flea beetle and climbing cutworm. Vineyards past bud break are much less susceptible to injury. Cutworm is generally not a severe problem in the Finger Lakes region. Flea beetle and cutworm feeding damage can be hard to distinguish between. A quick look in the vineyard for buds with holes bored into them will give you an idea if you have a problem. While the entire vineyard should be monitored, focus on wooded edges and areas next to hedgerows to pick up damage. These pests are typically on the edge of the vineyard and may require an insecticide applied only to the edge of the vineyard. A threshold of 5% damaged buds should be used to determine whether an
insecticide application is economically warranted.

Grape cane borer is frequently mentioned as a pest in “hot spots” around Keuka Lake in the Finger Lakes Region. The best time to manage this pest would be during the bud swell through 3 - 6 inch shoot growth stage to reduce adult populations prior to egg laying. Early evening applications may be more effective since the adults become more active around dusk.

Banded grape bug is an insect pest which has been the focus of recent research by Tim Martinson and Greg English-Loeb. While it is believed that this pest is more common in the Lake Erie region, the severity of damage by this pest warrants monitoring of vineyards. Monitor vineyards between 5- and 10-inches of shoot growth, examining clusters for the presence of nymphs. Banded grape bud nymphs can be distinguished by their long, banded (alternating white and black bands) antennae. Concentrate on vineyard borders. If you see more than one or two nymphs per vine, an insecticide application is probably warranted. The NY DEC has granted a 2(ee) recommendation for using carbaryl (Sevin) to manage this insect. This pest is sporadic and does not occur in all vineyards. Banded grape bug has been found to exhibit an edge effect similar to grape berry moth. Therefore, while the entire vineyard should be scouted, an insecticide application may only be necessary to the edge of the vineyard. A new Banded Grape Bug Fact Sheet is now in print and available from your regional grape program office. The fact sheet has excellent pictures showing the nymphal and adult stages along with feeding damage and is a great tool in identification of this pest in the field.

Plume moth has been getting more attention as of late. Plume moth is easily spotted in the vineyard when webbed leaves and shoot tips are seen. However, once it has reached this point an insecticide application is of limited value, because larvae enclose themselves inside a leaf “cocoon” and are protected from the spray residues. To be effective, insecticide application should be made before leaf webbing becomes visible – at the 1 - 3 inch shoot growth stage. However, you will need to carefully examine shoots up close to determine whether plume moth larvae are present. This insect typically completes its development by early June and lays eggs which remain in bark crevices on second-year wood. Results of a survey conducted by Tim Martinson and Greg English-Loeb in 1995 found that while shoot infestation could reach as high as 40% on the vineyard edge, very little of the feeding resulted in economic damage to the vine. In Martinson’s survey of 24 vineyards, 70% of the infested shoots showed feeding injury only on lateral leaves, 20% had feeding on the shoot tips, and 10% showed feeding including cluster injury. Growth on shoots which experienced feeding on the growing tip were reduced in length by approximately 50%. Cluster feeding by plume moth did not appear to significantly reduce berry number. The results of this survey indicate that unless you have very heavy infestations of plume moth an insecticide application would be uneconomical.

If you would like more information on pest management problems please give me a call at (716) 672-6830 or e-mail me at timweigl@netsync.net.

GRAPE CODE-A-PHONE GOES ELECTRONIC
Tim Martinson

This year grape code-a-phone messages will be available to enrollees and subscribers via electronic mail as well as telephone. I started sending out and recording code-a-phone messages on April 13, and will update them on Mondays (for now) and Thursdays (soon).

If you would like to receive grape code-a-phone updates on pest management and vine development via e-mail, the simplest way to do so is the following:
1. Send an e-mail message to Katie Tomlinson at: ktomlins@cce.cornell.edu.

2. Write that you would like to receive the grape code-a-phone message. Send message.

That’s it! Your e-mail address will be copied from your message into our address file. You will receive all subsequent messages.

If that sounds too hard to do, you can also call (315) 536-5134 or fax (315) 536-5117 our office and read your e-mail address over the phone to one of us.

For those using the telephone, we have a new code-a-phone number:

315-536 -5549 (Code-a-Phone)

This message is now available 24 hours a day, so call when it is convenient for you - there is no need to wait until after office hours. Regardless of whether you receive the message by e-mail or telephone, the message will be the same.

1997 New York Grape Crop Statistics

Timothy E. Martinson

Official crop statistics for 1997 are in. Results showed the total crop down by 26% from 1996, and 13% below the long-term (last 10 years) average. Hybrids (major varieties only) were down statewide by 34% compared to 1997, and vinifera tonnage was level statewide. For the Finger Lakes, tonnage was reduced less - by 18% overall compared to 1996, with a 19% reduction for Natives, 23% reduction for hybrids, and 11% increase from 1996 for vinifera grapes.

Table 1. New York and Finger Lakes 1997 Estimate of Grapes Received by Processors.

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<td>34,517</td>
<td>28,014</td>
<td>7,949</td>
<td>1,530</td>
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<tr>
<td>Finger Lakes 1997</td>
<td>34,517</td>
<td>28,014</td>
<td>7,949</td>
<td>1,530</td>
</tr>
<tr>
<td>% Change from 1996</td>
<td>-19%</td>
<td>-23%</td>
<td>11%</td>
<td>-18%</td>
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SUMMER SCHOLARSHIP

THE N. J. SHAULIS ADVANCEMENT OF VITICULTURE AWARD

A summer intensive experience in viticulture

The N. J. Shaulis Advancement of Viticulture Fund, Inc. will make a work experience award to a Cornell University student in the College of Agriculture and Life Sciences for the summer of 1998. The goal of the award is to encourage students to enter the field of viticulture as a career by exposure to viticultural research.

- **Eligibility:** Cornell College of Agriculture and Life Sciences undergraduates in good standing who have a sincere interest in viticulture are eligible.

- **Stipend:** The award is $2,500. The student will participate in a summer work experience in the Horticultural Sciences department at the New York State Agricultural Experimental Station at Geneva under the supervision of viticulture faculty members. A housing allowance is available for those in need.

- **Academic Requirement:** The student will register in an independent research course and will be required to engage in independent study during the summer as well as to submit a research paper on his or her viticulture study. The experience will involve a combination of both independent study and work in various research projects during the summer.

- **Selection Process:** Members of the N. J. Shaulis Fund for the Advancement of Viticulture will review applications and designate the scholarship winner.
Study/Work Period: 12 weeks, starting no later than June 1, 1998.


Obtain Application Forms: Secretary, Dept. Fruit and Vegetable Sciences, 134 Plant Science, Cornell University.


CORRECTION ON DORMANT OIL

In the last Finger Lakes Vineyard Notes, I indicated that dormant spray oils (such as Sunspray 6E) were registered for European red mite use on grapes during the dormant period. This is incorrect. Dormant oil is registered for use against Grape Mealybug during the dormant period on grapes, and registered for European red mites in apples. However, European red mite is not listed as a target pest for grapes on the label, and this use is therefore not a legal one in New York.

UPCOMING EVENTS

May 21. Spring Pest Management Field Meeting and Pesticide Updates. 2:45 - 6:00. Lance Fullager Vineyard Supplies, Co. Rd. 17, Penn Yan. The meeting will include updates in Insect, Weed, and Disease management, an update on regulatory issues by the DEC, industry updates and label changes, and sprayer calibration. Equipment (including sprayers and a grape harvester) will be on display. A barbecue will be held immediately after the program. Pesticide Recertification Credits will be offered. Full announcement to appear in the next Vineyard Notes. Pre-registration is required.

July 22-24. Eastern Section American Society of Enology and Viticulture (ASEV) Meeting, Crowne Plaza hotel, Grand Rapids, Michigan. This program has two major sections. Issues in Sparkling Wine Production: An International Symposium (22-23 July) will include talks on enology and viticulture aspects of sparkling wine and tasting of commercial and research wines. The Technical Program (23-24 July) will focus on research presentations in enology and viticulture, a trade show, and a regional wine showcase. Contact Ellen Harkness, 745-494-6704 (phone), 765-494-7953 (fax), or harkness@foodsci.purdue.edu (email) for registration information.

Timothy E. Martinson
Area Extension Educator
Finger Lakes Grape Program

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**PEST MANAGEMENT FIELD MEETING**

Name ____________________________________ Names _________________________________

Name ____________________________________ Names _________________________________

Farm _____________________________________________________________________________

Address ___________________________________________________________________________

Telephone No. _______________________________________________________________________

Please mail to: Finger Lakes Grape Program, 110 Court Street, Penn Yan, NY 14527

Please pay $10 per person if NOT enrolled in the Finger Lakes Grape Program (make checks payable to the “Finger Lakes Grape Program”). If a farm is enrolled, all employees of the farm are considered as enrolled, and therefore, may attend free of charge.