Following our large Viticulture 2000 meeting in Buffalo last year, planning is underway for a return to the Waterloo Holiday Inn for the 52nd Annual Finger Lakes Grape Grower’s Convention, to be held March 2 and 3, 2001. This year’s program will feature a one-day New Grower Workshop on Friday March 2 in addition to our regular Convention and Trade Show on Saturday, March 3. Registrants can sign up for either day or both days. Program highlights include:

March 2. The New Grower Workshop is being jointly organized by the Finger Lakes Grape Program, and Steve McKay, Hudson Valley Cooperative Extension Grape and Small Fruits specialist. The program will feature talks on economics of startup operations (how to make money growing grapes), site selection, variety selection, vineyard establishment, choosing a training system, and care of the vineyard through the first 3 years. The program will close with a question and answer session with growers and speakers. Following the program, a grazing dinner and wine reception, featuring representative NY wines, will be held (sponsored by Vineyard and Winery Management). The $75 registration fee will include lunch, the grazing dinner, and a 3-ring binder of extension bulletins and talk summaries.

March 3. The Convention and Trade Show will feature talks on insect and disease management, variety selection (potential hybrid releases and vinifera clones), Concord root biology, foliar fertilizers, and a look at grape contracting options to ensure stable supply for processors, stable markets for growers, and incorporate quality standards. The ‘question box’ session will address questions from YOU. The schedule will also allow ample opportunity to visit the Trade Show, featuring 42 exhibitors representing nurseries, equipment dealers, ag chemical suppliers, crop insurance, and winery supplies. Lunch is included in the $30 registration fee (for Extension enrollees from Ontario, Seneca, Schuyler, Steuben and Yates counties; $40 for out-of-region subscribers or nonmembers). The meeting will finish with the traditional industry wine & cheese reception.

The complete program and registration forms will be mailed out in early January 2001.

THE FUTURE FOR GRAPE INSECTICIDES AND MITICIDES

Greg English-Loeb, NYSAES

Over the past four or five years there has been relatively little change in the insecticides and miticides registered for use on grapes in the Northeast and for the most part, the grape industry has relied on what is sometimes referred to as "old generation" pesticides. Things have started to change in the last year or two due to a couple of factors. The most important one is changes in pesticide regulations, particularly the Food Quality Protection Act (FQPA). FQPA has led to both loss of insecticide registration (PennCap M) and restriction of use (Guthion). In addition, FQPA has prompted new procedures for assessing exposure risk (e.g. the establishment of a risk cup) that can limit the number of crops compounds are registered...
for. A second factor contributing to a change in the pesticide climate in our area is evidence that Eastern Grape Leafhopper and Grape Berry Moth are starting to develop resistance to Sevin, the insecticide most growers have relied upon to manage these two key pests. For these and other reasons, there is new interest in some of the "new generation" pesticides that have been developed over the past decade or two. Below I summarize what I know about some of these new compounds. These observations are based on insecticide and miticide trials that we (including Ted Taft Jr., Rick Dunst and Tim Weigle at Fredonia and Tim Martinson in the Finger Lakes) have conducted in the last year or two as well as conversations with representatives of the chemical industry.

**Danitol 2.4 EC** [fenpropathrin]: A broad-spectrum synthetic pyrethroid insecticide (marketed by Valent) that has actually been around for a number of years. Danitol has recently received EPA registration for grapes, although it is not yet registered in New York (anticipated for this winter or spring). In our various trials we have found it to be quite effective against leafhoppers, plant bugs, and grape plume moth. We have not tested it on grape berry moth, but all reports indicate it is very effective. It also did a pretty good job of controlling European red mite, although mites are not on the grape label. The benefits of Danitol and other pyrethroids is that they are broad-spectrum and relatively low toxicity to mammals. The downside of pyrethroids is that they are broad-spectrum and will kill beneficial arthropods. In the past pyrethroids have been responsible for causing outbreaks of spider mites, presumably because they kill off predatory mites. As mentioned above, the new generation pyrethroids have miticidal activity and therefore, will kill both spider mites and predatory mites. Spider mites, however, seem to be much better able to adapt to pesticides than predatory mites. Be aware, therefore, of the possibility that frequent use of Danitol may lead to spider mite problems.

**Other Pyrethroids**: Danitol will be the first pyrethroid registered in grapes but there are a couple of others that I am aware of that may get labeled in the future. One is Baythroid [cyfluthrin] from Bayer and the other is Brigade [bifenthrin] from FMC. We will keep you posted on the status of these materials.

**Pyramite** [pyridaben]: This miticide has been around outside of the US since the mid-80s. Pyramite now has a national EPA label and therefore, its use is allowed in Pennsylvania. Registration for New York is pending, although expected for the 2001-growing season. However, its use in Long Island will likely not be allowed. In our trials it has been very effective at controlling European red mite at the lower label rates (4.4-6.6). According to the label as well as the company (BASF) representative, higher rates (8.8-13.2) are required for control of two-spotted spider mite. At these higher rates, pyramite may be harmful to predatory mites. Pyramite has some activity against leafhoppers.

**Agri-mek 0.15 EC** [abemectin]: Agri-mek is a miticide that has recently received federal and NY state registration for grapes. The grape portion of the label appears to have been written more for the industry out west than here. As such, two-spotted spider mite is on the label but not European red mite even though red mite is listed for apples. Hopefully, this can be changed in the future after getting some specific efficacy data. Agri-mek is not too hard on beneficial mites. Based on trials conducted in western NY and on Long Island, Agri-mek also has activity against grape berry moth. In our trial near Fredonia, it worked as well as Sevin.

**Actara 25 WG** [thiamethoran]: This is a relatively new neonicotinoid compound with systemic and contact activity against leafhoppers and other sucking insects. It is in the same chemical class as Provado [imidacloprid] (see below). Federal registration for Actara is anticipated for sometime this winter. Our trials indicate that it is very effective against leafhoppers. Data from California indicates this compound, when delivered through a drip system, will help control root-form phylloxera. Because of its selectivity, Actara and similar products are relatively easy on beneficial insects.

**Provado 75 WP** [imidacloprid]: Provado has been registered on grapes for several years now and is a very effective leafhopper material. It has not been widely used in the Northeast because of its relatively high cost and the availability of less expensive alternatives. In a trial conducted this year we found that half the label rate of Provado was equally effective against leafhoppers as at the full rate. We will be submitting a request for a 2ee label change to allow a lower rate for Provado, which, if approved, will help make this product more economical to use in grapes.

**Avaunt** [idoxacarb]: A new carbamate product (same class as Sevin) with selective activity against lepidopteran pests and some beetles and sucking insects. In our trials this year Avaunt gave good control of grape berry moth and also was pretty effective against leafhoppers. It is reported to not be
very harmful to beneficial insects, although I have no data to verify this. Avaunt has recently received a federal EPA label that does not currently include grapes. However, a company representative informed me that there is a good chance grapes will be added to the label in the future. Because it has activity against both berry moth and leafhoppers, it may be useful for the grape industry in the Northeast. One area of concern, however, is that since Avaunt is in the same chemical class as Sevin, we may see some cross resistance between the two products. In other words, populations of leafhoppers or berry moth resistant to Sevin may have partial resistance to Avaunt. Avaunt is reported to have a novel mode of action so this may not prove to be a problem.

**Spintor** [spinosyn]: Spinosyns, naturally occurring compounds derived from the fermentation of fungi, are contact and stomach poisons with selective activity against lepidoptera and some other insects like thrips. It currently is not labeled for use in grapes. In our field trial conducted this year it was fairly effective in controlling grape berry moth, roughly equivalent to Sevin. The prospects for this material getting registered for grapes is unclear.

**3M Sprayable Pheromone**: Sex pheromones in lepidopteran insects like the grape berry moth (GMB) are used by females to attract males for mating. A "calling" female releases a plume of pheromone which a male follows to the source. The idea behind pheromone disruption is to release synthetically produced sex pheromone into the environment to such an extent that the males get confused and cannot find the females. Plastic twist ties impregnated with the sex pheromone of GBM have been used in the past in our region with mixed results. The 3M company of Canada has been developing a new technology for encapsulating GBM pheromone inside small packets that can be delivered through a conventional sprayer. Our field trials with the 3M product indicate it has some potential for use in New York and Pennsylvania. There appears to be two related drawbacks. One is that the capsules only release sufficient pheromone for 2 or 3 weeks thereby necessitating two applications per GBM generation. The other is the cost is somewhat higher than conventional insecticide options. The company is working on a longer lasting capsule that we hope to test next year.

**CAN A NEW MECHANICAL HARVESTER PAY FOR ITSELF?**

*Barry Shaffer*

Most of the harvesters in the New York are over 20 years old. Indications are that advances in harvester technology can make a significant difference compared to an older machine. Probably the biggest single advancement is with the picking head and conveyor systems, which may result in greater recovery of harvested fruit & juice.

One option is to retrofit (upgrade) existing machines. Many growers have done that over the years and that could be the most cost-effective approach. However, let us do a partial budget example between a new harvester and a typical 20-year-old harvester (well maintained). The grower harvests 150 acres with no custom harvest operation. The new harvester costs $135,000 and he can get $30,000 for his existing machine. Maintenance will be less for the new machine, especially in the beginning. Any improvements to vine size and yields due to reduced leaf and shoot damage with the new harvester will NOT be factored in this example. We will assume the same labor costs for the picking crew although there are reports of less labor used (due to faster ground speeds) to be on the conservative side. Assume a 15-year economic life for the new harvester with no salvage value (erring on the conservative side). Assume a 10% increase in yields with the new harvester. Assume a 7 t/a long term average with the existing harvester.

<table>
<thead>
<tr>
<th>Increased Costs</th>
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<tbody>
<tr>
<td>135,000 new harvester cost</td>
<td></td>
</tr>
<tr>
<td>-30,000 existing harvester salvage value</td>
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</tr>
<tr>
<td>105,000</td>
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<table>
<thead>
<tr>
<th>Increased Revenues and Reduced Costs</th>
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<tbody>
<tr>
<td>7 t/aX .1 =</td>
<td>0.7 t/a increase</td>
</tr>
<tr>
<td>X 150 acres picked yearly</td>
<td>105 additional tons</td>
</tr>
<tr>
<td>X $220 a ton</td>
<td>$23,100 additional income yearly</td>
</tr>
<tr>
<td>$24,100</td>
<td>+ 1,000 reduced maintenance costs (estimated yearly savings)</td>
</tr>
<tr>
<td>X 15 years</td>
<td>$24,100</td>
</tr>
<tr>
<td>$361,500 over the life of the machine</td>
<td>$361,500 over the life of the machine</td>
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Payback Method
105,000/24,100= 4.35 years
This analysis would suggest that this machine would pay for itself in 5 harvests. Since the economic life is triple that, the new harvester would be a good purchase.

**ADJUSTED GROSS REVENUE INSURANCE PILOT IS A GO FOR 16 COUNTIES IN N.Y.S!**

**Alison DeMarree**

Growers who have purchased Crop Insurance are now eligible to participate in a pilot program called Adjusted Gross Revenue Insurance. Growers who grow crops for which there is no crop insurance coverage are also eligible to participate in the AGR insurance pilot.

This insurance allows a grower to insure his average gross revenue for crops produced on the farm. The average is a five year average. Revenue from value-added processing or packing, crops purchased for resale, and / or custom work is not included and is adjusted out of the gross revenue and expenses.

**The deadline for application is January 31, 2001.**

If you are interested in participating in this pilot it is important that you begin to get together the information required immediately. Many growers will be trying to participate in this pilot and the crop insurance agents who can sell this policy are limited – and have a limited amount of time.

**Important Note:** This pilot program only applies to growers in Seneca, Ontario and Yates counties [within the Finger Lakes Grape Program area – other counties along Lake Ontario & Erie and Suffolk Co. on Long Island are also included. Schuyler and Steuben counties are NOT included. -TEM

This is the information you will need to submit along with your application for AGR insurance;

1. Copies of your tax returns for the past five years – Schedule F for most growers or corporate tax returns
2. A five Year Cropping History – USDA Form 823 – a listing of crops grown, acreage, how marketed by percent produced (wholesale, retail), crops purchased for resale and irrigation practices. This information must be listed for each of the past five years.
3. An Intended Commodity Report – USDA Form 821 – a listing of the crops you intend to produce for the Year 2001- with your intentions for marketing (wholesale, retail), intended acreage, estimated production, expected value per unit and total expected revenue by crop.
4. End of Year Inventories for crops produced and or purchased for resale.

You must work with a crop insurance agent. This insurance is called Adjusted Gross Revenue because adjustments are made to gross revenue and expenses. Crop insurance agents are being trained for AGR insurance on December 12 and 13. The current schedule for detailed informational meetings (for eligible growers, loan officers, FSA personnel and others who can help growers get ready to apply) is as follows:

Dec. 8 at Middletown – Orange Co Extension Office from 12 noon – 1:30. Call (914) 344-1234 to register.

Dec. 15 at Rochester – Monroe Co. Extension Office from 10 am – 2 pm. Call (315) 331-8415 to register.

Dec. 21 at Oswego – Oswego Co. Extension Office from 10 am – 2 pm. Call (315) 963-7286 to register.

We are trying to also set up a meeting in Chautauqua or Erie County the first week of January – stay tuned for more information.

**NYSERDA HELPS GROWERS AND WINERIES REDUCE COSTS WITH ENERGY EFFICIENCY**

**Joyce Marthaller, NYSERDA**

[Ed. Note: This article describes programs that may be useful to area growers and wineries in designing and financing projects that conserve energy. NYSERDA is actively interested in (and has resources available for) developing projects in energy conservation and possibly waste management with the wine industry, particularly given the small scale of many winery businesses and their relatively intensive energy use. For anyone looking to upgrade or construct new facilities, it should be worth your while to contact NYSERDA for engineering assistance or possible low-interest financing. We hope to organize informational meetings and further newsletter articles with NYSERDA representatives in the near future – TEM]

The New York State Energy Research and Development Authority (NYSERDA) is a public-benefit corporation established by the State Legislature in 1975 to address some of New York’s most difficult energy and environmental problems in ways that also improve the State’s economy.
NYSERDA accomplishes this by forging public and private partnerships with the State’s businesses, industries, municipalities, and residents to address their most pressing energy and environmental needs.

New York’s grape-growing and winery industry is one that requires special attention in the emerging competitive electric utility market. Energy costs, new business development, and watershed protection issues are forcing operators to look for innovative, low-cost, and profitable practices to remain competitive and comply with regulations. While it is a very important industry to the State, the relatively small size and geographic distribution of New York’s wine industry make it difficult to tap into the emerging resources for energy efficiency services. NYSERDA will support projects that lead to increased economic productivity and energy efficiency in New York’s grape-growing and winery sector, while mitigating the environmental impacts of growing and wine making activities.

Through a variety of Energy Efficiency Services programs, NYSERDA helps operators identify, implement, and finance energy efficiency improvements to their farms and businesses, using currently available technologies to lower energy costs.

Energy Efficiency Consulting Services. Under these programs, NYSERDA works with energy and engineering consultants that visit individual locations to assess current energy use patterns and equipment. Based on this assessment, theses consultants identify improvements that could be made to existing equipment or changes to energy use patterns that will save energy and money. Recommendations are generally only made for improvements where the energy savings will provide the operator with a relatively quick payback period. Ultimately, it is up to the owner to decide whether or not to implement the recommended improvements.

Low Interest Financing. Should an operator decide to implement recommended improvements, we also provide programs to help finance the improvements, including a low-interest loan fund that buys down the interest on loans for certain energy efficiency improvements. Operators making substantial renovations to their facilities can also take advantage of financial incentives from the New Construction Program, which offers cash back for certain energy efficient equipment.

For more information about these programs, please contact Joyce Marthaller at (716) 394-0989; e-mail jmarth@psdconsulting.com; or Gay Canough (607) 785-6499; e-mail etm@tier.net; or contact NYSERDA (518)862-1090.

UPCOMING EVENTS

Cool Climate Pinot Noir Conference. December 11 - 12, 2000. Lakefront Ramada Inn, Geneva, NY. This new conference, sponsored by the Finger Lakes Pinot Noir Alliance and New York Wine & Grape Foundation will feature talks on both viticulture and winemaking, with speakers from Ontario, Burgundy, California and Oregon. For registration information, contact the NYS Wine & Grape Foundation at 315.536.7442, Fax 315.536.0719.

Long Island Agricultural Forum. January 11-12, 2000. Suffolk County Community College, Riverhead. Viticulture session is the morning of January 12 and includes Dr. Wayne Wilcox, NYSAES, Dr. Peter Cousins, USDA roostock breeder, Dr. Carmo Vasconcelos, Oregon State Univ. and Mr. Dan Gilrein, entomologist with CCE Suffolk County. For registration information call Mrs. Linda Lynch, 631-727-7850.

Unified Wine and Grape Symposium. January 23 - 25, 2001. Sacramento Convention Center, Sacramento, California. Contact ASEV, PO Box 1855, Davis, CA 95617-1855, 530.753.3142, Fax 530.753.3318, society@asev.org or http://www.unifiedsymposium.org

Employee Management Seminar. January 24 & 31, 2001. Farm Credit Office, Route 14, Phelps, NY. This seminar will improve your skills in writing job descriptions, recruiting, interviewing and performance management. Proven leadership styles, motivation techniques and training programs that improve employee productivity will be discussed. Contact Farm Credit of WNY, 800.929.7102 for more information. http://www.farmcreditwny.com


Ohio Grape/Wine Shortcourse "The Path to Gold." February 18 - 20, 2001. Wyndham Dublin Hotel, Dublin, OH. Program includes enology workshops, viticulture seminars, marketing programs, nationally known speakers, expanded trade show, tastings, banquet and fun! For more information contact Ohio Wines from the Heartland at 440.466.4417 or 800.227.6972.


Grape Expectations - A Viticultural and Enological Symposium. March 10, 2001. Forsgate Country Club, Jamesburg, NJ. For more information contact Dr. Joseph Fiola, Rutgers Fruit R & E Center, 283 Route 539, Cream Ridge, NJ 08514, call 609.758.7311 or email creamridge@aesop.rutgers.edu

Wineries Unlimited. March 20-23. Lancaster, PA. This will be the 25th annual trade show and seminar, organized by Vineyard and Winery Management. Call 800.535.5670 for more information. http://www.vwm-online.com

New York Wine Industry Workshop. April 4 - 6, 2001. Lake Front Ramada Inn, Geneva NY. Contact Nancy Long for more information at npl1@cornell.edu or phone 315-787-2288 or fax 315-787-2284

Grape Expectations - A Viticultural and Enological Symposium. March 10, 2001. Forsgate Country Club, Jamesburg, NJ. For more information contact Dr. Joseph Fiola, Rutgers Fruit R & E Center, 283 Route 539, Cream Ridge, NJ 08514, call 609.758.7311 or email creamridge@aesop.rutgers.edu

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